

India

Fostering Climate Resilient Upland Farming Systems in the Northeast

Project Implementation Manual for Nagaland

First Draft – September 2017

Contents

i	Currency equivalents						
li	Weights and measures						
iii	Abbrev	viations and acronyms	vi				
iv	Implementation and start-up activities						
1	Introdu	iction and background	1				
2	FOCU	S description					
	А	Introduction	2				
	B Approach and logic behind interventions						
	С	Targeting	6				
	D	Description	7				
	E	Interaction and linkages between project components	19				
	F	Expected outcomes and outputs	20				
	G	Risks and key factors for success	21				
	Н	Sustainability	23				
	I Environmental impacts						
	Annex 2.1: Logical framework Nagaland						
3	Project cost estimates 2						
		Annex 3.1: Summary Tables: Nagaland	30				
		Annex 3.2: Detailed Cost Tables (Nagaland)	38				
4	Projec	t Organization and Management					
	А	Introduction	48				
	В	Project Management	48				
	C Project Coordination Mechanisms						
	D Implementation partners						
	E	Implementation arrangements	52				
	F	Implementation plan	54				
		Annex 4.1: Project Management Structure	60				
		Annex 4.2: Project Coordination Structure	61				
	Annex 4.3: Project Phasing Plan						
		Annex 4.4: Draft Society Financial Regulations	67				
		Annex 4.5: Draft Society By-Laws	74				
		Annex 4.6: Staff Terms of Reference	92				
		Annex 4.7: Scope of FAO Technical Assistance to Nagaland and Mizoram	103				
		Annex 4.8: ICAR engagement to support FOCUS in Nagaland and Mizoram	114				
5	Procurement Procedures						

	А	Applicability of procurement provisions						
	В	Guiding principles of procurement						
	С	Codes of conduct and conflict of interest	118					
	D	Role of lead implementing agency in procurement	121					
	Е	Procurement methods	121					
	F	Procurement plans	122					
	G	Prior review	123					
	Н	Procurement involving community participation						
		Annex 5.1: Procurement Plan for works						
		Annex 5.2: Procurement Plan for Goods	127					
		Annex 5.3: Procurement Plan for Services	129					
6	Financ	ial Management						
	А	Introduction and financing	130					
	В	Fund Flow Mechanism	131					
	С	Disbursement Procedure, withdrawals and withdrawal applications	132					
	D Audit Procedures and arrangements							
		Annex 6,1: Terms of Reference of the Internal Auditor:	140					
		Annex 6.2: Project Financial Statements						
		Annex 6.3: Sample Annual Work Plan and Budget						
		Annex 6.4: Indicative chart of accounts	157					
		Annex 6.5: Sample TORs for accounting software	174					
		Annex 6.6: Sample Monthly Budget Execution Report	176					
		Annex 6.7: Financial Reporting Tables	178					
		Annex 6.8: Fixed Asset Register	182					
		Annex 6.9: Petty cash forms						
		Annex 6.10: Vehicle record forms						
		Annex 6.11: Sample Terms of Reference for the Audit of Project FOCUS	186					
		Annex 6.12: Expenditure record forms	191					
		Annex 6.13: Sample recovery plan	194					
		Annex 6.14: Designated account reconciliation statement	195					
		Annex 6.15: Checklist for a Withdrawal Application	196					
7	Monito	ring and Evaluation Guidelines						
	А	Objectives of M&E	197					
	В	Strategic principals	197					
	С	M&E System	197					
	D	Inception, reviews and surveys	199					
	E	Knowledge management system						

	F	Monitoring and Evaluation in FOCUS 2						
	G	Gender and vulnerable groups in M&E						
	Н	Implementation responsibilities of M&E	208					
	I	Reporting and communicating project results	210					
	J	Learning and knowledge management	211					
		Annex 7.1: A Model Design of an M&E System	215					
	Annex 7.2: M&E Training modules							
	Annex 7.3: How to store M&E data							
	Annex 7.4 Monitoring Indicators							
		Annex 7.5 New RIMS Core Indicators	238					
8	Guidel	ines for preparing Annual Work Plan and Budget	240					
		Annex 8.1 : Model outline of AWPB	242					
		Annex 8.2: Model AWPB for 2018-19	247					
9	Guidel	ines for village-level planning	258					
10	Guidel	idelines for Improved jhum cultivation						
11	Guidel	Plines for settled cultivation						
12	Guidel	delines for agriculture value chain						
	А	Production support	273					
	В	Marketing support	276					
	С	C Innovation fund						
		Annex 12.1: Guidelines for value chain studies	287					
		Annex 12.2: Guidelines for innovation fund						
13	Guidel	uidelines for livestock value chain						
	A Introduction							
	В	Pigs	306					
	С	Poultry	310					
	D	Mithun	311					
	E	Animal Health	312					
	F	Food safety and hygiene	313					
	G	Implementation arrangements	314					
		Annex 13.1: Training Programme for Community Animal Health Workers	315					
		Annex 13.2: Livestock population	318					
		Annex 13.3: Economically important & common animal diseases	319					
		Annex 13.4: Training manuals and support for livestock development from FAO Technical Assistance	321					
14	Guidel	ines for market access infrastructure						
	А	Introduction	325					

В	Planning and design	326
С	Construction	327
D	Collection centres	328
	Annex 14.1: Example of Bill of Quantities	331
	Annex 14.2: Bidding Document for Procurement of Works	336
	Annex 14.3: Format for bid evaluation	427

Currency equivalents

Currency Unit	= Indian Rupees (INR)
USD1.0	= INR 68

Weights and measures

1 kilogram	=	1000 g
1 000 kg	=	2.204 lb.
1 kilometre (km)	=	0.62 mile
1 metre	=	1.09 yards
1 square metre	=	10.76 square feet
1 acre	=	0.405 hectare
1 hectare	=	2.47 acres

Abbreviations and acronyms

AFAs	Agricultural Field Assistants
AO	Accounts Officer
AOS	Annual Outcome Survey
APC's Office	Agriculture Production Commissioner's Office
APDMP	Andhra Pradesh Drought Mitigation Project
APMC	Agriculture Producers' Marketing Committee
ATARI	Agriculture Technology and Research Institute
ATMA	Agriculture Technology Management Agency
AWP&B	Annual Work plan and Budget
BPCC	Block Project Coordination Committee
BPL	Below Poverty line
CAG	Controller and Auditor General
CAHW	Community animal health worker
CAIM	Convergence of Agricultural Interventions Programme in Maharashtra
CI	Community Institution
COSOP	Country Strategic Opportunities Programme
CPE	Country Programme Evaluation
CRPs	Community Resource Persons
CSSs	Centrally Sponsored Schemes
DAHV	Department of Animal Husbandry and Veterinary Services
DAO	District Agriculture Officer
DEA	Department of Economic Affairs
DMU	District Project Management Unit
DoA	Department of Agriculture
DPCC	District Project Coordination Committee
DPM	District Project Manager
FAS	Finance and Accounts Specialist
F&AO	Finance and Accounts office
FAO	Food and Agriculture Organization
FIGs	Farmer Interest Groups
FOCUS	Fostering Climate Resilient Upland Farming Systems in the Northeast
FPO	Farmer Producer Organization
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Green House Gases
GIA	Grant in Aid
Gol	Government of India
GoM	Government of Mizoram
GoN	Government of Nagaland
НН	Household
ICAR	Indian Council for Agricultural Research
ICEF	India-Canada Environment Facility

ICRAF	International Centre for Research in Agroforestry
ILRI	International Livestock Research Institute
ILSP	Integrated Livelihoods Support Programme
IOE	Independent Office of Evaluation
JRMC	Jhum Resource Management Committee
JTDP	Jharkhand Tribal Development Programme
JTELP	Jharkhand Tribal Empowerment and Livelihoods Programme
KM	Knowledge Management
KVK	Krishi Vigyan Kendra
LAMP	Livelihood and Access to Markets Project
LPG	Liquefied Petroleum Gas
M&E	Monitoring and Evaluation
MDG	Millennium Development Goals
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
Ministry of DoNER	Ministry of Development of Northeast Region
MIS	Management Information System
MLIPH	Meghalaya Livelihoods Improvement Project for the Himalayas
MoU	Memorandum of Understanding
MOVCD	Mission on Organic Value Chain Development
MTR	Midterm Review
NAPCC	National Action Plan on Climate Change
NEPED	Nagaland Environment Protection and Economic Development through People's Action
NER	Northeast Region
NERCORMP	Northeast Region Community Resource Management Project for Upland Areas
NGO	Non-governmental Organization
NHM	National Horticultural Mission
NICRA	National Innovations in Climate Resilient Agriculture
NLUP	New Land Use Policy
NMOP	National Mission on Oil Palms
NTFP	Non-timber Forest Products
OPELIP	Orissa PTG Empowerment and Livelihoods Improvement Programme
OTELP	Orissa Tribal Empowerment and Livelihoods Programme
PCR	Project Completion Report
PDS	Public Distribution System
PEFA	Public Expenditure Financial Accountability Assessment
PESA	Panchayats (Extension to Scheduled Areas) Act
PFM	Public Finance Management
PFS	Project Financial Statements
PIM	Project Implementation Manual
PLUP	Participatory Land Use Planning
PMC	Project Management Committee
PMKSY	Pradha Mantri Krishi Sinchayi Yojana
PMU	State Project Management Unit
PRA	Participatory Rural Appraisal

Project Steering Committee
Post Tsunami Sustainable Livelihoods Project
Public Works Department
Results and Impact Management System
Rashtriya Krishi Vikas Yojana
Site Allotment Advisory Boards
State Agricultural Research Stations
Society for Climate Resilient Agriculture in Nagaland
Self Help Group
Sustainable Land and Ecosystem Management
Statement of Expenditure
Si=system of Rice Intensification
Sustainable Spice Initiative
Soil and water conservation Assistants
System of Wheat Intensification
State Project Director
Technical Assistance
Terms of reference
Training of Trainers
Terrace Rice Cultivation
Tejaswini Rural Women's Empowerment Project
Utilization certificate
United Nations Development Programme
United States Dollar
Village Council
Village Development Board
Veterinary Field Assistants
Wet Rice Cultivation

Chapter 1: Implementation and Start-up Activities

Preparatory Phase

a. Administrative

Pre-Loan Negotiation Phase

- Finalize Personnel Policies of SoCRAN.
- Finalize Financial Regulations of SoCRAN. Draft financial regulations are in Annex 4.4and Society by-Laws are in Annex 4.5.
- Call for meeting of the Governing Council of SoCRAN to approve the personnel policies and Financial Regulations. . Staff Terms of Reference are in Annex 4.6.
- Obtain clearance from the Chief Secretary for engaging Food and Agriculture Organization to provide technical assistance using IFAD grant funds. The proposed scope of FAO involvement is in Annex 4.7.
- Process a file through the Department of Finance for Chief Secretary to request DEA to release the initial advance to be released by IFAD to GoN, and GoN in turn to release this amount to the SoCRAN through APC's office.
- Place the project details before the Chief Secretary and request the Chief Secretary to constitute a State Delegation to negotiate the legal agreements.
- Comply with conditions of Project Readiness Checklist of DEA and submit the same to DEA and IFAD.
- Obtain permission from appropriate authorities and select persons to be engaged by SoCRAN on both deputation and contract basis for both PMU and DMUs.
- SoCRAN to obtain permission from appropriate authorities and fill in all vacant positions in Blocks/Circles and Village level workers.

Post Loan Negotiation Phase

- Initiate steps to include FOCUS budgetary requirements for 2018-19 into the state budget by creating a separate budget line under the APC's Office.
- Conduct an orientation programme for all PMU staff and DAOs with field visits to IFAD project sites.
- Prepare a Project Implementation Manual and get the same approved by the Governing Council of SoCRAN.
- Place the project details along with signed minutes of the loan negotiations before the State Cabinet and obtain approval.
- Coordinate with FAO and review the Technical Assistance agreement and obtain approval from the Governing Council /Project Steering Committee and sign an agreement with FAO.
- Coordinate with ICAR and jointly prepare a Technical Assistance Agreement and obtain approval of the Governing Council/Project Steering Committee and sign an agreement with ICAR. Details of the role of ICAR are in Annex 4.8.
- Establish District level Project Coordination Committee with the Deputy Commissioner as the Chairperson.
- Call for a meeting of Deputy Commissioners of project districts and brief them about the proposed project activities and their role in project implementation.
- SoCRAN to obtain approval from its Governing Council to issue a circular to all the Deputy Commissioners to facilitate convergence of MGNREGS and other government programmes with FOCUS.

Post Loan Effectiveness Phase

• Conduct a start-up workshop at state level to launch the project.

 GoN shall release an amount equivalent to the initial authorised allocation of received from IFAD through GoI to SoCRAN for pre-financing project activities. Thereafter, funds required for project implementation shall be released to SoCRAN as a part of the yearly budgetary exercise. Initial authorised allocation will be adjusted in instalments during the last 2-3 years of project implementation. This will enable SoCRAN to provide required advances to the implementing agencies and to ensure project implementation without disruption due to budgetary constraints.

b. Financial Management and Procurement

Pre-Loan Negotiation Phase

- Open a bank account.
- Release INR 2 crore out of agreed INR15 crore of endowment grant to SoCRAN immediately after opening a bank account to undertake the start-up activities. GoN to make budgetary allocation in the budget of 2018-19 for the balance INR 13 crore which will have to be released in two instalments during 2018-19.
- Prepare AWP&B for the Financial Year 2018-19 and obtain concurrence from IFAD before obtaining approval from the Governing Council of SoCRAN. Include the same in the budget of the Department of Agriculture as grant-in-aid to SoCRAN. Refer to AWP&B of PY1 provided in this PIM.
- SoCRAN to obtain approval of its Chairperson for procurement of vehicles and equipment as per the list approved for retroactive financing.
- SoCRAN to purchase furniture and equipment covered under the retroactive financing.

Post Loan Negotiation Phase

- SoCRAN to appoint a qualified and experienced Chartered Accountant/Cost Accountant as the Finance and Administration Specialist.
- Establish an accounting system using Tally.

Post Loan Effectiveness Phase

- SoCRAN shall delegate powers to the DPMs and the D&FAO to operate the bank accounts. District level procurement will be made in accordance with the financial powers vested with the respective DPM.
- Release funds to Districts as per AWP&B. Districts to release funds to FIGs and others as per approved AWP&B.

c. PMU and DMU Establishment

Pre-Loan Negotiation Phase

- Obtain agreement from the Department of Finance/Department of Personnel for deputation of regular government staff to the society, engagement of contractual staff for the PMU and DMU and also engagement of contractual staff for the district, circles and village level workers against approved vacancies.
- Review the Terms of Reference of staff to be engaged and place it before the Governing Council for approval of staff requirements, salary scale proposed and the process of staff recruitment. Refer this PIM for terms of reference of key staff.
- Advertise for approved contract staff positions in national and local newspapers and short list candidates for contract positions.
- Establish a selection committee to interview shortlisted candidates and to undertake final selection for contract positions.

Post Loan Negotiation Phase

- Review the capability of the DAOs in the eight districts to manage the project and select persons with appropriate experience and aptitude and appoint them as DPM.
- Issue appointment letters to key PMU and DMU staff on deputation.
- Complete procurement of equipment for PMU and DMUs.
- Establish DMU offices within the District Agriculture Office.

- All technical staff selected on deputation basis to be appointed.
- Issue appointment letters to PMU and DMU contract staff.
- Conduct orientation of all district, block and circle level officers and village level workers on project goal, outcomes and outputs including implementation modalities.

d. Village Selection

Pre-Loan Negotiation Phase

• Finalize Village selection. Ensure no overlap with other major externally aided projects.

Post Loan Negotiation Phase

- Conduct a district level workshop of all Village Council Chairpersons and *Jhum* Resource Management Committee Secretaries to discuss the project details in order to obtain Free Prior Informed Consent (FPIC) of the community with regard to participation in the project.
- The Village Council Chairpersons and *Jhum* Resource Management Committee Secretaries to conduct a meeting of the Village Assembly and to ascertain the interest of the community to participate in the project and obtain written consent from the community in the form of signed minutes of the meeting.
- Inform IFAD of village, clusters and blocks to be covered under FOCUS as per the format provided below:

District	Cluster	Block	Village	Total number of households	No. of Jhumia households	No. of households with a member in government service	No. of target households
A	В	С	D	E	F	G	H=E-G
Total							

Chapter 1: Introduction and background

1. Project Implementation Manuals (PIM) are prepared for all IFAD-funded projects. The aim of a PIM is to facilitate implementation by providing a comprehensive set of guidelines for project implementation. These include IFAD and Government requirements and procedures along with a description of processes involved in implementation. The PIM is designed for circulation to project management and senior technical staff as well as to partner agencies and to act as a basic guide to project implementation.

2. The PIM contains information about the project concept, its design and implementation modalities. It will enhance the overall understanding of staff (both government and partner agency) and other stakeholders about the rationale, purpose and design of FOCUS, its various components and the process of its implementation. It is also intended to provide guidance with regards to the management of finances, systems of budgeting and accounting and the procurement procedures. The PIM will help in improving monitoring processes, and overall management information and reporting systems.

3. This first draft of the PIM has been prepared by Edward Mallorie (IFAD consultant) prior to approval of the project by the IFAD Executive Board. This draft is based on the final design report for FOCUS along with additional material by members of the project design missions. It also makes reference to a number of IFAD guidelines.

4. The PIM is a dynamic document that will be updated by the State Project Management Unit (SPMU) as the project progresses. Changes to key elements of the PIM that impinge on IFAD requirements should be agreed with IFAD.

Chapter 2: FOCUS Description

A. Introduction

1. **Background and rationale.** Nagaland is one of the eight states in the North Eastern Region (NER) of India, a biodiversity hotspot where climate change adaptation is of critical importance for the largely rural population. With a hilly terrain, low population density, shallow soils and high rainfall, farmers have adopted a shifting cultivation system known as *jhum*. This largely self-sufficient system has adequately met the various needs of rural communities, including food, fibre and energy, but is now getting disrupted due to shortening *jhum* cycles as a result of increasing population, focus on high value crops for cash income, soil fertility degradation and top soil erosion on account of decreased fallow cycles. Changing climate patterns is further exacerbating these disruptive trends.

2. In Nagaland the *jhum* system covers 60 percent of the area under food grain cultivation, and about half of rural households are engaged in *jhum* cultivation, with about 100,000 ha of forest being cleared for cultivation each year. Rice is the staple food, and upland paddy is the main *jhum* crop, grown mixed with other crops. *Jhum* land and forest-fallows also meet most community firewood and timber needs, and are also sources of wild foods and medicinal plants, as well as catchment areas of local streams.

3. Jhum is a way of farming poor upland soils by utilising fertility accumulated in the forest-fallow period. It maintains more bio-diversity than conventional farming. The practice of burning controls weeds and disease pathogens. Almost no external inputs are used, and the system is naturally organic. The mixed cropping with traditional varieties reduces risk and supports traditional food habits linked to distinctive local cultures. On the other hand, *jhumias* widely held to be a destructive farming system, causing severe soil erosion, atmospheric pollution, damage to soil biology and loss of biodiversity. The system is increasingly becoming unsustainable as *jhum* cycles are becoming shorter, with less time to restore soil fertility and biodiversity. *Jhuming* is labour-intensive, with no potential for mechanisation, and most work is done by women. With low crop yields, not much is produced per day worked, and production usually does not meet household food needs or generate much needed cash income.

4. **Rural Poverty in the project area**. The poverty analysis conducted as part of the project design, shows that poverty in Nagaland has multiple dimensions in the rural areas of the state, namely in terms of access to basic services, connectivity and low incomes. It is closely associated with the agriculture and natural resources based livelihoods of the rural households: the low productivity, the high inputs of family labour for agriculture, the limited options to diversify livelihoods, and the high cost of living in the State, trap households in poverty and render them vulnerable to price shocks on the one hand and to climate change on the other. As per census data, the incidence of rural poverty in the state has doubled from 2004 to 2012 and stood at 19.9% in 2011-2012 equivalent to 280 000 persons. The qualitative wealth ranking exercise conducted in sample villages suggests that on average 16% of rural households earn less than 75,000 INR/year which puts them close to or below the poverty line. The poor rely on a production system comprised of *jhum* cultivation, terrace cultivation and livestock rearing, and their landholdings are typically less than 1 ha of *jhum* and 1 ha of terrace cultivation. Landlessness is less than 10% of rural households.

B. Approach and logic behind interventions

Support for traditional practices and culture

5. The design of this project is in consonance with the following nine principles of engagement espoused in the IFAD Policy on Engagement with Indigenous Peoples: (i) cultural heritage and identity; (ii) free, prior and informed consent; (iii) community driven development; (iv) equitable access to land and resources; (v) building on indigenous knowledge; (vi) environmental issues and climate change; (vii) access to markets; (viii) empowerment; and (ix) gender equality.

6. *Jhum* cultivation and the traditional foods that it produces are the cornerstones of the tribal *cultural heritage and identity* in Nagaland, and the project is focused on making this system more productive and sustainable. Village livestock also have an important role in traditions and food - often being consumed at festivals. The participatory planning process through elected Village Councils will ensure *free, prior and informed consent*, and a *community driven development* approach. There are no land tenure issues in Nagaland and households largely have *access to land resources for jhuming*. Three types of land ownership pattern exist in Nagaland. They include: (i) private lands which are used for both *jhuming* and also for terraced rice cultivation; (ii) clan lands which are owned by a clan collectively and used for fuel wood collection; and (iii) community lands owned collectively by the entire village which is largely used as conservation forests and for fuel wood collection.

7. There are generally three ways of *jhuming* on private lands excluding terrace rice fields: (i) *Jhum* land is in 8-15 blocks depending upon the *jhum* cycle and majority of the households own a parcel of land in each block and undertake *jhum* cultivation collectively; (ii) *jhum* land is in 8-15 blocks depending upon the *jhum* cycle and some (not majority) of the households own a parcel of land in each block and only those who own land undertake *jhum* cultivation in that *jhum* cycle while others do not take up *jhuming* or use land owned by others for *jhuming*; and (iii) *jhum* land are divided into blocks owned by individual households and the households practice *jhum* on their private land individually. The first scenario where *jhum* land is divided into 8-15 blocks in which majority of the members own land is the most common scenario. However, the land ownership is *de jure* as there are no land records and title documents. The mechanism for resolving disputes is vested with the village council *recognizing the cultural heritage and identity* of the indigenous people. FOCUS will address this issue to ensure *equitable access to land resources*.

8. Building on indigenous knowledge will be a key to improving both *jhum* cultivation and settled agriculture. There are a number of examples of traditional practices for more productive *jhum* management in Nagaland which provide the basis for the improved practices to be supported by FOCUS¹. Wetland rice cultivation in Nagaland is based around the traditional *zabo* system of rainwater harvesting. Representation of women is already mandated by state policy and laws in the Village Council (VC), the principal local governance institution at the village level. Women are already fully involved in production and marketing of farm produce, as well as in credit group. The project will build on this to ensure *empowerment and gender equality*, with full participation in project institutions, capacity building for women, and reduction in their often excessive workload.

Improving *jhum* cultivation

9. The project will address the issues facing *jhum* cultivation through: (i) better *jhum* cultivation practices that will be both more productive and more sustainable, with an ecological balance being created; and (ii) gradually shifting *jhumia* households to sedentary farming. Both of these approaches, along with more productive wet rice fields, better plantation crops, improved livestock systems and increased off-farm income, will enhance farmer's income and reduce pressure on land and enhance adaptation to climate change. As farmers seek to increase their income via more market-orientated production, they will need support for marketing, including orientation of production towards what the market needs in terms of volume, quality and price.

10. More productive and sustainable *jhuming* ("better *jhum*") requires a judicious combination of modern scientific knowledge, agricultural technologies and practices in natural resource management with the traditional wisdom and adaptive practices of the highland communities. For instance, farmers already practice certain measures to conserve soils, such as placing logs along contours; and this can be augmented by a ground cover of nitrogen-fixing legumes to add fertility, conserve moisture and suppress weeds. Such measures will enable communities to cultivate a *jhum* field for a longer period, thereby

¹ For example "The Alder Managers, the cultural ecology of a village in Nagaland", Malcolm Cairns, PhD thesis, 2007. Also see Building upon Traditional Agriculture in Nagaland, IIRR, 1999.

restoring the *jhum* cycles to the earlier, sustainable levels of 15 to 20 years. A virtuous cycle can thus be created. Similarly, planting of carefully selected indigenous species of trees and shrubs on *jhum* fallows can reduce soil degradation and increase the biomass for soil fertility restoration and as firewood and timber. This, together with better planting material for *jhum* crops (and judicious introduction of new crops and varieties), will increase household food production and also enable additional sales of surplus cash crops.

11. The communitarian systems of resource governance embedded in the cultural ethos and customs of the highland communities provide an ideal setting to introduce such changes, and the project will support participatory land use planning in each village to enable communities to come up with a rational plan for equitable and sustainable use of natural resources, including reservation of steeper slopes for trees and the establishment of community conservation areas which will be reserved for traditional timber and non-timber forest products.

More productive and sustainable settled agriculture

12. As farmers become able to cultivate more productive *jhum* plots for a longer period, and as they invest in planting trees and soil conservation methods, they will be less inclined to shift their cultivation plots and *jhum* will evolve into sedentary farming. Jhum farming is highly labour intensive (and a real burden for women), and improvements to enhance the productivity and income generation from settled agricultural and livestock enterprises, will mean that households will earn considerably more from non*jhum* activities and so reduce the amount of *jhum* they cultivate². The design mission saw examples of this – such as a village in Nagaland that had given up *ihum* in favour of pig production. With only a limited area of terraces for wetland paddy cultivation (the topography means it is difficult to create more terraces), settled agriculture on sloping land means, to a large extent, a move to permanent tree and plantation crops which are produced for sale rather than meeting subsistence food production. The approach to support settled agriculture will be to improve the productivity of land and provide access to better planting materials (with village level plant nurseries and local seed systems) and other inputs, along with training. Where possible, intercropping with annual crops will contribute to food security and also ensure the continued production of the traditional crops that were previously grown in *jhum*.

13. Particular attention will be paid to the poorest households who may otherwise lack the resources to invest in settled agriculture. In Nagaland, where little land has so far been converted from *jhum* to settled agriculture, the project will support *jhum* conversion via physical and vegetative soil and water conservation methods (including narrow bench terraces for wet rice cultivation) to make sloping land agriculture productive and sustainable.

14. The technologies and methods used in production of these relatively new commercial crops are often out of date and crops are nowhere near as productive as they should be. Up to now the emphasis for government support has been on getting these crops established rather than on improving productivity. Standards of crop husbandry are often poor, and pests and diseases are not effectively controlled. In some cases farmers are using dangerous pesticides such as Furadan and DDT, and it may well be possible to reduce production costs as well as increase productivity.

15. Household food security will not be overlooked. There is a major opportunity to increase the productivity of wetland rice through integrated soil fertility management, improved irrigation, better seed and improved crop varieties (although care will be taken to preserve traditional varieties, many of which fetch premium prices in local markets). Pulses, oilseeds and maize can be sown after paddy has been harvested to utilise residual soil moisture and produce fodder. There are also opportunities to grow food crops, especially the local vegetables and grains found in traditional *jhum*, as intercrops in orchards and in homestead vegetable gardens.

Access to value chains

² Not only does settled agriculture require less labour, but a higher share of this labour comes from men.

16. This shift from subsistence to commercial production can result in a major increase in household income and improvement in living standards. However more engagement with markets has risks and needs to be accompanied by improved access to markets and better value chain management. If this does not happen, households may revert to *jhum* cultivation. FOCUS value chain support will aim to address bottlenecks in the production and marketing system, to ensure that farmers are able to produce products for specific market opportunities. It will complement and support better *jhum* and the expansion of settled agriculture.

17. There is potential to capitalise on *jhum* products as being traditional varieties produced under natural conditions (they are effectively organic by default). Markets for such products exist within the state³, however to access larger and more distant markets may need some form of certification - such as organic. FOCUS will enable partnerships with external agribusiness and trade organisations to enable access to such markets⁴. Processing of products adds value and can reduce the volume and increase shelf life to make access to external markets easier. There are opportunities to produce ground and packaged spices for local markets and semi-processed (cleaned, sliced and dried) spices for markets outside of the state (providing new opportunities for local youth). Drying is not so easy due to the amount of rainfall at the time of harvesting some crops, but there is potential to support the development of new approaches and drying technologies - which would also be useful for paddy and maize as well as spices.

18. FOCUS will develop value chains for selected products. A value chain study⁵ carried out as part of the project design process, has identified a number of sub-sectors with potential for value chain interventions. These are spices (large cardamom, ginger, chilli, and turmeric), oranges, areca nut, bamboo, vegetables, and pineapple. Based on the potential benefits from improving market linkages, the project will initially focus on cardamom, ginger and chilli in Nagaland - once dried these are non-perishable, low volume and high value products that can withstand transport to more distant markets. At the same time, the project will provide marketing support for widely growing cash crops, such as ginger and oranges, as well as bamboo, including support for aggregation and producer organisations, and links with the private sector. The project will support the establishment of small marketing units in the State Agriculture Marketing Board of Nagaland to provide support on policy, market intelligence and planning issues.

19. Market access is also hindered by poor road infrastructure. In Nagaland the road network is not well developed, although around 80% of villages are connected by a road, only about 20% have an all-weather bitumen road. Many villages are connected by little more than a farm track, which gets very muddy and may be prone to landslides, making it impassable during the rains. In response the project will invest in access roads and in Nagaland the emphasis will be on building cross drain structures to make the roads usable during rainy season. Funds will also be provided to support innovative sub-projects to be implemented by selected government agencies, universities and NGOs.

Supporting village livestock development

20. The project will also support livestock production in project villages. Livestock are an integral part of rural livelihoods and traditions, and most village households keep a few pigs and/or chickens. Cattle and goat rearing are also significant in some locations, and in some areas mithun (gayal - *Bosfrontalis*) are kept. Mithun have a special place in the culture of north-east India. Poultry contribute to household food security, while pigs represent a form of savings which can be sold for a significant lump sum (INR15,000 to INR 20,000) at times of need. Pigs and poultry are, to a large degree, fed on domestic food waste and crop by-products, but manufactured feeds are also used. Support for pigs will enable project interventions to reach most of the households in project villages.

³http://www.in.undp.org/content/india/en/home/library/environment_energy/market-development-assessment-for-organic-agrihorticulture-prod/

⁴ Contact has already been made with this spices initiative: https://www.idhsustainabletrade.com/sectors/spices/

⁵Value Chain Analysis Report for Mizoram and Nagaland, Sanjay Kumar Gupta (Value Chain Consultant)

21. The rationale to include livestock in the project is to increase household income, reduce dependence on *jhum* cultivation, utilize crop by-products, and to realize new opportunities through improved production technologies, both for livestock and feed production. Villages do not allow pigs to roam, and all pigs are housed, generating a significant volume of manure. However almost no use is made of pig manure and there is an opportunity to demonstrate improved composting systems, which households can be shown how to use it to make compost that could be utilized in homestead vegetable gardens and on areas of permanent cropping.

22. The approach to livestock development will be based on the successful "Pashu Sakhi" model for goats⁶. This involves having a trained Community Animal Health Worker (CAHW) in each village who will provide preventive health services and first aid, as well as providing advice and information on improved husbandry practices including feeding and housing. The CAHW will act as a link between livestock producers and the Department of Animal Husbandry – with the project also providing support to DAHV. CAHW will be expected to charge for their services and become self-sustaining during the project period. In each village, the CAHW would be selected from the village community and it is expected that a great majority of them would be women, particularly younger women.

23. Although the project will focus on pigs and, there will also be opportunities in specific villages to support poultry, goats and mithun, and to develop dairy production and marketing groups. Support for goats will be based on the same "Pashu Sakhi" model as is proposed for pigs. Mithun development would take place in villages where there is now a mithun population and would aim to improve standards of animal husbandry and manage forest grazing areas. To develop dairy production, the lesson from MilkIT, an IFAD grant project implemented in Uttarakhand by ILRI, is that developing market outlets for milk via collection centres and local retail shops is the catalyst for investment in productivity improvements such as improved feeding and breeding.

C. Targeting

24. **Project area and target group:** In Nagaland, the project would focus on eight out of 11 districts namely, Mon, Longleng, Zunheboto, Wokha, Kiphire, Phek, Mokokchung and Kohima. Dimapur district is not being considered as it is largely situated in the plains. Tuensang and Peren districts are not included as these are covered under the World Bank supported North East Rural Livelihoods Programme (NERLP). The eight selected districts have approximately 200,000⁷ rural households.

25. The population of the state of Nagaland is largely tribal⁸ with about 16 recognized tribes. The project's target group would be entirely tribal and would include all farmers in the project villages who are dependent on *jhum* cultivation. As the project would involve participatory land use planning for the entire village and seek to create community conserved areas and firewood forests besides *jhum* improvement, low land rice cultivation, upland orchard/plantation crop cultivation and value chain development, the project will largely target all farming households in selected villages.

26. **Targeting Approach:** The project would adopt a two stage targeting strategy. First, the project would adopt geographic targeting by excluding the districts with other major development projects. The project area in a district will be selected primarily based on high levels of *jhum* cultivation with an aim to increase the *jhum* cycle and at the same time increase the number of years of *jhum* cultivation to make a gradual shift towards settled agriculture. Second, the project would adopt a social targeting approach by excluding the households with permanent government jobs. The target group categories would therefore include all tribal households involved in *jhum* farming and those unable to take up *jhum* cultivation on account of labour shortages and other vulnerable households having persons with disability and other challenges. Women are the main contributors to both agriculture and livestock activities and therefore

⁶ The Pashu Sakhi model has been successfully used by IFAD-supported project in India (MPOWER, Tejaswini MP) as well as other development programmes. See <u>www.goattrust.org</u> for further details.

⁷196,827 as per Census 2011

⁸89% in Nagaland as per 2001 Census

gender would be mainstreamed into the project activities so that women have access and control over resources both in terms of targeting of project activities and also their participation in various committees of the project.

27. Similarly, youth would be engaged in various project activities which include training them in pig value chain which is a low risk investment and providing them with capital, and engaging them as the main grassroots level project facilitators in the form of Lead Farmers, Community Resource Persons (CRPs) and CAHWs. Youth associations in both the states would be supported to participate in the innovation fund related activities in both the states.

28. In Nagaland, the project would select a cluster villages in each district depending on the size of the district after excluding the clusters allocated the proposed JICA project. A cluster approach would be followed in order to be ensure ease of delivery of project services and to promote economies of scale in selected commodities to facilitate aggregation of both inputs and output for enhancing marketability to outside markets and also reduction in transaction costs. The main village clusters selection criteria include: (i) at least 75% of the villages with high levels of *jhum* cultivation with more than 60% of the households undertaking *jhum* cultivation; (ii) more than 50% of the *jhum* cultivating villages have a *jhum* cycle of eight years and less; (iii) one cluster per district covering the blocks falling in the cluster in their entirety to ensure that the cluster boundary is in consonance with the administrative boundaries for ease of management; ((iv) existence of access roads; and (v) potential for cultivating high value crops on *jhum* land. In total the project would cover a total of 650 villages (69% of all villages in the eight districts with approximately 137,000 rural households) - covering a population of 685,000 persons. A saturation approach will be followed within each cluster to ensure comprehensive land use planning for the entire village landscape.

29. Based on the profile of the households activities related *jhum* improvement, settled agriculture, value chains and livestock development would be targeted. In case of land use planning, village/community forest conservation marketing support and market access promotion, the project would generate benefits to all the households in project.

30. **Scaling up:** FOCUS will build on current and recent initiatives in the two states that have demonstrated the effectiveness of a twin approach of promoting better management of *jhum* on the one hand and gradually shifting towards sedentary agriculture on the other. In Nagaland these are: (i) NEPED⁹, funded by the India-Canada Environmental Facility (ICEF) during 1995-2006; and (ii) Sustainable Land and Ecosystem Management in shifting cultivation areas of Nagaland for ecological and livelihood security (SLEM) project funded by UNDP-GEF. Additionally, the North Eastern Region Community Resource Management Project for Upland Areas (NERCORMP), a project supported by IFAD in Manipur, Meghalaya and the hill districts of Assam, demonstrated community planning and implementation for more sustainable land use systems.

D. Description

31. **Objective**: The overall goal of the project in Nagaland is to increase agricultural income of 137,000 households, and to enhance their resilience to climate change. This would be achieved through the development objective of increasing the environmental sustainability and profitability of farming systems practiced by highland farmers.

32. **Components:** The project will have three components: (i) Improved *jhum* management; (ii) value chain and market access; and (iii) project management and knowledge services

Component 1: *Jhum* Improvement

⁹ Implemented in two phases, the first phase (1995-2001) was called Nagaland Environment Protection and Economic Development through People's Action and the second phase (2001-06) was called Nagaland Empowerment of People through Economic Development. https://www.nagaland.gov.in//Nagaland/GovernmentAndPrivateBodies/Department_of_NEPED.html

33. Agriculture in Nagaland is practiced on hill slopes and valley lands. Normally farmers have been farming on the slopes of the hills by clearing forests and preparing the cleared land for rain-fed mixed cropping systems for few years, generally for 1-2 years. They leave the land as fallows and return after 8-10 years to cultivate it the same way for another 1-2 years. However, they continue to cultivate wet land rice on the terraced lowlands, called terraced rice cultivation (TRC) year after year. The *jhum* cycle in Nagaland has been decreasing and in some places it has come down to just 5-6 years, e.g. Chikitong village in Wokha district and Kigwema village in Kohima District. The forest cover has reduced over a period of time and there has been serious deterioration of ecological conditions and soil fertility due to practice of shifting cultivation in its current form with reduced *jhum* cycles or reduced fallow period and reduction in cultivation period.

34. The main objective of ensuring sustainable agriculture without resorting to *jhum* will be to intensify efforts on: (i) soil and water conservation through mechanical and vegetative methods; (ii) promoting settled agriculture on sloping lands; and (iii) increased rice production from low lands. The project intends to implement agriculture related interventions on *jhum* land taking into account climate change and its impact on food production, livelihoods and environment. The project will take into account emerging climate resilient best practices, which include demonstration of technological practices to adapt to current climate risks such as suitable plant genotypes, in situ moisture conservation, run off water management, disease and insect-pest management, and matching cropping systems to current precipitation levels.¹⁰

35. The project intends to implement agriculture related interventions on *jhum* land taking into account climate change and its impact on food production and livelihoods. The project will take into account climate resilient best practices that are emerging from various research institutions such as, the NICRA programme of ICAR and NAPCC of the Ministry of Environment and Forests. Some of these best practices and innovations that will be introduced include: (i) use of remote sensing capacities to facilitate Village Councils to identify lands appropriate for cultivation and to avoid using steeply sloping lands for *jhum* cultivation, as is prevalent currently; (ii) introduction of fertility management practices using both biological measures and also possibly through the introduction of "nano-nutrient delivery systems"; (iii) use of traditional knowledge in erosion control for ensuring extension of cultivation period from currently one year to at least three years; and (iv) use of better agronomic practices, introduction of agro-forestry, linear planting, cereal and pulse cultivation to build synergy between crops to maintain soil health on one hand and improved farmer income on the other.

36. The project intends to promote cover crops for soil fertility improvement, fruit trees, fodder crops and timber trees. All the species intended for use are indigenous to Nagaland and have not been reported to have any allelopathic effect on the bio-diversity. The project does not support monoculture and will support only existing crops with better seedlings and package of practices and introduction of high value tree crops for erosion control which in reality will enhance biodiversity. Village forests and community level seed banks will be promoted for preservation and promotion of local varieties. However, the slash and burn practice (*jhum* cultivation) has significant negative effect on the local bio-diversity and the environment.

Sub-component 1.1 – Better jhum and conservation

37. **Capacity building:** State Project Management Unit (PMU) will conduct a training programme to all the district level staff to explain the project concept, project components and step-wise implementation modalities including the process of village level micro-plan preparation. Subsequently, the district staff, under the supervision of PMU staff will train the Block/Circle level and village level staff of all the Agriculture, Animal Husbandry and Soil and Water Conservation departments.

¹⁰ National Innovations in Climate Resilient Agriculture, Indian Council for Agricultural Research

38. The project will initially conduct a day long stakeholders' workshop at the district level by inviting all the Chairpersons of Village Councils and Secretaries of *Jhum* Resource Management Committees in the project area to orient them on project goal and project activities with deliberations on the impact of the project. Thereafter, these persons will conduct a meeting of the Village Assembly and deliberate on whether the village wants to take up project implementation. The Village Councils will be requested to submit minutes of the meeting with records of their willingness, or otherwise for participation in the project. Based on the willingness of the community, the project implementation will proceed.

39. The project will use the services of existing Agriculture Field Assistants (AFAs) / Soil and Water Conservation Assistants (SWCAs) / Veterinary Field Assistants (VFAs) after providing them adequate training. The project will identify a Lead Farmer from each village and train them in various aspects of *jhum* improvement covering soil and water conservation measures, fertility enhancing cover crops, improved traditional varieties of seed, fodder crops, tree crops and in managing nursery. The project will support these Lead Farmers to establish an intervention of their choice in the form of demonstration to establishing nursery and livestock units. These Lead Farmers will be the focal points for implementing village level activities and will be supported by Block/Circle level line department officers and the project staff. The project will support Lead Farmers to engage themselves in the establishment of plant nurseries and supply of planting material to the interested farmers. These efforts will create a cadre of village level workers linked to the Departments of Agriculture, Horticulture, Animal Husbandry and Land Resources and Soil and Water Conservation.

40. Land use planning: The project will engage Nagaland GIS and Remote Sensing Application Centre (NaRSAC) to assist in the preparation of land use maps and land suitability maps for the eight project districts. The project will support procurement of GPS for each village and will also build the capacity of NaRSAC in the use of new technology for preparing the land use maps. The project will facilitate the community to prepare a Participatory Land Use Plan (PLUP). This will be based on a 3D digital elevation model and a map produced by NaRSAC. A PLUP for each village will be finalised after validation from the Village Council. Based on the PLUP and also land suitability classification maps, Village Councils will be trained to: (i) identify lands suitable for growing various crops based on the slope, altitude and soil texture, and to allocate land based on this scientific information for *jhum*, settled agriculture; and (iii) decide on the crops to be cultivated to ensure development of economies of scale required for accessing markets. The project will support identification of Village Resource Areas and preparation of Village Resource Maps in districts where these initiatives are yet to be implemented.

41. <u>Better Jhum</u>: Jhum cultivation system has two phases: (i) crop production phase; and (ii) fallow phase. The fallow phase is also known as *jhum* cycle in Nagaland. The duration of both, cultivated and *jhum* fallow varies according to the fertility and productivity status of the land. Usually in *jhum* system, many crops of different duration, such as rice, chillies, ginger, vegetables, etc. are grown in the same piece of land and in an inter-spread (non-linear) manner. The harvesting of crops is done based on their maturity. Usually the land is cultivated for 1-2 years and after that left fallow for few years. One of the major problems in the *jhum* system is the menace of the large volume of weedy and scrubby growth. Farmers burn this vegetation after slashing. Therefore, it is important to keep the weedy growth suppressed through cover crops. In order to achieve the improvements in *jhum*, it is important to address both the phases - cultivation and the fallow periods simultaneously.

42. The project will focus on improving current *jhum* and improved management of *jhum* fallows, which will give two-fold results. First, it will increase the productivity and second it will lengthen *jhum* cycle, resulting in increased fallows. Based on the land use planning maps prepared with support from NaRSAC, communities will be encouraged to earmark the ridge and steep slopes for permanent tree farming, and side slopes for crop farming along with trees, including fruit trees. The community will be encouraged to create fire lines to prevent the spread of fire outside the land allocated for *jhum*. The selection of tree species will be decided based on the altitude of the area. Better planting material and

agronomy for the crops will be introduced coupled with the introduction of new and high value low volume crops in the system. The project will either maintain or increase the crop diversity in *jhum* that is important for the dietary diversity of the *jhum* farmers. Fertility improvement measures will involve growing of cover crops, especially the fertility building and leguminous plants during the pre-crop and fallow periods, and planting and growing of high value leguminous, timber and fuel wood plants / trees on contour bunds.

43. The project will promote FIGs to take up activities related to current *jhum* improvement and fallow *jhum* management. Each FIG will comprise of 10-20 farmers and each member of the FIG will be connected to 20 *jhum* families and these 20 households will be the associates of FIG members. The project will train FIG members and provide project support for implementation of activities.

44. *Current Jhum Improvement:* The FIG comprising farmers will be encouraged to earmark the ridge and steep slopes for permanent tree farming, and side slopes for crop farming along with trees, including fruit trees. The selection of tree species would be decided based on the altitude of the area. The farmers will be encouraged to create fire lines to prevent the spread of fire outside the land allocated for *jhum*. Farm planning will be undertaken in such a way that high nutrient requiring crops are grown in the first year of *jhum* cultivation and lesser nutrient requiring crops in subsequent years due to the natural decline in soil fertility. Farmers will be trained in all these aspects.

45. All *jhum* farmers will be covered in current *jhum* improvement strategy. Each *jhum* farmer will get support for about 25% of their *jhum* plot (estimated at 0.13 ha per *jhum* farmer). This will enable provision of support for all *jhum* farmers and based on the experience the farmers will be able to scale up. The support will be spread over three years to ensure that the *jhum* farmers continue cultivation in the same area. During the first year, the project with support from Lead Farmers will form a FIG in each village.

46. The project will support the construction of water harvesting ponds, low cost bunds, and trenches that will improve the availability of moisture for the cultivated crops. This will be complemented by planting of the leguminous crops on contour bunds (perpendicular to the incline), such as, Leucaena (*Leucaena leucocephala*), Alder (*Alnus nepalensis*), Neel (*Indigofer tinctoria*) and perennial pigeon pea. Gliricidia (*Gliricidiasepium*), Tephrosia and Felmingia will also be planted. In current jhum fields, wild sunflower (*Tithonia diversifolia*) and stylo (*Stylosanthes hamata*) may also be grown and chopped off before sowing of the main crops.¹¹ Crops/commodities such as, rice, maize, sesame, cowpea, vegetables and other pulses will also be promoted for consumption purposes to add to dietary diversity and to improve nutritional security in addition to fodder trees, tubers, etc, for use as animal fodder and feed. The project will purchase planting material from the Lead Farmers to facilitate progression of nursery activities of the Lead Farmers as business enterprise.

47. The project will support Arrowroot and Tikhur cultivation which are tuber crops and are in high demand. Arrow roots is used for making baby foods and can also be consumed as staple. The agronomic requirements of these crops are similar to any other tuber crop and do not need replanting year after year. Left over rhizomes from previous crop germinate and provide good crop. There are also improved nursery production techniques available for these two crops, which may be adopted by the community. The project will make allocations for training, seed and nursery establishment.

48. The project will promote linear manner (proper row and plant spacing), wherever possible to increase the possibility of using farm implements and to control weed growth. Mulching using local materials, use of nano-nutrients, planting leguminous plants on the upper edge of the bunds and cereals on the lower edge of the bund to improve farm productivity and income of the farmers in the short and medium term will be promoted. These intervention are climate resilient as there will be reduction in erosion and improved fertility reducing the need to slash and burn and shift to another *jhum* plot.

¹¹ B. Jama, C. A. Palm, R.J. Buresh, A. Niang, C. Gachengo, G. Nziguheba, and B. Amadalo (2000). Tithonia diversifolia as a green manure for soil fertility improvement in western Kenya: A review. Agroforestry Systems, 49: 201-221.

49. The project support will be spread over three years to ensure that the *jhum* farmers continue cultivation in the same area. During the first year, the project will provide all support related to *jhum* improvement such as soil and water conservation works, introduction of better varieties and improved package of practices. The project will purchase planting material from the Lead Farmers. During second year, the *jhum* households will be required to take up cultivation using their own resources on the same *jhum* plot.

50. During the third year, subject to the FIGs and their associates completing low cost in situ conservation works, taking up cultivation on the same plot using their own resources without shifting to the next *jhum* plot and starting purchase of planting materials from the Lead Farmers, the project will provide additional planting materials from the Lead Farmers. The project will support current *jhum* improvement in a total of 65,000 ha with direct support in 11,700 ha covering 91,000 households.

51. *Fallow Jhum Management:* Fallow *jhum* management gives benefits for both, in-situ and downstream areas. The emphasis is to grow the soil erosion controlling and nutrient building species rather than allowing the scrubby growth during the fallow periods. Fast growing leguminous plant species will supress weedy growth, facilitate improving soil fertility and nutrient cycling, reduce soil erosion and improve the soil moisture holding capacity. The fallow *jhum* management activity will be implemented by the FIG formed for current *jhum* improvement and will be supported by the Lead Farmer.

52. The project will support low cost contour bunding, trenching, creating terraces using vegetative strips of fast growing plant/tree species and grasses, such as *Leucaena, Gliricidia, Alder, Indigo/ neel, perennial pigeon pea* and vetiver. The project will support seeding the fallows with both, annual and perennial legume cover crops, such as the *perennial pigeon pea*, wild sunflower (*Tithonia diversifolia*), *Sesbania species* (*speciosa and aculeate*), *Trifolium alexandrinum*, *Indigofer tinctoria*, stylo (*Stylosanthes hamata*), *etc.* These plants will be self-sustaining over the fallow periods and are expected to stabilize the land and improve soil fertility as well as soil moisture holding capacity. Some of these leguminous crops also have significant fodder and food value.

53. The project will support fallow *jhum* management in all project villages covering a total of 65,000 ha, out of which direct project support will be for 16,250 ha covering some 91,000 households. Each household will get support for about 0.18 ha.

54. <u>Community Conservation Area:</u> The community forests remain the vital community asset for protecting water sources, supply of non-timber forest produce (NTFP), and controlling forest fires. Only the dry wood is allowed to be removed from the village forests and no commercialization is allowed for the NTFPs. The village forests in riverine areas are also protected as rivers are used for navigation purposes. However, over a period of time, these forests have not been maintained. It is therefore, essential to restore the community forests to meet the above objectives.

55. The project will fund contour bunding, contour trenching and water harvesting structures and biological measures, including seeding the area with leguminous plants, such as the wild sunflower, glyricidia and stylo, and perennial pigeon pea. Protection of water sources, raising nurseries and supplying planting material of locally preferred species such as, Tree bean (*Parkia Timoriana, Parkia speciosa,* Badrang / Indian Pepper (*Xanthozylum rhetsa, Champa (Michella champaka*), Gamar (*Gmelina arborea*), Cotton tree (*Bombax ceiba*), etc. Non-structural vegetative measures will also be promoted to recharge springs in the village conservation areas / village forests after mapping of the geology, vegetation and data on water availability.¹² The VCs and the JRMCs, will play a major role in this effort, including the protection and conservation part and in allocating village forest resources for use by the community. The project would support this activity in 20 ha of community forest per village. In total 13,000 ha of community forest conservation areas will be supported.

Sub-component 1.2 – Support to Settled Agriculture

¹²ICIMOD -2016- Spring recharge interventions in Nepal

56. The project does not directly promote settled agriculture though many farmers have made the transition from *jhum* only production system to *jhum* and settled agriculture mixed system mainly on account of high levels of labour requirement and hard labour on a day-to-day basis throughout the year, and also the disinterest of younger generation in *jhum* cultivation. The project will support two aspects related to settled agriculture: (i) the existing terrace rice cultivation; and (ii) orchards and plantations in sloping uplands.

57. Support to existing terrace rice cultivation: The project will support farmers undertaking terraced rice cultivation. The main aim of this will be to increase soil fertility, productivity and cropping intensity, and stabilize productivity. 1-2 FIGs in each village, comprising of about 10-20 members will be established and supported by the selected Lead Farmer and by the project in each village. FIG members will be provided training on improved farming systems and better agro-techniques for the chosen crops and production of improved seeds.

58. Farmers will also be encouraged to grow *Sesbania rostrata*, and *azolla* as green manure before transplanting of paddy in the lowland rice fields.¹³The project will select short duration improved local paddy varieties in consultation with KVKs/ATARI. The possibility of two crops of decent productivity with first crop of low land short duration rice and a second crop of pulses/ginger/ onion after rice cultivation will be explored through proper crop planning using water balance analysis and improved agronomic practices.¹⁴The project will also support sustained low cost water supply, better seeds and better practices (seed selection, management and replacement, row planting, and crop rotation) in terraced lands. It is planned to support paddy seed selection and replacement to improve the yields with technical support from the State Agricultural Research Station (SARS).

59. Introduction of ducks or fish into the rice cultivation areas to improve fertility of soils and additional income will also be implemented.¹⁵ The project will support development of supplementary irrigation system such as lift irrigation, and water harvesting ponds for rice cultivation and also micro-irrigation. The project will support 39,000 households covering 9,750 ha. Each household with terrace rice cultivation will get support for 0.25 Ha.

60. Support for upland settled agriculture: In Nagaland, transition from *jhum* to settled agriculture has started. This is taking place in *jhum* lands of medium slopes situated close to the village. These *jhum* plots are being converted into vegetable gardening, fruit orchards and spice cultivation. In addition, the identified plot for settled agriculture should have slopes that are easy to convert to terraces, water source, and easy accessibility to the village. In such villages the project will establish a FIG in each village, comprising of about 10-20 members with support from the Lead Farmer. Each FIG member will be linked to 20 associate members. The FIG members will be provided training on soil and water conservation, improved farming systems and better agro-techniques.

61. The project will undertake soil and water conservation works in these *jhum* areas. Measures, such as contour bunding and contour trenching will be taken up as demonstrations. Construction of water harvesting ponds will be taken up, wherever feasible to provide for protective irrigation. The contour trenches will be either staggered or continuous depending on the slopes, and designed using appropriate equipment like "A" frame and water level for marking contours.

¹³S.Kannaiyanand K. Kumar (2005). Azolla Biofertilizer for Sustainable Rice Production. <u>https://books.google.co.in/books?isbn=8170353564</u>

¹⁴ Singh V P, Singh RK, Sastri ASRAS, Baghel SS, Chaudhary JL.1999. Rice growing environments in Eastern India: An agroclimatic analysis. Indira Gandhi Agril. Univ. and the International Rice Research Institute. Pub. Pp 76.

¹⁵ Singh VP, Early AC, Wickham TH. 1979. Rice agronomy in relation to rice-cum-fish culture. Pp.15-36. <u>In</u> Proc. International conference on integrated systems. ICLARM / SEARCA, Manila, Philippines.

62. The project will support construction of terraces wherever feasible.¹⁶ Low cost terrace formation techniques will be demonstrated. Better agronomic practices will be supported which includes compost pits, *azolla* pits, and legume, fodder trees and multi-purpose tree planting, such as *Butea monosperma, Albizia lebbec, and Gliricidia* on bunds.The treated area will be utilized for planting high value trees like *Melia composita, Alnus nepalensis,* and other locally available tree crops.¹⁷ Commercially important trees like walnut (*Juglans regia*), chestnut (*Castanea dentata*), bay leaf (*Laurus Nobilis*), cinnamon (*Cinnamomum tamala*), large cardamom (Amomumsblatom) and chillies (*Capsicum chinense* and *Capsicum frutescens*) and other species will be supported.¹⁸Depending upon the feasibility to grow vegetables, spices and other cash crops by taking into account the soil fertility, altitude, slope and other viability factors related to scale, cluster formation, road access and lower transaction cost to reach the market, the project will promote these crops.

63. In addition, where feasible, the project will support cultivation of "sericulture feed plants" such as castor(*Ricinus communis Linn.*), tapioca(*Manihot esculanta*), payam (*Evodia fraxinifolia*) and kessuru (*Heteropanax fragrans Seem*) by taking into account suitability of the area and also ease in establishing market linkages.Planting material production and growing techniques will also be developed and promoted for other high value plants such as *Texus baccata*, Agar (*Aquilarea agallocha*), Ginseng (*Panax ginseng*) and Rudraaksha (*Aelaeocarpus ganitrus*).The project intends to support for *jhum in transition to settled agriculture covering 9,750 ha covering 39,000 households*. Each household with upland settled agriculture will get support for 0.25 Ha.

Component 2: Value Chain and Market Access

64. *Jhum* improvement, settled agriculture and value chain and market access are clearly interlinked. Many farmers have both *jhum* and settled agriculture (mainly plantations, spice cultivation, and lowland rice). The shift to settled agriculture is mainly on account of inadequate labour availability for taking up labour intensive *jhum* cultivation; disinterest of youth to take up *jhum* cultivation and also the need to cultivate high value marketable crops to generate cash income. The project supports improved productivity of *jhum* to achieve production beyond in both of these two production systems to generate marketable volume. The beneficiaries under Value Chain and Market access will be a subset of beneficiaries under *jhum* improvement and settled agriculture. Production support under Value Chain component is to further increase marketable volume and the marketing support will facilitate aggregation, value addition and linkage to outside markets. Livestock support will also target a subset of farmers undertaking *jhum* to increase their income so as to reduce their dependence on *jhum* in its current form which has negative impact on the environment.

65. The horticulture crops are the key cash crops in the state in terms of providing employment generation and cash income to the farmers in the rural areas. The area under horticulture has increased over time and is presently around 1.10 lakh ha with a production of around 11.71 lakh metric tons in 2015-16 which includes fruit crops, spices (ginger, Naga-chilli and large cardamom) and vegetables. The important cash crops from the value chain perspective at present are Naga-chilli and large cardamom. Both these are not perishable, low volume/weight, and high value products. However, proper drying is necessary for achieving good quality produce of both the crops. Most of the cash crops including spices and vegetables are organic by default, as farmers do not apply any fertilizers. The value chain constraints include, inadequate availability of quality planting material/seed, inappropriate /unscientific package of practices, lack of aggregation to determine the marketable quantity to feed into supply chain, lack of

¹⁶ Early AC, Singh VP, Tabbal DF, Wickham TH. 1979. Land evaluation criteria for irrigated lowland rice. Report of an expert consultation. In Land Evaluation Criteria for Irrigation. World Soil Resources. Food and Agriculture Organization of the United Nations, Rome, Italy, 50:114-144.

¹⁷V.P. Singh, (2007). Agro- horti- silviculutre in hill slopes for enhanced and sustained production and hill conservation. Pp 70-73 In: Islam, Z., Hossain, M., Paris, T., Hardy, B., and Gorsuch, J. (Eds) Technologies for Improving Rural Livelihoods in Rainfed Systems in South Asia. IRRI, Los Banos, Laguna, Philippines. Pp 124.

¹⁸A.K. Singh, G.C. Munda, S.V. Ngachan, A.S. Panwar, P.K. Ghosh, Anup Das, D.P. Patel, B.U. Choudhury, A.K. Tripathi and K.P. Mohapatra. 2012.

testing and certification to access premium organic market and limited access to market players from outside the state.

66. The value chain study¹⁹ conducted as a part of the project design has identified five key sub sectors/crops and areas of support required, which include production system improvement, marketing and value addition support in respect of ginger, cardamom, orange, vegetables and chilli.²⁰The fragmented production and availability of limited marketable surplus makes it difficult to start aggregation and market linkages.

67. *Cluster approach:* A cluster approach for promotion of select value chain commodities will be adopted wherein on an average four villages form a cluster, which ensures economies of scale in terms availability of a minimum of a truck load of produce for selling, attractive enough for marketing players to get into business partnership with value chain farmers. Cluster ensures collective procurement of agriculture inputs and business development services i.e. transportation and logistics services to make these service economical for the value chain farmers. Clusters also develop around strategically located villages with comparative advantages in terms of presence of motorable road and transportation access, banking services, collection centres and processing units. The project will support existing and new value chain farmers to become part of clusters selected under the project

<u>Sub-component 2.1 – Value chain development:</u>

68. <u>Production Support</u>: Naga-chillies have high levels of oleoresins and capsacinoids which are used in the food and pharmaceutical industries. The market demands top quality and consistent product. Drying and grading operations needs to be maintained at high standards. Large cardamom is another important spice crop of India and grows in the forest ecosystem and has been domesticated. Nagaland is one of the states in north-eastern India where large cardamom are cultivated. Both these crops are not perishable, low volume and high value produce. The average productivity in the state has been around 2-2.5 tons/ ha for Naga chilli and 0.47 tons/ ha for large Cardamom. Productivity of cardamom has declined on account of nematode infestation resulting in root rot. The productivity of both Naga-chilli and cardamom is expected to increase by 30 to 50% by provision of improved planting materials and appropriate package of practices including treatment regime for nematode infestation.²¹A significant volume of ginger is produced, but production is fragmented and competition from other states and countries has severely depressed the market price. Quality seed for ginger remain an issue. Based on the above factors, the project will focus on promoting and increasing area under Naga-chilli, ginger and cardamom cultivation.

69. The project will use a cluster approach for selection of villages for promoting Naga-chilli, ginger and cardamom production. The clusters / villages will be selected based on the suitability (soil, climate, water, etc.) of soils, slopes and participating farmers' interest and ability to invest in labour to ensure establishment of the selected crops. Interested farmers in these clusters will have to allocate a separate plot of about 0.5 ha either in current *jhum* or in fallow *jhum* to grow only the selected crops.

70. Once the clusters are identified, the project will identify and train two Community Resource Persons (CRPs) for each cluster in various aspects of nursery management, planting material selection and in micro-propagation techniques for rapid multiplication of quality planting material and package of practices. The project will support the CRPs to establish nurseries of Naga-chilli, Ginger and Cardamom for production of quality planting materials. This effort can be expanded to other crop varieties, such as pineapple and other fruit crops. The project will identify and support 100 CRPs in the project districts with about 2 CRPs per cluster.

¹⁹ Value Chain Analysis Report for Mizoram and Nagaland, Sanjay Kumar Gupta (Value Chain Consultant)

²⁰ Value chain analysis of select crops in the north-eastern region by the Small Farmer Agribusiness Consortium

²¹ Central Institute of Horticulture, Dimapur- www.cihner.org.in

71. The project will promote FIGs comprising 20 farmers per group in respect of three spice crops namely Naga-chill, ginger and cardamom in 50 clusters covering about 4 villages per cluster. The FIG members will be provided access to improved planting material of Naga-chilli, ginger and cardamom, and bio-fungicide such as Trichoderma for cardamom. FIG members will be trained in better package of practices in collaboration with local KVKs and the Horticulture Department. Training of farmers will help in increasing survival of plants and better application of nutrients (organic) and management of pests and diseases.²² In total about 400 FIGs will be supported.

72. CRPs will support FIGs by providing quality planting materials. The project will be flexible to accommodate other crops also, depending upon emerging priorities and opportunities. The project in total intends to support 8,000 households and expand production in 1,000 ha for Naga-chilli, 1,000 ha for ginger and 2,000 ha for cardamom.

73. The project plans to introduce an innovative modality for digital delivery of extension and monitoring of production practices, input use and expected production. This can be accessed by market players across the world to support their procurement decisions by identifying number of farmers cultivating a particular crop, quantity of produce expected, and package of practices used. This would reduce the need for face to face interaction required to access market players and increase the reliability quotient. Introduction of this system would also enable the farmers to make a quick progression into organic certification.

74. <u>Marketing Support</u>: The major constraints to value chain development of traditional spice, and agricultural and horticultural crops are mainly issues related to marketing. They include: (i) limited aggregation for achieving economies of scale required for cost effective collection, transportation and storage; (ii) insufficient investment in post-harvest management practices, including primary processing to add value and also to reduce volume for transportation; (iii) inadequate data on marketable quantity to feed into supply chain; (iv) inadequate linkage with premium markets on account of issues related compliance to certification and quality standards; and (v) limited access to market players from outside the state.²³

75. The project's marketing efforts will be directed towards both the project promoted commodities (Naga-chilli, ginger and Cardamom) and also other commodities and crops promoted under *jhum* improvement and settled agriculture, including commodities such as turmeric, orange, passion fruit and pineapple, which are grown in sufficient quantities for market entry to be viable. The project will support Societies/FPOs/FIGs/agencies/firms interested in taking up aggregation and primary processing. The project will also establish linkages of these aggregators/primary processors with agencies interested in procuring commodities produced in Nagaland for sale in the mainland and for export. The project will support engagement of short term consultants as commodity specialists to work on establishing marketing linkages. In addition, the project will also support next level of processing of spices such as extraction of oleoresins, capsanoids, natural plant based dyes, etc.

76. In respect of bamboo, the project will support value addition to bamboo in terms of manufacture of handicrafts and incense sticks and partial processing such as flattening. The project will make funds available for engaging agencies like National Institute of Design to make contemporary designs, train local artisans and also to procure machinery required for bamboo value addition.

77. In order to facilitate production based on market needs, the project will support establishment of a Marketing Unit within the State Agriculture Marketing Board. This unit will produce market intelligence reports, conduct (or commission) market studies, and policy reforms required marketing of agriculture and horticultural produce. This will enable the line departments plan production based on market intelligence

²² ATMA and Horticulture Mission for NE states and Himalayas- <u>http://tmnehs.gov.in</u>)

²³ Livelihood based Agri-business and Market studies for North East Rural Livelihoods Project, MART, 2011

and inputs from the marketing unit. In addition, this unit will act as focal point to for identify market linkage partners and to facilitate market support activities of the project.

78. The marketing unit will establish contacts with agencies, such as Sresta Organics, Patanjali, and other agencies to develop contract farming modalities for the FIGs promoted under the project. Patanjali has shown interest to buy dried turmeric, tulsi, aloe vera, etc. The marketing unit will analyse all market interests and explore the possibility of entering into contract farming arrangements. Collaboration with IDH India (a trade initiative supported by the governments of Netherlands and Sweden) has been firmed up. Once the project implementation starts, IDH India will: (i) conduct a study to validate the business case for organic spice production to the local spice farmer and explore the market demand; (ii) validate the market size for Cardamom both for the domestic and the international markets from India; (iii) explore the model and the business case for a local (near to farm gate) processing plant in Nagaland and the statutory and local requirements to start up such an enterprise; (iv) work with the local partners of Sustainable Spice Initiative (SSI) to identify the parties who would be interested in providing technical support and enter into a long term MoU; and (v) define market requirement parameters for sourcing products from the North East.

79. The project will support participation of agencies, both government and non-government including private sector, in trade fairs and exhibitions within the country, and will also organize buyer-seller meets. The project will also prepare plans to attract private sector and other agencies from outside the state to establish processing and value addition of select crops. In addition, the project will support construction of collection centres, which can also be used for other commodities as well.

80. <u>Livestock support services:</u> Livestock is an integral part of rural livelihoods and way of life in Naga culture and diet, with most village households keeping one/two pigs and/or a few chickens. Cattle and goats are also kept, but are greatly outnumbered by pigs. The population of livestock in the state is marginally declining over a period of time and around half the meat consumed comes from other states.

81. The key person in supporting livestock development will be a CAHW, in all the 650 villages (one in each village) in the 8 identified districts of Nagaland. With women having a major role in livestock, about 50% CAHWs will be women and remaining will be men folk committed to serve the community and stay in the village during the project period and beyond. Capacity building of farmers and CAHWs has been emphasized in the project. Towards this, customized training manuals for pig farmers, poultry farmers and CAHWs will be developed based on the existing training manuals/ available literature and will be translated in to local language. Based on those, the ToT training material for the VFAs will be developed, who will be the master trainers for imparting training to the target group of farmers. The CAHW will be trained to provide health /husbandry services, immunization and first aid, as well as providing advice to farmers on improved husbandry practices. The CAHW activities will be technically supervised by the Veterinary Field Assistants (VFAs) and their activities monitored by the respective village councils. There will be about 74 VFAs, at least one in two clusters (one VFA supporting about 10 villages).

82. *Pigs:* The project will focus mainly on the pig sub-sector by developing support services related to breed improvement, feed improvement, and animal health. The biggest constraint in pig production is inadequate availability of quality feed. To address the problem, the project will demonstrate and promote feed crops cultivation (e.g. sweet potato, tapioca, colocasia, cow-pea, maize, azolla, etc.) in the backyard and generate awareness among the farmers about the nutrient requirement of pigs. There is a requirement of feed supplements/ingredients to increase productivity. In this direction, the project will encourage existing retail outlets to sell fish meal, soya bean meal and oil cakes in addition to wheat bran and rice polish that they commonly sell. Besides, mineral and vitamin mixture will be promoted by distributing it to the pig producers through CAHWs on pilot basis. Small feed grinding units will be established to utilise locally produced maize, dried cassava etc.

83. To improve the genetic quality of pigs, the project will support establishment of 148 small pig breeding units (6:1 unit) to be operated by progressive/ experienced farmers. In addition, the project

envisages distribution of about 30,000 improved piglets for individual households on 50% cost basis. The project will also demonstrate/promote improved pig housing and compost production from pig manure. Existing artificial insemination services for pigs will be expanded by strengthening the existing boar stations under DAHV and or setting up new stations one in each project district and introducing cold chain facilities at least up to village clusters level. VFAs will carry out inseminations of pigs.

84. Animal Health: Preventive animal healthcare is an important component in any animal husbandry activity and the basic necessity. The project envisages immunizing the pigs and poultry in the project area therefore; vaccination against prevalent diseases will be undertaken on a large scale. The vaccination will be done by the CAHW/VFA under the supervision of the Veterinary Officer. Necessary support in terms of making timely availability of vaccine etc. from the DAHV will be provided by the concerned VFAs. The pigs will also be de-wormed on a limited scale during the first three years of the project.

Meat Quality Improvement: Mostly pigs are slaughtered and sold under conditions of very poor 85. hygiene in villages and small towns. This has a great implication on human health. The project would aim to raise awareness of the quality threats among the pig slaughterers, retailers and transporters through information campaign and imparting training on hygienic slaughtering, handling, displaying and selling of pork. The project will provide a few equipment for hygienic business operation. In cooperation with village councils, slaughter slabs would be provided to allow more hygienic slaughtering and reduce wastage of by-products.

Innovation Fund: FOCUS will fund the testing and dissemination of innovative technologies and 86. approaches to improving settled agriculture, livestock and marketing. A small number of institutions are emerging in Nagaland who have started several innovative activities that can be scaled up. Several organizations, such as Entrepreneurs Associates have started training youth and providing them with credit for starting enterprise and Mithun rearing as a biodiversity initiative.²⁴ Similarly, The Green Caravan has started aggregation of local produce and marketing these products outside the state and also value addition of local pork through smoking to market outside the state.²⁵ These, and other similar efforts need a funding mechanism for expansion. In order to address this, FOCUS will set up an innovation fund that will provide flexibility to fund any emerging innovation.

87. Marketing and processing innovations remain the core element in incentivising production that meets the requirement of markets. In order to realise the potential of the agricultural sector to cater to demand from consumers outside the state requires a scale of operations that can enter external markets on competitive terms and/or a premium price for products / produce of Nagaland. Both these situations currently do not exist on account of fragmented pockets of production, high cost of production, limited value addition efforts and limited efforts for aggregation to ascertain volume and transaction costs to test viability of outside market linkages. FOCUS will support in marketing related activities in order to demonstrate the possibility of accessing premium markets outside the state in a consistent and sustainable manner. The project will support aggregation of produce such as Chilli, Turmeric, Cardamom, Kidney bean, Rice bean, Brown Rice and other cereals to link up to markets outside the state. In addition, higher level investment is required to establish extraction of oleoresins, capsanoids and tumerons. These need to be funded in a sub-project mode.

Development of entrepreneurial skills of youth remains a challenge. Skill development and 88. financing challenges mainly constrain young entrepreneurs.²⁶ This issue needs to be addressed in a systematic manner, which requires careful identification of youth interested in taking up a small business, providing them technical as well as managerial training, provision of financial assistance and handholding

²⁴ https://www.eanagaland.com/

 <sup>1111D3://WW.Garegoland.com/TheGreenCaravanNagaland/
 ²⁶ Rural Entrepreneurship in India: Challenge and Problems; Brijesh Patel, Kirit Chavda, G. H. Patel Institute of Business
</sup> Management, Vallabh Vidhyanagar Sardar Patel University, Gujarat, India

to overcome initial business problems. FOCUS will provide support for institutions who have a track record of promoting entrepreneurship amongst youth. Another area requiring innovation is the provision of livestock services. The public system of veterinary hospitals and dispensaries, and animal breeding facilities are not able to provide the coverage needed by livestock producers – not only do they have inherent management weaknesses and inadequate investment, the scattered population in the hills are difficult to reach. FOCUS will provide funds for innovations in livestock services and related technologies. They include innovations in feed development, breeding of local livestock and also meat processing.

89. FOCUS will also support innovations in value addition at the village level that include primary processing of spices and pulses. Bamboo being a common available natural resource in Nagaland requires innovative interventions for value addition which includes pre-processing at the village level. Some of such interventions will be scaled up with project support.

90. In order to support these interventions, the project will establish a fund and seek proposals from interested agencies and provide funding based on a detailed business plan and agreed outcomes. This support will be available to legally registered and tax compliant local agencies that have already implemented innovative interventions requiring scale up support with demonstrated ability to bring their own funds to part finance the proposal. Some funds may also be allocated to generating knowledge on the evolution and sustainability of upland farming systems and their capacity to respond to climate change. Draft operational guidelines for implementing this activity will be prepared during appraisal.

91. The project will prioritize the needs of youth while approving sub-projects funded by the Innovation Fund. Sub-projects of youth taking up enterprise related to aggregation and value addition will be funded on a priority and capacity building aspects will be built into this. In addition, the project will actively identify agencies that have capacity to submit sub-projects that train youth in specific vocations and provide funding for enterprise establishment coupled with technical backstopping. Such agencies will be funded using Innovation Fund.

Sub-component 2.2 - Market access infrastructure

92. A major constraint for the development of market-orientated agriculture is poor road access to production areas. Although almost all villages are now connected by all-weather roads, these tend to run along the ridges where settlements are located. Much of the land with good potential for the development of plantation and other permanent crops are in valley bottoms and on the lesser steep-slopes. However, such areas often have no road access, making it difficult to supply inputs and extract crops. Farm link roads are therefore a major priority of the government. However, many of the roads that have been built, either by DoA or using village labour funded via MGNREGS. These have been constructed without proper survey and design resulting in poor quality, high gradient and largely unpaved; they are not resilient to intense monsoon seasons or extreme events exacerbated by climate change. Rural roads, therefore, often get washed away, buried, or become impassable depending on conditions.

93. IFAD loan funds will be only allocated for construction of critical gaps in the existing road infrastructure such as bridges, culverts and other cross drainage structure. The main reasons for making this change are: (i) availability of substantial allocations under various government programmes for road construction; (ii) increase in number of villages from 600 to 650 requiring additional investments into *jhum* improvement; (iii) inadequate investment in critical cross drainage structure in many of the roads already built. The revised plan is to construct a total of around 200 km of earth road (with proper side slopes and cross drainage and base course) using the funding facilities available under convergence (MGNREGS). In addition, the project will build 600 cross drainage structure using IFAD funds which will result in improvements to 200 km of existing gravel roads.

E. Interaction and linkages between project components

94. The linkages among the four key sub-components are of components 1 and 2 are shown in Table 1 below.

95. The Better *Jhum* and conservation subcomponent focuses on improved productivity of current *jhum* on account of fertility improvement measures, soil and water conservation works including both physical and biological measures. The project will support tree crops and the traditional crops in order to increase the period of cultivation on a *jhum* plot and thereby reduce *jhum* cycle. This intervention will enable the farmers to sustain their activity and take up settled agriculture as a means of improving income levels and reduce dependence on *jhum*. The value chain component will facilitate aggregation of the traditional produce for marketing outside the state and the marketing access will facilitate improved marketing of traditional produce.

96. The settled agriculture sub-component will promote conversion of *jhum* into settled agriculture, thereby increasing the *jhum* cycle and reduction in *jhum* practice. Settled agriculture will not only promote traditional varieties but also crops that have markets outside the state. Improved package of practices and improved seeds of traditional varieties will improve productivity. Value chain related efforts will synchronize settled agriculture with markets, so that produce that have marketing potential are cultivated to target the premium organic market. This will increase farmers' income and further reduce dependence on *jhum*.

97. The value chain activities will not only focus on improving market access of traditional crops in *jhum* but will also provide production support for select crops with market potential. These crops will be cultivated in clusters so as to achieve economies of scale required for aggregation, primary processing and transport. This will further add value to the produce increasing farm gate prices of agricultural commodities. The project supported livestock sector activities will also increase meat production and increase non-farm income of the households.

98. Market access plays an important role in the overall drive of the project to reduce dependence on *jhum* by improving access to productive areas with water source and better soils for settled agriculture, apart improving connectivity between farms and markets. This will reduce the transaction costs and improve the possibilities of aggregation to cater to the markets outside the state.

Component /Sub-		1.1	1.2	2.1	2.2
Component					
		Better Jhum and	Settled Agriculture	Value Chain Development	Market Access
		Conservation	Promotion		Infrastructure
1.1	Better Jhum and		Improved productivity	Aggregation and marketing of	Improved
	Conservation		 –fertility improvement 	traditional crops	traditional crop
			and SWC measures		marketing
1.2	Settled	Jhum converted to		Improved package of	Increased volume
	Agriculture	settled agriculture		practices and increased	for transport of
	Promotion			production volume of	agriculture
				selected marketable produce	produce
2.1	Value Chain	Reduced	Premium marketable		Increased farm
	Development	dependence on	crop production		gate price
		Jhum			
2.2	Market Access	Improved access	Improved access for	Transaction cost reduction for	
	Infrastructure	Jhum areas.	settled agriculture	input, and output aggregation	

Table 1: Linkages between project sub-components

F. Expected outcomes and outputs

Outreach

99. The project is expected to reach 137,000 households covering 685,000 persons. The logframe in provided in Annex 2.1. The details of the assumptions made are provided in Table 2 below.

Table 2: Outreach

Component/Sub- Component	Target HHs	Area (Ha)/Length (km)/No.	Ove assu %	erlap mption HHs	Net target HHs	Assumption
Component 1						

<i>Jhum</i> - Improvement	91,000	11,750	0%	0	91,000	650 villages, 140 households per village and 0.13 Ha per household
Fallow management	91,000	16,250	100%	91,000	0	650 villages, 140 households per village and 0.18 Ha per household
Community Conservation Area	91,000	13,000	100%	91,000	0	650 villages and 20 Ha per village
Terrace Rice Cultivation support	39,000	9,750	60%	23,400	15,600	650 villages, 60 households per village and 0.25 Ha per household
Existing settled agriculture support	39,000	9,750	60%	23,400	15,600	650 villages, 60 households per village, 60 Ha per village and 0.25 Ha household
Component 2						
Spice Value chain support	8,000	4,000	65%	4,800	2,800	Large Cardamom -2,000 Ha, Naga Chilli - 1,000 Ha and Ginger - 1,000 Ha, 50 clusters, 200 villages (1 cluster=4 villages), and 0.5 Ha per household
Livestock support	30,000		60%	18,000	12,000	650 villages, about 46 households per village and 1 piglet per household
Cross drain structures	91,000	600	100%	91,000	0	
Common Facility Centre/Collection Centres	45,000	50	100%	45,000	0	
Total						
Final outreach (households)					137,000	
Final outreach (persons)				685,000		

Outcomes

100. The major outcomes of this project will include:

- i. 70% of the *jhum* households farming for three or more years on the single plot.
- ii. 75% of the households reporting increase in more than 100% in household income.
- iii. Soil carbon percentage of at least 4% on *jhum* land.
- iv. Real increase in net annual farm income (in 2017 prices) to INR 3,480.1 million.
- v. Number of trees increased to at least 20 per ha on *jhum* land.
- vi. 137,000 households reporting adoption of environment friendly sustainable and climate resilient technologies (use of agro-forestry, soil and water conservation, improved planting material and integration with livestock.
- vii. Gross returns from spices increased to INR 669.1 million.
- viii. Gross returns from livestock increased to INR 316.5 million.

Outputs

- 101. The specific outputs of this project will include:
 - i. 100% of the villages (650) with completed participatory land use plans.
 - ii. 182,000 farmers trained on better jhum and fallow management.
 - iii. 78,000 farmers trained on settled agriculture.
 - iv. 47,450 ha under SWC by *jhum*, fallow and settled agriculture.
 - v. 13,000 ha under community conservation areas.
 - vi. 8,000 households participating in organized spice value chain.
 - vii. 30,000 households benefitting from pig rearing.
 - viii. 75,000 households reporting improved access to markets.
 - ix. 400 km of farm link road improved.

G. Risks and key factors for success

102. **Risks:** there are a number of risks associated with the project. Key risks from those identified in the logframe are summarised in Table 3 below. Overall the risk profile of the project is medium to low and the project has incorporated adequate risk mitigation strategies.

Risk (R) / Assumption (A)	Risk before mitigation	Risk reduction Approach	Residual Risks
Goal level:			
Economic growth and social stability (A);	Low		1
Growth of the non-farm sector means that fewer households than anticipated participate in project	Medium	If needed, cover additional districts and include non-farm	LOW
activities (R)	Mediditt	activities	
Long history of insurgent groups in Nagaland putting		Project to transfer funds directly to the community groups	Medium to Low
pressure on the government to comply with their	Medium	and these community groups will be able to tackle the	
demand for funds (R)		insurgent groups	
Development Objective level:	1	Designed in the second in the second se	\/
Extreme climatic events (R)	LOW	ef crops to climate change. Eacus on livestock	very low
makes farming unattractive (R)	Low	horticulture and agroforestry which are more resilient	
Improved <i>jhum</i> management: component level risks:			
Farmers find it worthwhile to adopt improved			
methods for jhum cultivation and settled agriculture	Medium	Improved methods based on proven practices which are	Medium to low
(A)		already adopted in some locations	
Farmers are prepared to replicate project pilots and		Careful manitaring of regulta of domonstrations with	
demonstrations using own resources (A)	Medium-High	profitable technologies disseminated via training and	Medium to low
Reduced levels of income from settled agriculture		extension efforts in each village.	
due to lack of appropriate knowledge and investment		Project support through training and provision of	Low
in improved productivity (R)	Medium	materials and technology will demonstrate profitability of	
Lack of a sharing pattern between land owners and		settled agriculture	
share croppers in Nagaland for long term tree crops		GoN has agreed to consult the community institutions	Low
and orchard/plantation cultivation in <i>jnum</i> system will disincentivise <i>ihum</i> farmers who are share croppers	Medium	and develop a system of sharing between the land	
(R)		orchards and plantations	
Market access and value chain: component level			
risks:			
High transaction cost due to small volume and	High	Build production clusters and aggregation centres, with	Low
remote location (R)	1	improved road communications.	
Policy changes discourage market engagement (R)	LOW	marketing units to provide policy advice in line with Gol	Very low
by competition from other states (R)	Low	Increased efficiency and lower feed costs makes local	Vorylow
Breeding animals/day-old chicks available (A)		production of pigs and poultry more competitive.	
Govt supports role of CAHW in health care (A).	Medium	Village level production of breeding pigs and chicks	Low
	Medium-low	Strong links with state agencies reassures government	Low
Overall weak Financial Management (budgeting,	High	Hiring of qualified staff, training and implementation	Medium to Low
accounting, reporting, internal controls,		support should facilitate the performance of good	
internal/external audit) may result in suspension of disbursements and consequent interruption of		Financial Management	
implementation activities			

Table 3: Risks and Risk Mitigation

103. The main risk at the goal level is that the project does not reach as many households as planned as, with growth in the non-farm sector, fewer households than anticipated are involved in agriculture. The number of households in project districts who are actually involved in farming will become clear once village profiles are generated as part of baseline data gathering. At this stage it will be useful to review and, if needed, adjust outreach targets. It may even be possible to include additional villages in Nagaland (but avoiding overlap with a similar project financed by JICA). Another option would be to reach more households via activities in the non-farm sector, but this risks complicating implementation processes.

104. At the development objective level there are risks related to climate change. However forecasts of climate change show that Nagaland is likely to be less impacted than many other states in India, including Arunachal Pradesh in the north-east, and there may actually be opportunities as other production areas in India suffer from reduced rainfall and great weather fluctuations.

105. There are risks in implementing improved jhum management. Farmers will need to find it worthwhile to implement improved methods, especially where these involve significant investment in physical or vegetative soil conservation methods for land which will only be in production for a limited period during the jhum cycle (albeit a period that is longer than current practice). Careful testing and evaluation of interventions in terms of adoptability will aim to avoid this, but if this becomes a problem, the project could focus more on jhum conversion and supporting existing settled agriculture and livestock.

106. A related risk is that pilots and demonstrations with inputs funded by the project act as a discourage farmers from replicating these interventions with their own resources - they would prefer to wait to get government support. This requires a careful approach from the project, explaining to farmers from the outset that the project is only going to test and demonstrate interventions on a limited scale. It also requires results of these demonstrations are monitored and outcomes disseminated via training and extension work in each village.

107. For the value chain and market access component, there is a risk that production volumes of commercial crops are too small and scattered for it to be worth entering the market. The project will mitigate this problem by developing production clusters and improving market linkages.

108. Another risk, albeit not very significant, is that the state governments will impose regulations on the marketing of farm produce that ends up acting against the interests of producers, reducing competition and lowering producer prices. The project is to support establishment of a marketing unit within the Department of Agriculture which will set out policy options and their consequences, which should reduce this risk.

109. **Key factors for success** - in terms of the ability of the project to mitigate these risks and achieve its planned outputs, key factors are:

- Rapid start of activities on the ground which requires recruitment of project staff, procurement of contracted agencies, and selection and training of community service providers.
- Clear management responsibilities both within the PMU and between the PMU and district level implementation agencies.
- Smooth flow of funds which in turn requires financial management and accounting systems to be efficient and transparent
- Monitoring system that provides comprehensive, accurate and timely information on the delivery of project outputs and the resulting outcomes. This will in turn will require adequate attention and resources for the M&E system.
- Partnerships with the private sector and with individuals and agencies involved in marketing of farm produce.
- Continued active support from Gol, the State Government and IFAD

H. Sustainability

110. The project interventions should be sustainable. Improved agricultural practices, if found by farmers to be useful and profitable will be sustained provided inputs and markets are available. The project interventions in the market access and value chain component will aim to ensure this.

111. In particular the project seeks to build capacity at the village level, not just in terms of the capacity of farmers to produce, but in local service providers - such as Lead Farmers, CRPs and CAHWs. In addition the project will establish village level suppliers of inputs - plant nurseries and animal feed mills, along with poultry and pig breeding farms. All of these will be operated by local people and make a profit from providing these inputs - and so will be sustainable after the project is completed. The project will

also establish systems for the continuing provision of crop and vegetable seeds through community seed systems.

112. Marketing systems will very largely be in the private sector, with the project helping producers make links with agribusiness and marketing companies, as well as establishing local aggregation and primary processing enterprises. There are a number of examples in both states of such enterprises continuing to operate after direct support has been ended.

113. Government will have some continuing responsibilities. Road maintenance will be needed - but village and farm link roads are largely the responsibility of Village Councils who will mobilise resources to keep roads open. The provision of livestock vaccine is a continuing Gol responsibility which will be sustained after the end of the project.

I. Environmental impacts

Potential project impacts	Measures to address the impacts
Improved profitability of farming	In Nagaland, organic farming is in practice and will be promoted under the
could provide incentives for	proposed project as well. In Mizoram, fertilizer and pesticide application
increased use of pesticides and	will be in doses too low to cause environmental harm. Jhum is a form of
fertilizers, which may adversely	naturally organic farming as farmers do not use pesticides or fertilizers
impact on soil fertility, water	(burning of trees provides necessary potash to the soil).
quality and air pollution which	Promotion of IPM for pest control.
would further impact on health of	Integrated approach to farming, inclusive of crop rotation, cover crops,
humans, livestock and other	mulches, etc. to maintain soil fertility.
animals	Promotion of crop farming along with trees
Improved profitability from farming	Assess economic, environmental and social costs and benefits of
may provide incentives for	adaptation responses based on a thorough analysis of available
organised, unsustainable, over-	downscaled climate projections.
exploitation of available forest and	Define practical criteria in determining how specific climate adaptation
water resources, which may	interventions are promoted to reduce current and expected risk levels
further constrain the available	cost-effectively.
natural resource base.	Invest in off-farm livelihood diversification.
	Invest in agroforestry and denotification of species to facilitate planting
	them and using them as commercial species
	Invest in expanding the community conserved areas and forests as a
	result of the participatory land use planning and higher environmental
	awareness
	Managed conversion from Jhum to settled agriculture
Increased inequality amongst the	Stringent monitoring of the project implementation, esp. the selection of
rural population as a fallout of	target households (focusing on the poorest households, landless, and
missing out on proper	agricultural labourers).
implementation of the ideal	Promote communitarian systems of resource governance embedded in
targeting approach as envisaged	the cultural ethos and customs of the highland communities in the two
in project design	States.
	Work through existing village level institutions, i.e. Village Councils (VCs)
	in Nagaland and Mizoram, and the line departments to build capacity and
	commitment to climate risk management, rather than build project specific
	institutions to avoid duplication and conflict, and ensure institutional
	sustainability of climate response.
Increase in Jhum cycles may also	Invest in sustainable forest management, afforestation and reforestation,
be affected by degradation and	fire breaks, social fencing, community forest management of NTFP,
over-exploitation of forests,	grazing management, promotion of alternative energy sources for
including fire and overgrazing	cooking, food processing and product development

Landslide and seismic risks are	Conduct an environmental assessment prior to the construction/			
not properly assessed prior to the	improvement of roads/ buildings that would take into consideration natural			
construction/improvement of agri-	and climate risks as well as environmental and social safeguards			
link roads and construction of				
collection centres for farm produce				
Annex 2.1:	Logical	framework	for	Nagaland
------------	---------	-----------	-----	----------
------------	---------	-----------	-----	----------

		Targets		Means of Ver	Assumptions			
Results Hierarchy	Indicator	Base- line	Mid- Term	Endline	Source	Frequency	Responsibility	(A) / Risks (R)
Outreach	-Number of persons receiving services promoted by the project -Number of youth receiving services promoted by the project	0	274,000	685,000 41,100	Project MIS	Yearly	M&E Unit	
	Number of HH reached	0	54,800	137,000	Project MIS	Yearly	M&E Unit	
farm households in hill areas of Nagaland increased and their resilience to climate change enhanced	% of HH <i>Jnum</i> - farming for 3 or more years continuously on single plot Number of HH reporting increase of >100% in	0	41,100	102,750	Impact assessment Impact assessment	Baseline End-line Baseline End-line	M&E Unit Commissioned Study M&E Unit Commissioned	A) economic growth and social stability
	household incomes			40/	0 1 1		Study	
Development Objective: Environmental sustainability	% soil carbon			4%	Soil carbon test	Baseline Annual	M&E Unit	(R) Climate change and/or
and profitability of <i>the</i> farming systems in hill areas enhanced	Real increase in net farm income (July 2017 prices) in million INR	0	2,485.8	3,480.1	TOS	Baseline MTR End-line	M&E Unit Commissioned Study	better non-farm opportunities makes farming
	Number of trees increased at least 20 per ha in <i>jhum</i> land	0	10 tree/ha	20 tree/ha	TOS	Baseline MTR End-line	M&E Unit Commissioned Study	unattractive.
Outcome 1 : Improved farmers' capacities to manage upland farming sustainably	Number of HH reporting adoption of environmentally sustainable and climate resilient technologies and practices ²⁷	0	54,800	137,000	Project MIS	Yearly	M&E unit	(A) Producers are able to finance the continued investments required to climate proof their farms
Outputs:								
a. Participatory Land Use Planning conducted	No of VC with completed PLUP and land suitability maps	0	650	650	Project MIS	Yearly	M&E unit	(A) Access to reliable technical advice
b. improved production system	No farmers trained (W/M) on better <i>jhum and fallow</i> <i>management</i>	0	96,000	182,000	Project MIS	Yearly	M&E unit	and planting material is secured
	No farmers trained (W/M) on settled agri	0	26,000	78,000	Project MIS	Yearly	M&E unit	(A) Effective
	Area in ha under SWC, by <i>jhum, jhum</i> fallow, settled agriculture	0	18,980	47,450	Project MIS	Yearly	M&E unit	convergence with Govt prog to build the
c. Community forest conserved	Area under CCA managed by VC	0	5,200	13,000	Project MIS	Yearly	M&E unit	assets of the poorer HH
Outcome 2: Increased volume of marketed crops and livestock, with improved returns to producers	Gross returns from spices in million INR Gross returns from livestock in million INR	0	196.7 157.3	669.1 316.5	Project MIS	Yearly	M&E Unit Commissioned Study	(R) High transaction cost due to small volume and
Outputs: a. Spice producers are integrated in national and international spice markets	No participating HH in organized spice value chain	0	3,200	8,000	AOS	Annual	M&E unit	remote location (R) Implementation of

²⁷Climate resilient technologies and practices refer to agro-forestry, soil and water conservation, improved planting material, integration with livestock

Posulte Hiorarchy	Indicator	Targets			Means of Verification			Assumptions
Results merarcity		Base- line	Mid- Term	Endline	Source	Frequency	Responsibility	(A) / Risks (R)
b. Increased productivity of pig production	Pig off-take hh number	0	12,000	30,000	AOS	Annual	M&E unit	APMC Act prevents new
c. value-chain clusters developed	Number of clusters	0	20	50	AOS	Annual	M&E unit	types of market linkages and reduces farm- gate prices.
Outcome 3: Improved access to markets	Number of households reporting improved physical access to markets	0	30,000	75,000	AOS	Annual	M&E unit	(A) Operation and maintenance by
Outputs: a. Rural roads rehabilitated	Length and type of access road rehabilitated in km	0	150	400	Project MIS	Quarterly	M&E unit	communities and Gvt is effective.

Chapter 3: Project Costs and Financing

1. **Introduction:** This Chapter describes the assumptions underlying the calculation of the project costs estimates. It presents summary and detailed cost tables and proposed financing plans as prepared at the time of project appraisal (final design). Detailed costs were presented in INR and the summary costs in USD equivalents. Annual cost estimates are presented in the corresponding fiscal year of India, i.e. April to March. The designed project duration is 6 years starting from the fiscal: 2018/2019. Note that these costs are estimates and will need to be changed during project implementation. In advance of each year an Annual Workplan and Budget will be prepared which may be significantly different from the cost estimates in these tables (in terms of items to be financed, physical quantities and unit costs). In addition, the allocation of IFAD funds between the different categories of expenditure may be revised from time to time – with a proposal for such re-allocation from the State Government being forwarded via the Government of India to IFAD for its approval.

2. **Annual Inflation**: In line with the estimates from The Economic Intelligence Unit, the annual domestic inflation rate has been set at 4.7% for the whole project period and that of the foreign inflation, i.e USD set at 2%.

3. **Exchange rate**: Initial exchange rate has been assumed at INR 68 to one USD, the rate prevailing at the time of detailed design. Although the current exchange rate is at INR 65 to one USD, it is forecast that the exchange rate at the end of 2017 would be about INR 68 to one USD and the same has been set for the whole project period. No CPP option was used.

4. **Unit costs**: All unit costs are input in INR and are expressed in constant 2017 prices. These unit prices were provided by the state government and also collected during the mission. These costs are indicative and have been used for the purpose of estimating overall project costs. At the time of preparing annual work plan and budget, applicable use of these unit costs should be reviewed and where necessary should be updated or modified. Any large scale cost variations should be explained.

5. **Taxes and duties**: Taxes are applied to all expenditure categories in accordance with the provisions contained in newly introduced GST of GOI. No taxes were assumed for training and workshop and also for Grants and Subsidies. All taxes and duties have been fully accounted for and treated as a part of GON counter-part contribution to the project. But no taxes were applied for parallel-financing items and other government-financed works.

6. **Physical and price contingencies**: Physical contingencies have been assumed at 7.5% for all civil work categories that are based on typical engineering estimates. Price contingencies related to annual inflation rate are applied to all expenditure.

7. **Costab accounts**: Expenditure and disbursement categories have been set in accordance with IFAD Circular IC/FOD/02/2013 on standardization of expenditures categories. Identical categories have also been set for procurement accounts also. These accounts are shown in Table-1 below.

Table 1: Costab accounts

Procurement accounts (PA)	Disbursement accounts (DA)	Expenditure accounts (EA)
Civil works_PA	Civil works_DA	Civil works_EA
Equipment_PA	Equipment_DA	Equipment_EA
Consultancy_PA	Consultancy_DA	Consultancy_EA
Grants and subsidies_PA	Grants and subsidies_DA	Grants and subsidies_EA
Goods, services and inputs_PA	Goods, services and inputs_DA	Goods, services and inputs_EA
Training, workshop_PA	Training, workshop_DA	Training, workshop_EA
Salaries and allowances_PA	Salaries and allowances_DA	Salaries and allowances_EA
Operating costs_PA	Operating costs_DA	Operating costs_EA

8. **Project cost table structure**: The FOCUS project has 3 main components and 5 sub-components and accordingly the detailed cost tables have been structured. Detailed cost tables contain such information as units, quantities by year, unit cost in INR, total costs by year and activity, disbursement account and financing rules for each activity. The summary tables are provided in Annex 3.1 and the detailed cost tables are provided in Annex 3.2.

Table 2:	Structure	of cost	tables
----------	-----------	---------	--------

Components	Sub-components	Detailed cost Table Reference #
A. Improved Jhum management	1.Better Jhum and conservation	1.1
	2.Settled agriculture	1.2
B. Value chain development and market access infrastructure	1.Value chain development	2.1
	2.Market access infrastructure	2.2
C. Project management	1.Project management and M&E and KM	3.1

9. **Financing Plan**: Sources of financing of the FOCUS are (i) IFAD loan, (ii) IFAD Grant, (iii) parallel financing of GOI's centrally sponsored schemes, (iv) Convergence funds such as MGNREGA and (v) the participating beneficiaries and along with state government's counter-part funds.

Abbreviations used in cost tables Project financiers:

IFAD Loan financing
IFAD Grant financing
GOI's centrally sponsored schemes
GON contribution of 10% for CSS
Convergence of ongoing schemes of GOI
Participating beneficiaries
GON counter-part funding

IFAD Disbursement categories

Consultancy services
Civil work
Training, workshop, studies etc
Equipment, office equipment, vehicles etc
Goods, services and inputs
Salaries and allowances
Office operating costs

Cost Table accounts categories

PA	Procurement account
DA	Disbursement account
EA	Expenditure account

Annex 3.1: SUMMARY TABLES: NAGALAND

India			
FOCUS_Nagaland State			% Total
Components Project Cost Summary	(INR '000)	(US\$ '000)	Base
	Total	Total	Costs
A. Improved Jhum Cultivation			
1. Better Jhum and Conservation	1,525,955.1	22,440.5	27
2. Support to settled agriculture	413,917.7	6,087.0	7
Subtotal	1,939,872.8	28,527.5	34
B. Market access and value chain development			
1. Value chain development	1,075,574.8	15,817.3	19
2. Market Access Infrastructure	1,644,847.7	24,188.9	29
Subtotal	2,720,422.5	40,006.2	48
C. Project Management			
1. Project Management	981,419.4	14,432.6	17
Subtotal	981,419.4	14,432.6	17
Total BASELINE COSTS	5,641,714.7	82,966.4	100
Physical Contingencies	45,223.1	665.0	1
Price Contingencies	437,291.2	6,430.8	8
Total PROJECT COSTS	6,124,229.0	90,062.2	109

India

FOCUS_Nagaland State

Procurement Accounts by Years

(US\$	'00)0)
-------	-----	-----

(03\$ 000)									
	18/19	19/20	20/21	21/22	22/23	23/24	Total		
1. Consultancies	81.9	191.6	137.8	268.3	267.9	151.7	1,099.1		
2. Works	822.2	7,468.2	7,859.4	7,457.8	4,675.9	1,781.0	30,064.6		
3. Equipment & Materials	921.5	94.0	42.6	78.8	-	-	1,136.9		
4. Grant&Subsidies	550.0	-	-	441.2	882.4	882.4	2,755.9		
5. Goods, Services & Inputs	4,259.5	7,690.0	4,981.9	4,711.8	2,600.6	541.3	24,784.9		
6. Training & Wshops	3,853.5	3,730.3	2,108.8	206.4	90.8	119.5	10,109.3		
7. Salaries & Allowances	2,363.2	2,499.8	2,483.6	2,590.0	2,711.7	2,806.2	15,454.6		
8. Operating Cost	657.1	704.4	753.6	804.0	849.2	888.6	4,656.9		
Total	13,508.8	22,378.2	18,367.6	16,558.4	12,078.5	7,170.7	90,062.2		

Totala Including Conting

India FOCUS_Nagaland State		Pro	curement Meth	nod				
Procurement Arrangements (US\$ '000)	Local Competitive Bidding	Consulting Services: QCBS	Consulting Services: LCS	Local Shopping	Direct Contracting	Community Participation in Procurement	N.B.F.	Total
A. Consultancies	-	948.0 (590.6)	151.1 (128.5)	-	-	-	-	1,099.1 (719.1)
B. Works	12,912.8 (5,382.6)	-	-	3,672.5 (2,589.7)	-	13,479.3 (282.5)	-	30,064.6 (8,254.8)
C. Equipment & Materials	· · ·	-	-	1,136.9 (911.2)	-	-	-	1,136.9 (911.2)
D. Grant&Subsidies	-	-	-	2,205.9 (1,544.1)	550.0	-	-	2,755.9 (1,544.1)
E. Goods, Services & Inputs	-	-	-	11,673.6 (5,911.2)	-	12,325.3 (7,525.1)	786.1	24,784.9 (13,436.2)
F. Training & Wshops	35.0 (35.0)	-	-	9,663.0 (9,643.3)	411.2 (411.2)	-	-	10,109.3 (10,089.6)
G. Salaries & Allowances	-	-	-	1,397.2 (1,288.0)	-	-	14,057.4 (219.5)	15,454.6 (1,507.5)
H. Operating Cost	-	-	-	4,542.6 (3,787.5)	-	8.3	105.9	4,656.9 (3,787.5)
Total	12,947.8 (5,417.6)	948.0 (590.6)	151.1 (128.5)	34,291.7 (25,674.9)	961.2 (411.2)	25,812.9 (7,807.5)	14,949.4 (219.5)	90,062.2 (40,249.9)

Note: Figures in parenthesis are the respective amounts financed by IFAD Loan

India FOCUS_Nagaland State

Disbursement Accounts by Financiers						Pa	arallel finance		Parallel								
(US\$ '000)	GOVT		IFAD Loan		FAD Grant		(CSS)	F	inance,GON	E	Beneficiaries	c	Convergence		Total		Duties &
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Taxes
1. Consultancies	128.4	11.7	719.1	65.4	-	-	226.5	20.6	25.2	2.3	-	-	-	-	1,099.1	1.2	128.4
2. Works	1,666.0	5.5	8,254.8	27.5	-	-	5,880.0	19.6	653.3	2.2	475.6	1.6	13,134.8	43.7	30,064.6	33.4	1,666.0
Equipment & Materials	225.7	19.9	911.2	80.1	-	-	-	-	-	-	-	-	-	-	1,136.9	1.3	204.6
Grant&Subsidies	-0.0	-0.0	1,544.1	56.0	550.0	20.0	-	-	-	-	661.8	24.0	-	-	2,755.9	3.1	-
5. Goods, Services & Inputs	648.2	2.6	13,436.2	54.2	-	-	7,153.6	28.9	796.4	3.2	2,750.4	11.1	-	-	24,784.9	27.5	407.3
6. Trainings & Wshops	19.7	0.2	10,089.6	99.8	-	-	-	-	-	-	-	-	-	-	10,109.3	11.2	19.7
Salaries & Allowances	13,947.2	90.2	1,507.5	9.8	-	-	-	-	-	-	-	-	-	-	15,454.6	17.2	160.8
8. Operating costs	786.9	16.9	3,787.5	81.3	-	-	-	-	74.2	1.6	8.3	0.2	-	-	4,656.9	5.2	600.4
Total PROJECT COSTS	17,422.1	19.3	40,249.9	44.7	550.0	0.6	13,260.1	14.7	1,549.2	1.7	3,896.1	4.3	13,134.8	14.6	90,062.2	100.0	3,187.2

India																	
FOCUS_Nagaland State																	
Components by Financiers						Pa	arallel finance		Parallel								
(US\$ '000)	GOVT		IFAD Loan	I	FAD Grant		(CSS)	Fi	inance,GON	E	Beneficiaries		Convergence		Total		Duties &
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Taxes
A. Improved Jhum Cultivation																	
1. Better Jhum and Conservation	5,966.6	24.1	14,317.9	57.9	-	-	3,149.2	12.7	349.9	1.4	945.1	3.8	-	-	24,728.7	27.5	384.0
2. Support to settled agriculture	278.9	4.2	6,035.5	90.6	-	-	-	-	-	-	348.9	5.2	-	-	6,663.3	7.4	274.2
Subtotal	6,245.4	19.9	20,353.4	64.8	-	-	3,149.2	10.0	349.9	1.1	1,294.0	4.1	-	-	31,392.0	34.9	658.3
B. Market access and value chain devt																	
1. Value chain development	873.4	5.0	9,217.9	53.0	-	-	4,230.9	24.3	471.7	2.7	2,602.1	15.0	-	-	17,396.0	19.3	727.5
2. Market Access Infrastructure	874.1	3.5	4,340.8	17.4	-	-	5,880.0	23.6	727.5	2.9	-	-	13,134.8	52.6	24,957.3	27.7	767.7
Subtotal	1,747.5	4.1	13,558.7	32.0	-	-	10,110.9	23.9	1,199.2	2.8	2,602.1	6.1	13,134.8	31.0	42,353.3	47.0	1,495.2
C. Project Management																	
1. Project Management	9,429.1	57.8	6,337.8	38.8	550.0	3.4	-	-	-	-	-	-	-	-	16,316.9	18.1	1,033.7
Total PROJECT COSTS	17,422.1	19.3	40,249.9	44.7	550.0	0.6	13,260.1	14.7	1,549.2	1.7	3,896.1	4.3	13,134.8	14.6	90,062.2	100.0	3,187.2

India FOCUS_Nagaland State

Expenditure Accounts by Financiers						P	arallel finance		Parallel								
(US\$ '000)	he Government		IFAD Loan	I	FAD Grant		(CSS)	F	inance,GON	E	Beneficiaries	(Convergence		Total		Duties &
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Taxes
I. Investment Costs																	
A. Consultancies	128.4	11.7	719.1	65.4	-	-	226.5	20.6	25.2	2.3	-	-	-	-	1,099.1	1.2	128.4
B. Works	1,666.0	5.5	8,254.8	27.5	-	-	5,880.0	19.6	653.3	2.2	475.6	1.6	13,134.8	43.7	30,064.6	33.4	1,666.0
C. Equipment & Materials	225.7	19.9	911.2	80.1	-	-	-	-	-	-	-	-	-	-	1,136.9	1.3	204.6
D. Grant&Subsidies	-0.0	-0.0	1,544.1	56.0	550.0	20.0	-	-	-	-	661.8	24.0	-	-	2,755.9	3.1	-
E. Goods, Services & Inputs	648.2	2.6	13,436.2	54.2	-	-	7,153.6	28.9	796.4	3.2	2,750.4	11.1	-	-	24,784.9	27.5	407.3
F. Trainings & Wshops	19.7	0.2	10,089.6	99.8	-	-	-	-	-	-	-	-	-	-	10,109.3	11.2	19.7
Total Investment Costs	2,688.0	3.8	34,954.9	50.0	550.0	0.8	13,260.1	19.0	1,474.9	2.1	3,887.8	5.6	13,134.8	18.8	69,950.7	77.7	2,426.0
II. Recurrent Costs																	
A. Salaries & Allowances	13,947.2	90.2	1,507.5	9.8	-	-	-	-	-	-	-	-	-	-	15,454.6	17.2	160.8
B. Operating costs	786.9	16.9	3,787.5	81.3	-	-	-	-	74.2	1.6	8.3	0.2	-	-	4,656.9	5.2	600.4
Total Recurrent Costs	14,734.0	73.3	5,294.9	26.3	-	-	-	-	74.2	0.4	8.3	-	-	-	20,111.5	22.3	761.2
Total PROJECT COSTS	17,422.1	19.3	40,249.9	44.7	550.0	0.6	13,260.1	14.7	1,549.2	1.7	3,896.1	4.3	13,134.8	14.6	90,062.2	100.0	3,187.2

India

FOCUS_Nagaland State

Procurement Accounts by Financiers						Pa	arallel finance		Parallel								
(US\$ '000)	he Government		IFAD Loan	I	FAD Grant		(CSS)	F	inance,GON		Beneficiaries		Convergence		Total		Duties &
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Taxes
1. Consultancies	128.4	11.7	719.1	65.4	-	-	226.5	20.6	25.2	2.3	-	-	-	-	1,099.1	1.2	128.4
2. Works	1,666.0	5.5	8,254.8	27.5	-	-	5,880.0	19.6	653.3	2.2	475.6	1.6	13,134.8	43.7	30,064.6	33.4	1,666.0
3. Equipment & Materials	225.7	19.9	911.2	80.1	-	-	-	-	-	-	-	-	-	-	1,136.9	1.3	204.6
4. Grant&Subsidies	-0.0	-0.0	1,544.1	56.0	550.0	20.0	-	-	-	-	661.8	24.0	-	-	2,755.9	3.1	-
5. Goods, Services & Inputs	648.2	2.6	13,436.2	54.2	-	-	7,153.6	28.9	796.4	3.2	2,750.4	11.1	-	-	24,784.9	27.5	407.3
6. Training & Wshops	19.7	0.2	10,089.6	99.8	-	-	-	-	-	-	-	-	-	-	10,109.3	11.2	19.7
7. Salaries & Allowances	13,947.2	90.2	1,507.5	9.8	-	-	-	-	-	-	-	-	-	-	15,454.6	17.2	160.8
8. Operating Cost	786.9	16.9	3,787.5	81.3	-	-	-	-	74.2	1.6	8.3	0.2	-	-	4,656.9	5.2	600.4
Total PROJECT COSTS	17,422.1	19.3	40,249.9	44.7	550.0	0.6	13,260.1	14.7	1,549.2	1.7	3,896.1	4.3	13,134.8	14.6	90,062.2	100.0	3,187.2

India				
FOCUS_Nagaland State			%	% Total
Expenditure Accounts Project Cost Sumr	(INR '000)	(US\$ '000)	Foreign	Base
	Total	Total	Exchange	Costs
I. Investment Costs				
A. Consultancies	65,531.8	963.7	21	1
B. Works	1,937,376.2	28,490.8	26	34
C. Equipment & Materials	75,722.4	1,113.6	31	1
D. Grant&Subsidies	187,400.0	2,755.9	-	3
E. Goods, Services & Inputs	1,530,772.8	22,511.4	14	27
F. Trainings & Wshops	648,538.8	9,537.3	20	11
Total Investment Costs	4,445,342.0	65,372.7	20	79
II. Recurrent Costs				
A. Salaries & Allowances	914,208.0	13,444.2	-	16
B. Operating costs	282,164.8	4,149.5	22	5
Total Recurrent Costs	1,196,372.8	17,593.7	5	21
Total BASELINE COSTS	5,641,714.7	82,966.4	17	100
Physical Contingencies	45,223.1	665.0	29	1
Price Contingencies	437,291.2	6,430.8	6	8
Total PROJECT COSTS	6,124,229.0	90,062.2	16	109

India

FOCUS_Nagaland State														
Project Components by Year Base Costs			Bas	e Cost (INR '000))					Base	Cost (US\$ '00	0)		
	18/19	19/20	20/21	21/22	22/23	23/24	Total	18/19	19/20	20/21	21/22	22/23	23/24	Total
A. Improved Jhum Cultivation														
1. Better Jhum and Conservation	444,628.1	459,686.3	224,040.9	211,629.7	127,110.0	58,860.0	1,525,955.1	6,538.6	6,760.1	3,294.7	3,112.2	1,869.3	865.6	22,440.5
Support to settled agriculture	77,206.2	155,183.7	132,511.3	49,016.5	-	-	413,917.7	1,135.4	2,282.1	1,948.7	720.8	-	-	6,087.0
Subtotal	521,834.3	614,870.1	356,552.3	260,646.2	127,110.0	58,860.0	1,939,872.8	7,674.0	9,042.2	5,243.4	3,833.0	1,869.3	865.6	28,527.5
B. Market access and value chain development														
1. Value chain development	110,100.2	275,743.1	247,505.6	203,102.0	147,376.4	91,747.5	1,075,574.8	1,619.1	4,055.0	3,639.8	2,986.8	2,167.3	1,349.2	15,817.3
2. Market Access Infrastructure	52,816.2	381,304.6	381,011.6	382,316.2	321,873.0	125,526.2	1,644,847.7	776.7	5,607.4	5,603.1	5,622.3	4,733.4	1,846.0	24,188.9
Subtotal	162,916.4	657,047.7	628,517.2	585,418.2	469,249.4	217,273.7	2,720,422.5	2,395.8	9,662.5	9,242.9	8,609.1	6,900.7	3,195.2	40,006.2
C. Project Management														
1. Project Management	216,434.4	160,190.0	154,423.7	157,039.7	146,480.9	146,850.7	981,419.4	3,182.9	2,355.7	2,270.9	2,309.4	2,154.1	2,159.6	14,432.6
Subtotal	216,434.4	160,190.0	154,423.7	157,039.7	146,480.9	146,850.7	981,419.4	3,182.9	2,355.7	2,270.9	2,309.4	2,154.1	2,159.6	14,432.6
Total BASELINE COSTS	901,185.0	1,432,107.8	1,139,493.2	1,003,104.1	742,840.3	422,984.4	5,641,714.7	13,252.7	21,060.4	16,757.3	14,751.5	10,924.1	6,220.4	82,966.4
Physical Contingencies	373.3	14,907.1	16,058.9	13,792.7	45.5	45.5	45,223.1	5.5	219.2	236.2	202.8	0.7	0.7	665.0
Price Contingencies														
Inflation														
Local	15,967.3	68,874.4	85,135.7	101,100.2	75,630.8	62,373.7	409,082.1	234.8	1,012.9	1,252.0	1,486.8	1,112.2	917.3	6,015.9
Foreign	1,075.0	5,830.6	8,311.6	7,971.8	2,818.1	2,202.0	28,209.1	15.8	85.7	122.2	117.2	41.4	32.4	414.8
Subtotal Inflation	17,042.2	74,705.0	93,447.3	109,072.1	78,448.9	64,575.7	437,291.2	250.6	1,098.6	1,374.2	1,604.0	1,153.7	949.6	6,430.8
Devaluation	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Price Contingencies	17,042.2	74,705.0	93,447.3	109,072.1	78,448.9	64,575.7	437,291.2	250.6	1,098.6	1,374.2	1,604.0	1,153.7	949.6	6,430.8
Total PROJECT COSTS	918,600.5	1,521,719.9	1,248,999.4	1,125,968.8	821,334.7	487,605.6	6,124,229.0	13,508.8	22,378.2	18,367.6	16,558.4	12,078.5	7,170.7	90,062.2
Taxes	26,639.8	54,030.0	57,326.3	52,605.8	13,992.7	12,136.3	216,730.9	391.8	794.6	843.0	773.6	205.8	178.5	3,187.2

India FOCUS_Nagaland State

Project Components by Year Totals Including Contingence			Totals Includin	g Contingencie	s (INR '000)				Тс	tals Including	Contingencie	es (US\$ '000)		
	18/19	19/20	20/21	21/22	22/23	23/24	Total	18/19	19/20	20/21	21/22	22/23	23/24	Total
A. Improved Jhum Cultivation														
1. Better Jhum and Conservation	454,337.0	492,927.0	251,732.3	250,424.0	156,334.3	75,795.2	1,681,549.7	6,681.4	7,248.9	3,701.9	3,682.7	2,299.0	1,114.6	24,728.7
2. Support to settled agriculture	78,804.4	167,614.6	149,661.1	57,025.1	-	-	453,105.3	1,158.9	2,464.9	2,200.9	838.6	-	-	6,663.3
Subtotal	533,141.4	660,541.6	401,393.4	307,449.1	156,334.3	75,795.2	2,134,655.0	7,840.3	9,713.8	5,902.8	4,521.3	2,299.0	1,114.6	31,392.0
B. Market access and value chain development														
1. Value chain development	112,760.7	295,657.0	277,196.1	232,369.1	165,048.1	99,897.9	1,182,928.8	1,658.2	4,347.9	4,076.4	3,417.2	2,427.2	1,469.1	17,396.0
2. Market Access Infrastructure	52,860.9	394,585.1	398,321.6	403,926.5	321,873.0	125,526.2	1,697,093.1	777.4	5,802.7	5,857.7	5,940.1	4,733.4	1,846.0	24,957.3
Subtotal	165,621.6	690,242.1	675,517.7	636,295.6	486,921.1	225,424.0	2,880,021.9	2,435.6	10,150.6	9,934.1	9,357.3	7,160.6	3,315.1	42,353.3
C. Project Management														
1. Project Management	219,837.6	170,936.2	172,088.4	182,224.1	178,079.4	186,386.4	1,109,552.1	3,232.9	2,513.8	2,530.7	2,679.8	2,618.8	2,741.0	16,316.9
Subtotal	219,837.6	170,936.2	172,088.4	182,224.1	178,079.4	186,386.4	1,109,552.1	3,232.9	2,513.8	2,530.7	2,679.8	2,618.8	2,741.0	16,316.9
Total PROJECT COSTS	918,600.5	1,521,719.9	1,248,999.4	1,125,968.8	821,334.7	487,605.6	6,124,229.0	13,508.8	22,378.2	18,367.6	16,558.4	12,078.5	7,170.7	90,062.2

India

FOCUS_Nagaland State

Expenditure Accounts by Years -- Totals

(US\$ '000)			Totals Incl	uding Conting	gencies		
	18/19	19/20	20/21	21/22	22/23	23/24	Total
I. Investment Costs							
A. Consultancies	81.9	191.6	137.8	268.3	267.9	151.7	1,099.1
B. Works	822.2	7,468.2	7,859.4	7,457.8	4,675.9	1,781.0	30,064.6
C. Equipment & Materials	921.5	94.0	42.6	78.8	-	-	1,136.9
D. Grant&Subsidies	550.0	-	-	441.2	882.4	882.4	2,755.9
E. Goods, Services & Inputs	4,259.5	7,690.0	4,981.9	4,711.8	2,600.6	541.3	24,784.9
F. Trainings & Wshops	3,853.5	3,730.3	2,108.8	206.4	90.8	119.5	10,109.3
Total Investment Costs	10,488.6	19,174.0	15,130.4	13,164.3	8,517.5	3,475.8	69,950.7
II. Recurrent Costs							
A. Salaries & Allowances	2,363.2	2,499.8	2,483.6	2,590.0	2,711.7	2,806.2	15,454.6
B. Operating costs	657.1	704.4	753.6	804.0	849.2	888.6	4,656.9
Total Recurrent Costs	3,020.3	3,204.2	3,237.3	3,394.0	3,560.9	3,694.8	20,111.5
Total PROJECT COSTS	13,508.8	22,378.2	18,367.6	16,558.4	12,078.5	7,170.7	90,062.2

India FOCUS_Nagaland State Financing of Investment/Recurren

(US\$ '000)				Financing			
	18/19	19/20	20/21	21/22	22/23	23/24	Total
I. Investment Costs							
The Government	335.3	765.6	784.7	688.7	71.6	42.2	2,688.0
IFAD Loan	7,317.0	10,848.2	7,310.0	6,095.2	2,448.7	935.8	34,954.9
IFAD Grant	550.0	-	-	-	-	-	550.0
Parallel finance (CSS)	1,093.6	3,666.8	3,348.4	2,768.8	1,975.9	406.7	13,260.1
Parallel Finance, GON	121.8	407.7	372.3	307.9	219.8	45.5	1,474.9
Beneficiaries	328.9	962.7	791.9	780.7	759.0	264.7	3,887.8
Convergence	742.1	2,523.1	2,523.1	2,523.1	3,042.5	1,781.0	13,134.8
Total Investment Costs	10,488.6	19,174.0	15,130.4	13,164.3	8,517.5	3,475.8	69,950.7
II. Recurrent Costs							
The Government	2,174.7	2,280.6	2,385.3	2,506.8	2,634.3	2,752.3	14,734.0
IFAD Loan	845.6	922.7	841.7	867.8	904.3	912.8	5,294.9
IFAD Grant	-	-	-	-	-	-	-
Parallel finance (CSS)	-	-	-	-	-	-	-
Parallel Finance,GON	-	-	7.4	14.8	22.3	29.7	74.2
Beneficiaries	-	0.9	2.8	4.6	-	-	8.3
Convergence	-	-	-	-	-	-	-
Total Recurrent Costs	3,020.3	3,204.2	3,237.3	3,394.0	3,560.9	3,694.8	20,111.5
Total Financing of Costs	13,508.8	22,378.2	18,367.6	16,558.4	12,078.5	7,170.7	90,062.2

Annex 3.2: Detailed Cost Tables NAGALAND

Table 1.1: Better Jhum and Conservation

India																		
FOCUS_Nagaland State																		
Table 1.1. Better Jnum and Conservation									Unit Cost		Ter	مرام الموار والم	Continuona					Other Assessments
Detailed Costs	Unit	18/19	19/20	20/21	21/22	22/23	23/24	Total	(INR)	18/19	19/20	20/21	21/22	22/23	23/24	Total	Disb. Acct.	Fin. Rule
	0	10/10	10/20	20/21		22/20	20/24	Total	()	10/10	10/20	20/21		22/20	LUILI	Total	2102.7000	T in Italo
I. Investment Costs																		
A. Better Jhum and Conservation																		
1. Stakeholders' consultation																		
District level consultation /a	district	8	-	-	-	-	-	8	100,000	824	-	-	-	-	-	824	TRW_DA	LOAN (100%)
Village level consultation with VCs /b	VC	650	-	-	-	-	-	650	10,000	6,696	-	-	-	-	-	6,696	TRW_DA	LOAN (100%)
FIG formation /c	village	300	350	-	-	-	-	650	30,000	9,271	11,265	-	-	-	-	20,536	TRW_DA	LOAN (100%)
Subtotal										16,791	11,265	-	-	-	-	28,056		
2. Land Use Planning																		
Capacity building of NaGRSEC	lumpsum	1	1	-	-	-	-	2	500,000	515	536	-	-	-	-	1,051	TRW_DA	LOAN (100%)
Land use maps /d	lumpsum	8	-	-	-	-	-	8	700,000	5,769	-	-	-	-	-	5,769	TRW_DA	LOAN (100%)
Land suitability classification maps /e	village	650	-	-	-	-	-	650	20,000	13,401	-	-	-	-	-	13,401	TRW_DA	LOAN (100%)
GPS to VLWs /f	each	650	-	-		-	-	650	30,000	20,195	-	-	-	-	-	20,195	EQUIP_DA	LOAN (80%)
Training of VC members	VC	300	350	-		-	-	650	10.000	3.090	3.755	-	-	-	-	6.845	TRW DA	LOAN (100%)
Training and support to lead farmers	lead farmer	650	-	650		-	-	1.300	30,000	20.087	-	21.790	-	-	-	41.877	TRW DA	LOAN (100%)
Honourarium to lead farmers /g	lead farmer	7,800	7.800	7.800			-	23,400	1.000	8.035	8.368	8,716	-		-	25,119	TRW DA	LOAN (100%)
Subtotal		.,	.,	.,				,	.,	71.092	12,659	30,506	-	-		114,258		
3 Orientation training to										,	,	,				,		
PMU & DPMU																		
BMI L staff orientation in Dolhi /h	pore dave	100						100	7 500	772						772		LOAN (100%)
DBML staff orientation in Kohima /i	pers_days	200						200	2,000	412						412		LOAN (100%)
Subtotal	pers_uays	200						200	2,000	412	-			-		412	INW_DA	EOAN (100%)
A Dational House										1,105	-	-	-	-	-	1,105		
4. Better Jnum																		
a. Fallow management																		
Legume cover crop - annual /j	per ha	-	3,000	6,500	3,500	-	-	13,000	1,500	-	4,828	10,895	6,111	-	-	21,834	GSI_DA	LOAN (90%), BEN (10%)
Legume cover crop - perennial	per ha	-	3,000	6,500	3,500	-	-	13,000	1,500	-	4,828	10,895	6,111	-	-	21,834	GSI_DA	LOAN (90%), BEN (10%)
Low cost bunds	per ha	-	5,400	5,400	5,450	-	-	16,250	2,000	-	11,587	12,068	12,688	-		36,343	GSI_DA	CSS (90%), GON (10%)
Subtotal										-	21,242	33,858	24,910	-	-	80,010		
b. Current Jhum improvement																		
Bunds, SCW	ha	5,400	6,300	-	-	-	-	11,700	5,000	27,813	33,794	-	-	-	-	61,608	GSI_DA	CSS (90%), GON (10%)
Farmer training /k	sessions	45,500	45,500	-	-	-	-	91,000	2,000	93,741	97,628	-	-	-	-	191,369	TRW_DA	LOAN (100%)
Supply of quality seeds /l	household	45,500	45,500	-	45,500	45,500	-	182,000	1,500	69,854	73,137	-	80,173	83,942	-	307,106	GSI_DA	LOAN (90%), BEN (10%)
Supply of Planting materials for																		
orchard crops	household	45,500	45,500	-		-	-	91,000	1,500	69,854	73,137	-	-	-	-	142,991	GSI_DA	LOAN (90%), BEN (10%)
Subtotal									-	261,262	277,696		80,173	83,942		703,073		
Subtotal									-	261,262	298,938	33,858	105,083	83,942		783,084		
5. Community conservation forest																		
Contour trenches in CCAs /m	ha	4.000	4.000	5.000		-	-	13.000	10.000	41.205	42.913	55.872	-	-	-	139,990	GSI DA	CSS (90%), GON (10%)
Nursery establishment /n	ha	50	150	125			-	325	50,000	2,559	8.037	7.012	-		-	17,608	GSL DA	LOAN (90%)
Planting & maintenance /o	ha		4 000	4 000	5 000			13 000	5 000	_,	21 432	22 439	29.368			73 239	GSL DA	LOAN (90%)
Protection of water sources /n	eitoe		600	600	750			1 950	50,000		34 608	36,005	46,830		_	117 443	CW DA	LOAN (85%) BEN (15%)
Subtotal	31103		000	000	750			1,550	50,000	43 764	106 990	121 320	76 198			3/8 280	OW_DA	EGAN (65%), BEN (15%)
Total Investment Costs									-	204.004	420.952	195 602	101 201	92 042	-	1 274 962		
I Becurrent Costs										354,054	425,002	105,095	101,201	03,342		1,274,002		
A Calaria (an Circle & Millere Invela																		
A. Salaries for Circle & Village levels																		
1. Circle and village level staff									~~ ~~~									0.01/7
Contractual staff for Circle offices /q	pers_month	444	444	444	444	444	444	2,664	20,000	9,089	9,516	9,963	10,431	10,922	11,435	61,356	SAL_DA	GOVI
Village level workers /r	pers_month	2,940	2,940	2,940	2,940	2,940	2,940	17,640	15,000	45,136	47,258	49,479	51,804	54,239	56,788	304,705	SAL_DA	GOVT
Motor cycle allowances /s	per month	2,940	2,940	2,940	2,940	2,940	2,940	17,640	2,000	6,018	6,301	6,597	6,907	7,232	7,572	40,627	OP_DA	LOAN (90%)
Total Recurrent Costs									_	60,243	63,075	66,039	69,143	72,393	75,795	406,688		
Total										454,337	492,927	251,732	250,424	156,334	75,795	1,681,550		
\a Village representatives are invited to this consultation		١	k Training	of farmers	conducted	d by the lea	d farmer in	3 sessions										
\b All community members are invited to this consultation		\	I such as r	ice, maize	, beans,se	same,turm	eric, ginger,	etc for 0.2 ha/hou	sehold									
\c 20 members in a FIG in a village		\	m 20 ha p	er village														
\d Preparation of land use maps with the support of MIRSAC		\	n 0.5 ha p	er village -	1000 seed	llinas per h	а											
\e For each village; prepraed by NIRSAT		1	o 20 ha ne	r village: c	cost inclusi	ve of maint	enance for a	a 4 year period										
\f provided to each village level worker		1	n 3 sites n	er village				,										
\n one lead farmer per village salary at INR 1000/month for 3 ve	ar period	1	a As ner a	nnroved w	acant nosit	ions:												
h For 3 days training and 2 days of travel	a ponou	,	r As ner ar	pproved ve	acant noeiti	ons												
1 5 days including two days of travel		1	e /101 in D	lock and w	illana lavol	etaff												
10 175 ha par hausahald		,	3 +31 III D	ook and vi	maye ievel	Judii												
y u. mo na per nousenoid																		

Table 1.2: Settled Agriculture (Nagaland)

India																		
FOCUS Nacaland State																		
Table 1.2 Support to settled agriculture																		
Detailed Costs					Quantities				Unit Cost		Tota	als Including	Continger	ncies (INR	'000)			Other Accounts
	Unit	18/19	19/20	20/21	21/22	22/23	23/24	Total	(INR)	18/19	19/20	20/21	21/22	22/23	23/24	Total	Disb. Acct.	Fin. Rule
L Investment Costs									()									
A Support to Sottlod Agriculture																		
1 Support to existing																		
settled agriculture																		
a Training and EIG promotion for TBC																		
EIG promotion for TRC/WPT	FIG	200	250					650	20,000	0.271	11 265					20 526		LOAN (100%)
Fig promotion for TRC/WRT	FIG	12 000	12 000	12 000	-	-	-	20,000	30,000	9,271	27 904	20.052	-	-	-	20,550	TRW_DA	LOAN (100%)
Farmer training /a	sessions	13,000	13,000	13,000	-	-	-	39,000	2,000	26,783	27,894	29,053			-	83,730	TRW_DA	LOAN (100%)
Subtotal										36,054	39,158	29,053	-	-	-	104,266		
b. Support for wetland agriculture					0 750							5 00 /	0 50 4					
Improved soil fertility measures - WRC/TRC/b	na	-	3,000	3,000	3,750	-	-	9,750	1,500	-	4,829	5,024	6,534	-	-	16,387	GSI_DA	LOAN (90%), BEN (10%)
Support for wetland agriculture /c	na	-	3,000	3,000	3,750	-	-	9,750	2,500	-	8,046	8,381	10,913	-	-	27,340	GSI_DA	LOAN (90%), BEN (10%)
Subtotal										-	12,875	13,405	17,447	-	-	43,727		
c. Support to upland agriculture																		
FIG promotion & support	FIG	300	350	-	-	-	-	650	30,000	9,271	11,265	-	-	-	-	20,536	TRW_DA	LOAN (100%)
Low cost SWC	ha	-	3,000	3,000	3,750	-	-	9,750	2,000	-	6,926	7,183	9,313	-	-	23,423	CW_DA	LOAN (85%)
Training on upland agriculture	sessions	13,000	13,000	13,000	-	-	-	39,000	2,000	26,783	27,894	29,053	-	-	-	83,730	TRW_DA	LOAN (100%)
Support for private nurseries																		
and trainings	per nursery	50	50	-	-	-	-	100	100,000	5,151	5,364	-	-	-	-	10,515	GSI_DA	LOAN (90%), BEN (10%)
Supply of quality planting materials /d	household	-	13,000	13,000	13,000	-	-	39,000	2,000	-	27,894	29,053	30,265	-	-	87,212	GSI_DA	LOAN (90%), BEN (10%)
Subtotal										41,205	79,343	65,290	39,578	-	-	225,415		
d. Irrigation support																		
Irrigation support -																		
water storage and delivery system /e	per system	-	300	350	-	-	-	650	100,000	-	34,629	41,913	-	-	-	76,542	CW_DA	LOAN (85%), BEN (15%)
Subtotal										77,259	166,005	149,661	57,025	-	-	449,951		
Support to Agriculture Research Station /g	each	1	1	-	-	-	-	2	1,500,000	1,545	1,609	-	-	-	-	3,154	GSI_DA	LOAN (90%)
3. Technical Assistance (Cost included under																		
TA for FAO in Component 3.1) /h																		
a. Preparation of agro-climatic Atlas																		
Preparation agro-climatic atlas /i	lumpsum	-	-	-	-	-	-	-		-	-	-	-	-	-	-	GRANT_DA	LOAN (100%)
Total									-	78,804	167,615	149,661	57,025	-	-	453,105		
		\g suport to N	Nagaland sta	ate agricultu	re research	stations												
\a Training by lead farmer to be conducted in 3 sessions		\h Included u	inder TA for	FAO in Cor	nponent 3.1	for TOTs fo	r SALT, TRO),										
\b 0.25 ha/household		Nursery n	nanagement	t and consu	Itants for Ag	onomy, agr	o-forestry											
\c 0.25 ha per household		and SWC	;															
\d for 0.25 ha per household		\i Included ur	nder TA to F	AO														
\e such as common schemes like lift irrrigation, water harvesti	ing ponds, checl	k dams																
	•.																	

Table 2.1: Value Chain Development (Nagaland)

India FOCUS_Nagaland State																		
Table 2.1. Value chain development									Unit On at		T .,	ala ha ala dha		(1)0 1000				011 4
Detailed Costs	Unit	19/10	10/20	20/21	Juantities	22/22	22/24	Total	(INP)	19/10	10/20	ais including	21/22	22/22	22/24	Total	Dich Acet	Ein Bulo
	0111	10/19	19/20	20/21	21/22	22/23	23/24	TOLAI	(INK)	10/19	19/20	20/21	21/22	22/23	23/24	Total	DISD. ACCI.	Fill. Kule
I. Investment Costs																		
A. Crop-based																		
1. Production Support																		
a. FIGs promotion /a	per FIG	50	150	200	-	-	-	400	30,000	1,535	4,822	6,732	-	-	-	13,089	TRW_DA	LOAN (100%)
b. CRP training /b	per CRP	50	50	-	-	-	-	100	5,000	258	268	-	-	-	-	526	TRW_DA	LOAN (100%)
c. Training of FIG members /c	per FIG	1,000	3,000	4,000	-	-	-	8,000	2,500	2,575	8,046	11,174	-	-	-	21,796	TRW_DA	LOAN (100%)
d. CRP Engagement	per CRP	600	1,200	1,200	-	-	-	3,000	1,000	618	1,287	1,341	-	-	-	3,246	TRW_DA	LOAN (100%)
e. Production of improved																		
planting material by CRPs /d	per CRP	50	50	-	-	-	-	100	70,000	3,605	3,755	-	-	-	-	7,360	GSI_DA	LOAN (100%)
f. Supply of Planting material																		
- Large Cardomum	per ha	200	1,000	800	-	-	-	2,000	12,000	2,472	12,874	10,727	-	-	-	26,074	GSI_DA	LOAN (90%)
g. Supply of Planting material																		
- Naga Chilli	per ha	200	300	500	-	-	-	1,000	1,500	309	483	838	-	-	-	1,630	GSI_DA	LOAN(90%)
h. Supply of planting material- Ginger	ha	200	300	500	-	-	-	1,000	7,500	1,545	2,414	4,190	-	-	-	8,149	GSI_DA	LOAN (90%)
Subtotal									_	12,918	33,950	35,003	-	-	-	81,871		
2. Marketing Support a. Marketing infrastructure																		
Aggregation centres																		
common facility centres /e	centre	-	10	20	20	-	-	50	1,500,000	-	17,316	35,916	37,254	-	-	90,486	CW_DA	LOAN (85%)
Equipment for aggregation center	set	-	10	20	20	-	-	50	100,000	-	1,074	2,227	2,310	-	-	5,612	EQUIP_DA	LOAN (85%)
Collection centres for																		
storage and drying /f	centre	-	10	10	10	-	-	30	1,000,000	-	11,544	11,972	12,418	-	-	35,934	CW_DA	LOAN (85%)
Subtotal										-	29,934	50,115	51,982	-	-	132,031		
b. Marketing support																		
Design projects unspecified /g	each	-	1	1	-	-	-	2	1,500,000	-	1,609	1,675	-	-	-	3,285	GSI_DA	LOAN (90%)
Participation in Trade fairs																		
and Exhibitions	lumpsum	-	1	1	1	1	1	5	500,000	-	536	558	581	605	630	2,912	GSI_DA	LOAN (90%)
Exposure visits	persons	-	5	5	5	5	-	20	50,000	-	268	279	291	303	-	1,142	TRW_DA	LOAN (100%)
Buyer-seller meet	lumpsum	-	1	1	1	1	1	5	1,000,000	-	1,073	1,117	1,164	1,213	1,263	5,830	TRW_DA	LOAN (100%)
Support for setting up of																		
Agroprocessing units /h	lumpsum	-	-	5	5	5	-	15	2,000,000	-	-	11,164	11,617	12,089	-	34,870	GSI_DA	LOAN (75%), BEN (25%)
Digital delivery of extension																		
Tablets	cluster	50	100	50	-	-	-	200	12,000	621	1,289	668	-	-	-	2,578	EQUIP_DA	LOAN (80%)
Services for Digital																		
Delivery of extension	lumpsum	-	1	1	-	-	-	2	450,000	-	483	502	-	-	-	985	CON DA	LOAN (85%)
Organic Certification																		
Spices	lumpsum	-		-	600	600	-	1.200	12.000	-	-	-	8.381	8.731	-	17,112	CON DA	CSS (90%), GON (10%)
Subtotal										621	5,258	15,966	22,034	22,941	1,894	68,715		,
c. Establishment of marketing unit																		
Computer set	set	5		-		-	-	5	50.000	259	-	-	-	-	-	259	EQUIP DA	LOAN (80%)
Furniture	set	5		-			-	5	40.000	207	-	-	-	-	-	207	FOUIP DA	LOAN (80%)
Vehicles	set	1		-				1	850,000	880						880		LOAN (80%)
Training Staff	persons	5		5		5	-	15	20.000	103	-	112	-	121	-	336	TRW DA	LOAN (100%)
Studies	study		2	2	2	2	2	10	20,000		13	45	46	48	50	233		LOAN (85%)
Meeting workshops	workshop	1	2	2	1	- 1	-	7	50,000	52	107	112	-10	61		380	TRW DA	LOAN (100%)
Subtotal	workshop		2	2				'	50,000	1 501	150	268	105	230	50	2 304	ANT_DA	EGAR(10070)
Subtotal									-	2 122	35 3/2	66 3/0	74 121	23 172	1 944	203.051		
3 TA for spices cultivation										2,122	33,342	00,349	74,121	23,172	1,344	203,051		
a TOT for enjoes /	0																CRANT DA	GRANT (100%)
h Consultante Marketing & Hortiouture //	pore dave	-	-		-	-				-	-	-			-		GRANT DA	GRANT (100%)
Subtetel	pers_uays	-	-	-	-	-	-	-	-	-	-	-	-	-	-		GRAINT_DA	GRAINT (100%)
4 Innovations										-	-	-	-	-	-	-		
 movations 	have a set				4.0				0.000.000				00.000	00.000	00.000	450.000	ODANT DI	
Innovation Fund (Project support)	iumpsum	-	-	-	10	20	20	50	3,000,000	-	-	-	30,000	60,000	60,000	150,000	GRANT_DA	LUAN (70%), BEN (30%)
Subiotal										15.040	69.292	101.352	104.121	83.1/2	01.944	434.921		

Contd..

FOCUS_Nagaland State																		
Table 2.1. Value chain development											-							
Detailed Costs	Unit	18/19	19/20	20/21	Quantities 21/22	22/23	23/24	Total	(INR)	18/19	19/20	als including 20/21	21/22	22/23	23/24	Total	Disb. Acct.	Fin. Rule
-																		
B Livestock-based																		
1. Pig Breeding																		
a Capacity building																		
Capacity Building: Training of																		
farmers on breeding/ mgmt/ AH /k	farmer	37	74	37	-		-	148	7.100	271	564	294	-	-	-	1.128	TRW DA	LOAN (100%)
Capacity Building: Exposure visits- in state	farmer	37	74	37				148	5 500	210	437	227				874	TRW DA	LOAN (100%)
Capacity Building:	lamo	0.		0.				110	0,000	2.0	101					0.11		20/11 (100/07)
Exposure visits- other states	farmer	37	74	37	-			148	15.000	572	1.191	620	-	-	-	2.383	TRW DA	LOAN (100%)
Subtotal										1.052	2,191	1.141	-	-		4.384	_	
b. Pig breeding units										.,	_,	.,				.,		
Pig Breeding Stock (6 pigs & 1 boar)	lumpsum	37	74	37	-			148	35.000	1.334	2.779	1.447	-	-	-	5,560	GSI DA	LOAN (50%), BEN (50%)
Construction of pig housing /	structure	37	74	37	-		-	148	100.000	4,115	8.541	4,433	-	-	-	17.088	CW DA	LOAN (50%), BEN (50%)
Subtotal										5,449	11.320	5,880	-	-	-	22,648		
c. Al unit for pigs												.,						
Boar semen station construction	building	4	4		-	-	-	8	300.000	1.336	1.385	-	-	-	-	2.721	CW DA	LOAN (85%)
Processing lab, store and																		(,
office for AI station for pigs /m	lumpsum	4	4	-	-	-	-	8	2,366,670	9,766	10,159	-	-	-	-	19,924	GSI DA	LOAN (90%)
Al for pigs: purchase of boars	each	20	20	-	-	-	-	40	25,000	515	536	-	-	-	-	1,051	GSI DA	CSS (90%), GON (10%)
Boar stations: operating costs	lumpsum	4	8	8	8	8	8	44	1,650,000	6,799	14,161	14,750	15,365	16,007	16,678	83,761	GSI_DA	CSS (90%), GON (10%)
Subtotal									-	18,415	26,242	14,750	15,365	16,007	16,678	107,458		
d. Piglet distribution																		
Distribution of cross-bred piglets /n	piglet	-	7,500	7,500	7,500	7,500	-	30,000	5,000	-	40,231	41,904	43,651	45,475	-	171,261	GSI_DA	LOAN (50%), BEN (50%)
Subtotal									-	24,916	79,984	63,675	59,016	61,483	16,678	305,751		
3. Mithun development - existing herds																		
Community mithun shelter/coral - materials, wood & la	village	10	20	20	-	-	-	50	400,000	4,123	8,584	8,936	-	-	-	21,643	GSI_DA	LOAN (50%), BEN (50%)
Water supply to grazing areas and																		
beneficiary labour	trough	40	80	80	-	-	-	200	120,000	4,948	10,300	10,723	-	-	-	25,971	GSI_DA	LOAN (50%), BEN (50%)
Fencing grazing areas -																		
barbed wire, poles & labour	km	50	100	100	-	-	-	250	52,500	2,706	5,633	5,864	-	-	-	14,203	GSI_DA	LOAN (50%), BEN (50%)
Mineral block demonstration	village	10	20	20	-	-	-	50	50,000	515	1,073	1,117	-	-	-	2,705	TRW_DA	LOAN (100%)
Subtotal										12,292	25,590	26,641	-	-	-	64,522		
4. Strengthening Vet Section																		
a. Strengthening Vet Infrastructure																		
Diagnostic kits for CSF	kits	5	5	5	5	5	5	30		-	-	-	-	-	-	-	GSI_DA	CSS (90%), GON (10%)
5. Animal Health services																		
a. pig vaccination																		
Pig vaccination /p	animal	50,000	100,000	200,000	200,000	200,000	200,000	950,000	42	2,163	4,506	9,386	9,778	10,186	10,613	46,633	GSI_DA	CSS (90%) , GON (10%)
Mineral & vitamin supplements	village	377	377	377	377	-	-	1,508	5,000	1,942	2,022	2,106	2,194			8,265	GSI_DA	CSS (90%), GON (10%)
Subtotal										4,105	6,528	11,493	11,972	10,186	10,613	54,898		
b. Poultry vaccination																		
Poultry vaccination	1000 birds	500	1,000	1,100	1,100	1,100	1,100	5,900	1,000	515	1,073	1,229	1,280	1,334	1,390	6,821	GSI_DA	CSS (90%) , GON (10%)
Subtotal										4,620	7,601	12,722	13,252	11,520	12,003	61,719		
6. Feed and Fodder demonstrations																		
Feed & fodder demonstration /q	lumpsum	350	300	-	-	-	-	650	45,000	16,224	14,483	-	-	-	-	30,708	GSI_DA	LOAN (90%)
7. Veterinary Field Assistant (VFA)		74						74	00.000	4 507						1 507	001 04	
Equipment and field materials for VFA	VFA	74	-	-	-	-	-	74	20,000	1,527	-	-	-	-	-	1,527	GSI_DA	LOAN (90%)
I raining of VFA /r	VFA	74	-	-	74	-	-	148	7,100	541		-	612	-	-	1,153	TRW_DA	LOAN (100%)
Subtotal										2,000	-	-	012	-	-	2,000		
8. Training of CAHWS /S		250	650	200				1 200	7 100	2.560	4.051	2 200				0.001		LOAN (100%)
Exposure visite	person	350	650	300	-	-	-	1,300	7,100	2,560	4,951	2,380	-	-	-	9,891	TRW_DA	LOAN (100%)
Exposure visits	person	250	300	300	-	-	-	650	7,500	1 444	2,010	2,514		-	-	5,330	GSL DA	LOAN (100%)
Subtotal	sei	350	300		-	-	-	050	4,000	1,444	1,268	4 804	-		-	2,732	GOI_DA	LUAN (90%)
9 Training of farmers										4,004	9,055	4,094		-	-	17,953		
by VEA and CAHW	nereone	30 300	30 300	30 300				00 000	440	13 734	14 302	1/ 809				42 024	TRW DA	LOAN (100%)
Sy Tradid Onitiv	persons	30,300	50,500	50,500				30,300	-+0	10,704	14,000	14,030				72,004	INT_DA	LOAN (10070)

Contd..

India																		
FOCUS_Nagaland State																		
Table 2.1. Value chain development				-							_							
Detailed Costs				G	uantities				Unit Cost		To	als Including	g Contingend	ies (INR '000)			Other Accounts
	Unit	18/19	19/20	20/21	21/22	22/23	23/24	lotal	(INR)	18/19	19/20	20/21	21/22	22/23	23/24	Total	Disb. Acct.	Fin. Rule
I. Investment Costs																		
10. Improvement to meat market chain																		
Training on hygienic meat handling	youth	350	300	-	-	-	-	650	7,100	2,560	2,285	-	-	-	-	4,845	TRW_DA	LOAN (100%)
Equipment for demonstration shops	youth	350	300	-	-	-	-	650	10,000	3,625	3,222	-	-	-	-	6,846	EQUIP_DA	LOAN (80%)
Slaughter slab units	youth_unit	-	250	200	200	-	-	650	200,000	-	53,642	44,697	46,561	-	-	144,900	GSI_DA	CSS (90%) , GON (10%)
Subtotal									-	6,185	59,148	44,697	46,561	-		156,591		
11. Technical assistance /u	0	-	-	-	-	-	-	-		-	-	-	-	-	-	-	GRANT_DA	GRANT (100%)
Support for other livestock																		
and fish culture interventions	lumpsum	1	1	1	1	1	1	6	2,000,000	2,063	2,146	2,233	2,323	2,418	2,516	13,700	GSI_DA	CSS (90%), GON (10%)
Subtotal										86,106	212,310	169,760	121,764	75,421	31,198	696,558		
Total Investment Costs									-	101,146	281,602	271,112	225,885	158,592	93,142	1,131,480		
II. Recurrent Costs																		
A. Salaries(Marketing section)																		
1. Salaries and allowances																		
(Marketing section																		
a. Marketing section in																		
Agricultural Marketing Board																		
Manager - Market Intelligence	pers_month	6	12	12	12	12	12	66	60,000	368	772	808	846	886	927	4,606	SAL_DA	LOAN (90%)
Manager - Market Policy & Research	pers_month	6	12	12	12	12	12	66	60,000	368	772	808	846	886	927	4,606	SAL_DA	LOAN (90%)
Manager - Market Linkage	pers_month	6	12	12	12	12	12	66	60,000	368	772	808	846	886	927	4,606	SAL_DA	LOAN (90%)
Marketing Assistants	pers_month	12	24	24	24	24	24	132	35,000	430	900	942	987	1,033	1,082	5,374	SAL_DA	LOAN (90%)
Subtotal									_	1,535	3,215	3,366	3,524	3,690	3,863	19,193		
b. Operating costs																		
Travel allowances	pers_month	30	60	60	60	60	60	330	5,000	155	322	335	349	364	379	1,904	OP_DA	LOAN (90%)
Office operating costs	year	1	1	1	1	1	1	6	60,000	62	64	67	70	73	75	411	OP_DA	LOAN (90%)
Vehicle operating cost	year	0.5	1	1	1	1	1	5.5	120,000	62	129	134	140	145	151	761	OP_DA	LOAN (90%)
Subtotal										278	515	536	558	582	606	3,075		
Subtotal									_	1,814	3,730	3,902	4,083	4,271	4,469	22,268		
B. Salaries: Livestock																		
1. Salaries and allowances																		
(Livestock services)																		
CAHW allowances	pers_year	650	650	-	-	-	-	1,300	12,000	7,983	8,359	-	-	-	-	16,342	SAL_DA	LOAN (90%)
VFA tranportation allowances	VFA year	74	74	74	74	74	74	444	24,000	1,818	1,903	1,993	2,086	2,184	2,287	12,271	OP_DA	LOAN (90%)
Subtotal										9,801	10,262	1,993	2,086	2,184	2,287	28,613		
C. Maintenance of Collection centres																		
 Collection centre/Common facility centre 	annual	-	10	30	50	-	-	90	6,250	-	63	189	315	-		568	OP_DA	BEN (100%)
Total Recurrent Costs									_	11,615	14,055	6,084	6,484	6,456	6,756	51,449		
Total										112,761	295,657	277,196	232,369	165,048	99,898	1,182,929		
		,																
\a 20 persons per FIG - 50 clusters - 4 villages - two FIGs in	each village	1	I cost-sharir	ng basis														
\b 2 days training to each CRP		```	m Includes	regrigerator v	vith solar unit	t, .												
\c 3 sesssions per FIG			maintena	nce costs, Al	equipment f	or Boar sta	ation etc											
d cost towards setting up nurseries and supply of seedlings	to farmers		n one piglet	per househo	ld													
Ve One centre per cluster of 4 villages; cost includes the cost	st design	1	o 20 birds p	er backyard u	init; cost inc	lusive of m	naterials etc											
and construction supervision			p for foot&n	nouth disease	is, classical,	swine feve	er, dewormin	g etc										
vr min 10,000 sq reet area; one centre for every 2 clusters		1	q including	aemo on prep	paring improv	/ea reed												
g including design, training and market linkage			from ban	ana stems, e	quipment, az	olia tanks	, etc											
In private sector participation			r 5 days x 2															
Vi Details and costs included under LA to FAO in Component	13.1		s 50% of C/	ALIVY SNOULD I	be women													
y Costs included under TA to FAO under Component 3.1			t 5 days x 2			0												
material trainers resource persons etc.		(u Costs Incl	uuea unaer I	A IOF FAU IN	Compone	ant 3.1											

Table-2.2: Market Access Infrastructure (Nagaland)

India																		
FOCUS_Nagaland State																		
Table 2.2. Market Access Infrastructure																		
Detailed Costs					Quantities				Unit Cost		Tot	als Including	g Contingenc	ies (INR '000))			Other Accounts
	Unit	18/19	19/20	20/21	21/22	22/23	23/24	Total	(INR)	18/19	19/20	20/21	21/22	22/23	23/24	Total	Disb. Acct.	Fin. Rule
I. Investment Costs																		
A. Market Access Infrastructure																		
1. Training & capacity building of engineering staff of DOA																		
Purchase of survey equipment	each	1		-			-	1	600.000	621	-	-	-	-	-	621	EQUIP DA	LOAN (80%)
GPS for Kohima staff	each	3	-	-	-	-	-	3	30,000	93	-	-	-	-	-	93	EQUIP_DA	LOAN (80%)
Design software	set	1		-	-	-	-	1	700.000	722	-	-	-	-	-	722	GSI DA	LOAN (90%)
Motor cycles /a	each	-	-	-	-	-	-	-		-	-	-	-	-	-		EQUIP DA	LOAN (80%)
One 4 WD field vehicle	each	1	-	-	-	-	-	1	850,000	880	-	-	-	-	-	880	EQUIP_DA	LOAN (80%)
Training /b	pers month	2	2	-	-	-	-	4	40,000	82	86	-	-	-	-	168	TRW DA	LOAN (100%)
TA for Road design and supervision	pers_month	-	-	-	-	-	-	-		-	-	-	-	-	-		CON DA	LOAN (85%)
Subtotal									-	2,399	86	-	-	-	-	2,485		(,
2. Climate resilient Farm link roads																		
Rehabilitation of earth roads /c	KM	-	50	50	50	50	-	200	2,191,000	-	111,067	111,067	111,067	111,067	-	444,267	CW_DA	CSS (90%), GON (10%)
Surveys and quality control /d	lumpsum	-	300	-	-	-	-	300	5,000	-	1,610	-	-	-	-	1,610	CON_DA	LOAN (85%)
Gravelling of existing earth																		
road with WBM /e	KM	-	-	-	-	-	-	-		-	-	-	-	-	-	-	CW_DA	LOAN (85%)
Cross-drainage structures with																		
protective works /f	each CDS	-	200	200	200	-	-	600	477,575	-	110,254	114,381	118,681	-	-	343,316	CW_DA	LOAN (85%)
Subtotal									-	-	222,930	225,448	229,748	111,067	-	789,193		
3. Other rural infrastructure (Under Convergence)																	
Construction of Channels for																		
water harvesting	lumpsum	-	200	200	200	300	200	1,100	350,000	-	70,646	70,646	70,646	105,969	70,646	388,554	CW_DA	CONVERG (100%)
Complementary access works	lumpsum	0.1	0.2	0.2	0.2	0.2	0.1	1	500,000,000	50,462	100,923	100,923	100,923	100,923	50,462	504,615	CW_DA	CONVERG (100%)
Subtotal										50,462	171,569	171,569	171,569	206,892	121,108	893,169		
Total Investment Costs									_	52,861	394,585	397,017	401,317	317,959	121,108	1,684,847		
II. Recurrent Costs																		
A. Operating Costs																		
1. Market access infrastrucutre																		
Maintenance of earth roads	per km	-	-	50	100	150	200	500	10,000	-	-	505	1,009	1,514	2,018	5,046	OP_DA	GON (100%)
Maintenance of cross-drainage structures /g	each CDS	-	-	200	400	600	600	1,800	4,000	-	-	800	1,600	2,400	2,400	7,200	OP_DA	GOVT
Total Recurrent Costs									-	-	-	1,305	2,609	3,914	4,418	12,246		
Total										52,861	394,585	398,322	403,926	321,873	125,526	1,697,093		
		1	\e 3.5 m pa	vement width	n, 1 m shoul	der width on	either side,	20 cm base a	and 20 cm of wear	ring coarse								
\a one each per district			cost incl	uding constru	uction of cro	ss drainage	and side dra	lins										
\b on adopting climate resilient features and		1	f such as s	lab or pipe c	ulverts for th	e existing ro	ad segment	S										
handling of total stations and design software			with clim	ate resilient	protective f	eatures												
 on adopting climate resilient features and handling of total stations and design software 		1	f such as s with clim	lab or pipe cl ate resilient	ulverts for th protective for	e existing ro eatures	and side dra	s										

cost inclusive of survey and design and preparation of BOQ \g by involving the local community

\c formation width of 5.5 m; cost inclusive of contruction of drainage crossings \d Approximately 10% of the total cost of construction of gravel road

Table 3.1 Project Management and M&E and KM (Nagaland)

India FOCUS_Nagaland State

Table 3.1. Project Management																		
Detailed Costs					Quantities				Unit Cost		Tot	als Including	Contingend	cies (INR '000	D)			Other Accounts
	Unit	18/19	19/20	20/21	21/22	22/23	23/24	Total	(INR)	18/19	19/20	20/21	21/22	22/23	23/24	Total	Disb. Acct.	Fin. Rule
I Investment Costs																		
A Project Management																		
1 Vehicles PMI																		
Vehicles AWD - Premium	each	2	_	_		_		2	1 700 000	3 457			_	_		3 /57		LOAN (80%)
Vehicle 4WD Pudget	oach	11							950,000	0,509						0,509		LOAN (80%)
Multiutility uchiele	each							1	1 800,000	3,300						3,300		LOAN (80%)
Minihun	each	1	-	-	-	-	-	1	1,800,000	1,004	-	-	-	-	-	1,004		LOAN (80%)
Willindus Subtatal	each		-	-	-	-	-		800,000	020						020	EQUIP_DA	LUAIN (00%)
Subtotal										15,658	-	-	-	-	-	15,658		
2. Vehicles DMU																		
Vehicle 4WD - Budget	each	8	-	-	-	-	-	8	850,000	6,915	-	-		-	-	6,915	EQUIP_DA	LOAN (80%)
Motorcycle /a	each	40	-	-	40	-	-	80	75,000	3,051	-		3,051	-		6,101	EQUIP_DA	LOAN (80%)
Subtotal										9,965	-	-	3,051	-	-	13,016		
3. Other equipments																		
Video-conferencing facility - PMU and DMUs	set	1	-	-		-	-	1	1,200,000	1,243	-	-	-	-	-	1,243	EQUIP_DA	LOAN (80%)
4. Office Equipment PMU																		
Laptop computers	each	14	-	-	-	-	-	14	45,000	652	-	-	-	-	-	652	EQUIP_DA	LOAN (80%)
Desktop computers	each	4	-	-	-	-	-	4	35,000	145	-	-	-	-	-	145	EQUIP_DA	LOAN (80%)
Printers and scanners	each	6	-	-	-	-	-	6	10,000	62	-	-	-	-	-	62	EQUIP_DA	LOAN (80%)
Photocopy machines	each	1	-	-	-	-	-	1	150,000	155	-	-	-	-	-	155	EQUIP_DA	LOAN (80%)
Other equipments	lumpsum	1	-	-	-	-	-	1	500,000	518	-	-	-	-	-	518	EQUIP_DA	LOAN (80%)
Office furniture	lumpsum	1	1	-	-	-	-	2	500,000	518	537	-	-	-	-	1,055	EQUIP_DA	LOAN (80%)
Computer Peripherals /b	lumpsum	1	-	-	-	-	-	1	200,000	207	-	-	-	-	-	207	EQUIP_DA	LOAN (80%)
Tablets	lumpsum	60	-	-	-	-	-	60	12,000	746	-	-	-	-	-	746	EQUIP_DA	LOAN (80%)
Subtotal									-	3,003	537	-	-	-	-	3,540	-	
5. Office Equipment DMU																		
Laptop computers	unit	32	-	-		-	-	32	45,000	1,491	-	-	-	-	-	1,491	EQUIP_DA	LOAN (80%)
Desktop computers	set	8	-	-		-	-	8	35,000	290	-	-	-	-	-	290	EQUIP_DA	LOAN (80%)
Printers and scanners	set	8	-	-	-		-	8	10,000	83	-	-	-	-	-	83	EQUIP_DA	LOAN (80%)
Other equipments	lumpsum	8	-	-	-	-	-	8	100,000	828	-		-	-	-	828	EQUIP_DA	LOAN (80%)
Office furniture	set	8	-	-	-	-	-	8	200,000	1,657	-		-	-	-	1,657	EQUIP_DA	LOAN (80%)
Computer Peripherals /c	lumpsum	8	-	-	-	-	-	8	100.000	828	-	-	-	-	-	828	EQUIP DA	LOAN (80%)
Subtotal										5,178	-	-	-	-	-	5.178		
6. Registration and other																		
expenses for the society	lumpsum	1	-	-		-	-	1	250.000	259	-		-	-	-	259	GSL DA	LOAN (90%)
7. Account & Annual Audit								-	,									
Accounting software	lumpsum	٩	9	q	9	9	٩	54	20.000	186	193	201	209	218	226	1 233	GSL DA	LOAN (90%)
Customisation of accounting software	lumpsum	1	-	-		-	-	1	600,000	619		201	200	2.0	-	619	GSL DA	LOAN (90%)
Audit expenses	lumpsum		1	1	1	1	1		400,000	412	129	447	466	485	505	2 744		LOAN (90%)
Internal Audit- External /d	lumpsum	9	9			0	9	54	200,000	1 856	1 931	2 010	2 092	2 177	2 267	12 334	GSL DA	LOAN (90%)
Subtotal	lumpsum	3	5	5	9	5	9	54	200,000	3.073	2 554	2,658	2,032	2,177	2 998	16 930	- 001_07	20/11 (30/8)
8 Technical Assistance by EAO										0,073	2,004	2,000	2,101	2,000	2,000	10,000		
Tochnical Assistance by FAO	lumpoum	1						1	27 400 000	27 400						27 400	CRANT DA	GRANT (100%)
Subtotal	umpsum		-	-	-	-	-		37,400,000	75 770	2 001	2 659	E 917	2 000	2 009	37,400	GIVANT_DA	GIVANI (100%)
Subiotal										13,119	3,091	2,000	3,017	2,000	2,990	95,224		

Contd..

ndia FOCUS_Nagaland State																		
Table 3.1. Project Management Detailed Costs					Quantities				Unit Cost		Tot	als Including	Contingen	ies (INR '000	n			Other Accounts
	Unit	18/19	19/20	20/21	21/22	22/23	23/24	Total	(INR)	18/19	19/20	20/21	21/22	22/23	23/24	Total	Disb. Acct.	Fin. Rule
I. Investment Costs																		
B. M&E and Knowledge Management 1. Monitoring and Evaluation (M&E)																		
a. Equipments																		
Laptop computers	each	2	-	-	-	-	-	2	45,000	93	-	-	-	-	-	93	EQUIP_DA	LOAN (80%)
Printer and scanner	each	1	-	-	-	-	-	1	35,000	36	-	-	-	-	-	36	EQUIP_DA	LOAN (80%)
Other equipment- GPS etc.	lumpsum	0.5	0.5	-	-	-	-	1	200,000	104	107	-	-	-	-	211	EQUIP_DA	LOAN (80%)
Subtotal										233	107	-	-	-	-	340		
b. M&E studies, wshops, surveys																		
Baseline, mid-term and impact survey /e	study	1	-	-	1	-	1	3				-	-	-	-		GRANT_DA	GRANT (100%)
Sub-sector outcome surveys	survey	2	2	-	-	-	-	4	1,000,000	2,063	2,146					4,209	CON_DA	LOAN (85%)
Annual Outcome Survey	survey	1	1	1	1	1	1	6	1,000,000	1,031	1,073	1,117	1,162	1,210	1,259	6,852	CON_DA	LOAN (85%)
Case studies, Climate impact																		
assessment study, other studies	lumpsum	-	2	2	2	2	2	10	1,500,000	-	3,219	3,350	3,486	3,629	3,778	17,462	CON_DA	LOAN (85%)
Climate Risk Assessment	lumpsum	-	1	1	1	1	1	5	500,000		537	558	581	605	630	2,910	CON_DA	LOAN (85%)
Enumerators for M&E unit surveys	district	8	8	8	8	8	8	48	187,500	1,547	1,610	1,675	1,743	1,814	1,889	10,278	CON_DA	LOAN (85%)
Project Completation review																		
and workshop	lumpsum	-	-	-	-	-	1	1	2,500,000	-	-	-	-	-	3,159	3,159	TRW_DA	LOAN (100%)
Subtotal	0									4,641	8,584	6,700	6,973	7,258	10,714	44,870	ODANT DA	ODANT (4000()
c. M&E Consulants, agency /r	U	-	-	-	-	-	-	-		-	-	-	-	-	-	-	GRANT_DA	GRANT (100%)
a. Mis Development /g	lumpsum	-	-	-	-	-	-	-	-	4.074	-	6 700	6.072	7.050	10 714	45.010	GRANT_DA	GRANT (100%)
Subtotal										4,074	0,092	6,700	6,973	7,200	10,714	45,210		
2. Knowledge Management (KM) a. Capacity Building and																		
Workshop for dissemination of results	lumpsum	-	-	-	1	1	1	3	300,000	-	-	-	349	364	379	1,092	TRW_DA	LOAN (100%)
Micro watershed management																		
demonstrations /h	per district	-	8	8	8	-	-	24	400,000	-	3,433	3,576	3,725	-	-	10,734	TRW_DA	LOAN (100%)
Technical backstopping	district	-	8	8	8	8	-	32	50,000	-	429	447	466	485	-	1,827	TRW_DA	LOAN (100%)
Impact assessment of																		
settled agriculture /i	lumpsum	1	-	-	1	-	1	3	600,000	618	-	-	698	-	758	2,075	TRW_DA	LOAN (100%)
Subtotal										618	3,862	4,023	5,238	849	1,137	15,727		
 b. Capacity building & knowledge sharing: ATARI 																		
Supply of improved planting material	village	-	72	100	100	-	-	272	10,000	-	772	1,117	1,164	-	-	3,054	TRW_DA	LOAN (100%)
Action research with local institutions /j	per district	-	8	8	8	-	-	24	200,000	-	1,717	1,788	1,862	-	-	5,367	TRW_DA	LOAN (100%)
Technical backstopping	district	-	8	8	8	8	-	32	20,000	-	172	179	186	194	-	731	TRW_DA	LOAN (100%)
Training for Lead Farmers /k	person	-	50	150	72	-	-	272	1,500	-	80	251	126	-	-	458	TRW_DA	LOAN (100%)
Demonstrations /I	demo	-	24	24	-	-	-	48	50,000	-	1,287	1,341	-	-	-	2,628	TRW_DA	LOAN (100%)
Subtotal										-	4,028	4,676	3,338	194	-	12,237		
c. Staff level training																		
Monthly meetings at district level	meeting	48	96	96	96	96	96	528	8,000	396	824	858	894	931	970	4,873	TRW_DA	LOAN (100%)
Quartely meeting at state level	meeting	2	4	4	4	4	4	22	20,000	41	86	89	93	97	101	508	TRW_DA	LOAN (100%)
Training in KM methods for sharing	batch	1	1	-	1	-	-	3	30,000	31	32	-	35		-	98	TRW_DA	LOAN (100%)
Subtotal										468	942	948	1,022	1,028	1,071	5,479		
d. Participants level																		
Focus groups and participatory M&E	meetings	8	16	16	16	16	16	88	5,000	41	86	89	93	97	101	508	TRW_DA	LOAN (100%)
Cluster level meetings - half-yearly	meetings	-	8	8	8	8	8	40	7,000	-	60	63	65	68	71	327	TRW_DA	LOAN (100%)
Documenting lessons leanrt	lumpsun	-	1	1	1	1	1	5	100,000	-	107	112	116	121	126	582	CON_DA	LOAN (85%)
Learning route - domestic	lumpsum	-	1	-	1	-	1	3	550,000	-	590	-	639	-	693	1,922	CON_DA	LOAN (85%)
Videos for farmer-to-farmer																		
Silaring: Equipment	set	-	1	-	-	-	-	1	150,000	-	101		-	-	-	161	EQUIP_DA	LUAN (80%)
videos for farmer-to-farmer	ter le le								500.000		500						TDW/ D	
snaring: Initial training	training	-	1	-	-	-	-	1	500,000	-	536	-	-	-	-	536	TRW_DA	LOAN (100%)
videos for farmer-to-farmer	human au sa			0.0	0.0	0.0	0.4		4 000 000			1 244	1 207	4.455	505	4 600		LOAN (1009()
Videos for farmer-to-farmer	iumpsum	-	-	0.3	0.3	0.3	0.1	1	4,000,000	-		1,341	1,397	1,455	505	4,698	TRW_DA	LOAN (100%)
sharing: Backetopping and support	lumpeum			0.2	0.2	0.2	0.1	1	1 000 000			335	3/0	360	126	1 172	CON DA	LOAN (85%)
Subtotal	lumpsum	-	-	0.5	0.0	0.5	0.1		1,000,000	41	1 6 4 1	1 040	2 659	2 104	1 622	0.006	JON_DA	20/11 (00 %)

India																		
FOCUS_Nagaland State																		
Table 3.1. Project Management					Quantitian				Unit Cost		Ter		. Contingon					Other Assessments
Detailed Costs	Linit -	18/10	19/20	20/21	21/22	22/23	23/24	Total	(INP)	18/19	19/20	20/21	21/22	22/23	J) 23/24	Total	Dish Acct	Fin Rule
	0111	10/19	19/20	20/21	21/22	22/23	23/24	Total		10/19	19/20	20/21	21/22	22/23	23/24	Total	DISD. ACCI.	Fill. Kule
I. Investment Costs																		
B. M&E and Knowledge Management																		
e. Dissemination and communication																		
Project start-up workshop	workshop	1	-	-	-	-	-	1	500,000	515	-	-	-	-	-	515	GSI_DA	LOAN (90%)
Village information kit	village	300	350	-	-	-	-	650	10,000	3,095	3,756	-	-	-	-	6,851	GSI_DA	LOAN (90%)
Posters and leaflets	lumpsum	-	1	1	1	1	1	5	80,000	-	86	89	93	97	101	465	GSI_DA	LOAN (90%)
Translation of technical materials	lumpsum	0.5	1	1	1	0.5	0.5	4.5	200,000	103	215	223	232	121	126	1,020	CON_DA	LOAN (85%)
Printing of technical materials	lumpsum	-	1	1	1	1	1	5	600,000	-	644	670	697	725	755	3,491	GSI_DA	LOAN (90%)
Annual knowledge sharing events	event	-	1	1	1	1	1	5	500,000	-	536	559	582	606	632	2,915	TRW_DA	LOAN (100%)
Attending national events	person	-	5	5	5	5	5	25	30,000	-	161	168	175	182	190	875	TRW_DA	LOAN (100%)
Editing and design of publications	lumpsum	-	1	1	1	1	1	5	500,000	-	537	558	581	605	630	2,910	CON_DA	LOAN (85%)
Website design and operation	lumpsum	1	1	1	1	1	1	6	800,000	825	858	893	930	968	1,007	5,482	CON_DA	LOAN (85%)
Printing of communication materials	lumpsum	-	1	1	1	1	1	5	600,000	-	692	720	749	779	811	3,752	GSI_DA	LOAN (90%)
Communication Videos	lumpsum	-	1	1	1	0.5	0.5	4	500,000	-	537	558	581	302	315	2,292	GSI_DA	LOAN (90%)
Subtotal									_	4,538	8,021	4,439	4,620	4,385	4,565	30,568		
Subtotal										5,665	18,395	16,025	16,877	8,561	8,396	73,918		
Subtotal										10,539	27,087	22,725	23,850	15,818	19,110	119,128		
Total Investment Costs										86,318	30,177	25,383	29,667	18,698	22,108	212,352		
II. Recurrent Costs																		
A. Salaries and allowances (PMU)																		
 Staff recruitment expenses 	lumpsum	1	-	-	-	-	-	1	300,000	307	-	-	-	-	-	307	SAL_DA	LOAN (100%)
2. Audit Officer	pers_month	12	12	12	12	12	12	72	50,000	614	643	673	705	738	773	4,146	SAL_DA	LOAN (90%)
3. Project Management Staff																		
State Project Director	pers_month	12	12	12	12	12	12	72	170,000	2,088	2,186	2,289	2,396	2,509	2,627	14,095	SAL_DA	GOVT
Dy Director - Agriculture	pers_month	12	12	12	12	12	12	72	70,000	860	900	942	987	1,033	1,082	5,804	SAL_DA	GOVT
Dy Director - Horticulture	pers_month	12	12	12	12	12	12	72	70,000	860	900	942	987	1,033	1,082	5,804	SAL_DA	GOVT
Dy Director - Animal Husbandry	pers_month	12	12	12	12	12	12	72	70,000	860	900	942	987	1,033	1,082	5,804	SAL_DA	GOVT
Executive Engineer	pers_month	12	12	12	12	12	12	72	70,000	860	900	942	987	1,033	1,082	5,804	SAL_DA	GOVT
Director - SWC	pers_month	12	12	12	12	12	12	72	70,000	860	900	942	987	1,033	1,082	5,804	SAL_DA	GOVT
Procurement consultant	pers_month	10	8	6	2	2		28	150,000	1,535	1,286	1,010	352	369		4,552	SAL_DA	LOAN (90%)
ACF Forests	pers_month	12	12	12	12	12	12	72	70,000	860	900	942	987	1,033	1,082	5,804	SAL_DA	GOVI
Asst Registrar of Cooperation	pers_month	12	12	12	12	12	12	72	70,000	860	900	942	987	1,033	1,082	5,804	SAL_DA	GOVT
Deputy Director, Fisheries	pers_month	12	12	12	12	12	12	72	70,000	860	900	942	987	1,033	1,082	5,804	SAL_DA	GOVI
Deputy Director, Sericulture	pers_month	12	12	12	12	12	12	72	70,000	860	900	942	987	1,033	1,082	5,804	SAL_DA	GOVI
Deputy Director, Land Resources	pers_month	12	12	12	12	12	12	72	70,000	860	900	942	987	1,033	1,082	5,804	SAL_DA	GOVI
Project Support Specialist	pers_month	12	12	12	12	12	12	/2	90,000	1,105	1,157	1,212	1,269	1,328	1,391	7,462	SAL_DA	LOAN (90%)
Project Assistants	pers_month	24	24	24	24	24	24	144	25,000	614	643	6/3	705	/38	//3	4,146	SAL_DA	LOAN (100%)
Finance and Accounts Manager	pers_month	12	12	12	12	12	12	72	100,000	1,228	1,286	1,346	1,410	1,476	1,545	8,291	SAL_DA	LOAN (90%)
Accounts Officer	pers_month	12	12	12	12	12	12	72	50,000	614	643	6/3	705	/38	//3	4,146	SAL_DA	LOAN (90%)
Accounts Assistant	pers_month	12	12	12	12	12	12	72	30,000	368	386	404	423	443	464	2,487	SAL_DA	LOAN (90%)
Drivers	pers_month	36	36	36	36	36	36	216	18,000	663	694	/27	761	/97	834	4,477	SAL_DA	GOVI
Grade IV Starr	pers_month	24	24	24	24	24	24	144	15,000	368	386	404	423	443	464	2,487	SAL_DA	GOVI
Subtotal										17,183	17,669	18,162	18,311	19,172	19,687	110,183		
4. Support to USS operations /m	pers month	24	48	48	48	48	-	216	30.000	(3)	1.543	1.616	1.692	1.((1	-	7.358	SAL DA	LUAIN (90%)

Contd..

-	- 44	-
		а
	-	~

FOCUS_Nagaland State

Table 3.1. Project Management											_							
Detailed Costs		40/40	40/00	00/04	Quantities	00/00	00/04	Tatal	Unit Cost	40/40	Tot	als Including	g Contingend	cies (INR '00	0)	Tetel	Disk Asst	Other Accounts
	Unit	18/19	19/20	20/21	21/22	22/23	23/24	lotal	(INR)	18/19	19/20	20/21	21/22	22/23	23/24	lotal	Disb. Acct.	Fin. Rule
II. Recurrent Costs																		
5. District Management Staff- DMU																		
District Project Manager - Joint Director Agriculture	pers_month	96	96	96	96	96	96	576	85,000	8,352	8,744	9,155	9,586	10,036	10,508	56,381	SAL_DA	GOVT
Project Director-ATMA	pers_month	96	96	96	96	96	96	576	70,000	6,878	7,201	7,540	7,894	8,265	8,653	46,431	SAL_DA	GOVT
Field Coordinator DD Agriculture	pers_month	96	96	96	96	96	96	576	70,000	6,878	7,201	7,540	7,894	8,265	8,653	46,431	SAL_DA	GOVT
District Vet Officer	pers_month	96	96	96	96	96	96	576	70,000	6,878	7,201	7,540	7,894	8,265	8,653	46,431	SAL_DA	GOVT
District Finance Manager	pers_month	48	48	48	48	48	48	288	50,000	2,456	2,572	2,693	2,819	2,952	3,091	16,583	SAL_DA	LOAN (90%)
Agriculture/Horti Officers /n	pers_month	480	480	480	480	480	480	2,880	45,000	22,108	23,147	24,235	25,374	26,566	27,815	149,243	SAL_DA	GOVT
Block, Circle Agri/AH Assistants	pers_month	720	720	720	720	720	720	4,320	30,000	22,108	23,147	24,235	25,374	26,566	27,815	149,243	SAL_DA	GOVT
Project assistants	pers_month	96	96	96	96	96	96	576	25,000	2,456	2,572	2,693	2,819	2,952	3,091	16,583	SAL_DA	LOAN (100%)
Drivers	pers_month	-	-	-	-	-	-	-		-	-	-	-	-	-	-	SAL_DA	GOVT
Subtotal									-	78,114	81,785	85,629	89,653	93,867	98,279	527,326	•	
Subtotal									-	96,954	101,640	106,080	110,361	115,548	118,738	649,321	•	
B. Operating costs																		
1. Operating costs - PMU																		
Utilities	month	12	12	12	12	12	12	72	50,000	621	644	668	693	719	746	4,092	OP_DA	LOAN (90%)
Office operating expenses	month	12	12	12	12	12	12	72	60,000	746	773	802	832	863	895	4,910	OP_DA	LOAN (90%)
Fuel and vehicle maitenance	lumpsum	12	12	12	12	12	12	72	120,000	1,491	1,546	1,604	1,663	1,726	1,791	9,821	OP_DA	LOAN (90%)
Travel allowances	lumpsum	12	12	12	12	12	12	72	300,000	3,728	3,866	4,009	4,159	4,314	4,476	24,552	OP_DA	LOAN (90%)
Subtotal									-	6,587	6,830	7,083	7,347	7,622	7,908	43,376	-	
2. Operating costs - DMU																		
Utilities	month	96	96	96	96	96	96	576	20,000	1,988	2,062	2,138	2,218	2,301	2,387	13,095	OP_DA	LOAN (90%)
Office operating expenses	month	96	96	96	96	96	96	576	20,000	1,988	2,062	2,138	2,218	2,301	2,387	13,095	OP_DA	LOAN (90%)
Fuel and vehicle maitenance	lumpsum	96	96	96	96	96	96	576	20,000	1,988	2,062	2,138	2,218	2,301	2,387	13,095	OP_DA	LOAN (90%)
Travel allowances	lumpsum	96	96	96	96	96	96	576	175,000	17,398	18,041	18,710	19,407	20,133	20,889	114,577	OP_DA	LOAN (90%)
Subtotal									_	23,363	24,226	25,125	26,060	27,035	28,051	153,861	-	
3. M&E Staff																		
a. PMU Staff																		
Manager Planning and M&E - PMU	pers_month	12	12	12	12	12	12	72	90,000	1,105	1,157	1,212	1,269	1,328	1,391	7,462	OP_DA	LOAN (90%)
Deputy Manager MIS - PMU	pers_month	12	12	12	12	12	12	72	80,000	983	1,029	1,077	1,128	1,181	1,236	6,633	OP_DA	LOAN (90%)
Compter Assistants - PMU	pers_month	24	24	24	24	24	24	144	30,000	737	772	808	846	886	927	4,975	OP_DA	LOAN (90%)
Subtotal										2,825	2,958	3,097	3,242	3,395	3,554	19,070		
b. Asst Manager (Planning, M&E and MIS) - DMUs	pers_month	48	48	48	48	48	48	288	50,000	2,474	2,575	2,681	2,791	2,906	3,026	16,452	OP_DA	LOAN (90%)
Subtotal										5,299	5,533	5,777	6,033	6,300	6,580	35,522		
4. Knowledge Management Staff																		
Manager - KM	pers_month	6	12	12	12	12	12	66	90,000	553	1,157	1,212	1,269	1,328	1,391	6,909	OP_DA	LOAN (90%)
Manager, Gender & Cl	pers_month	6	12	12	12	12	12	66	90,000	557	1,159	1,206	1,256	1,308	1,362	6,847	OP_DA	LOAN (90%)
Subtotal										1,109	2,316	2,418	2,525	2,636	2,752	13,756		
5. M&E Operating expenses	lumpsum	1	1	1	1	1	1	6	200,000	207	215	223	231	240	249	1,364	OP_DA	LOAN (90%)
Subtotal									-	36,565	39,119	40,626	42,196	43,833	45,540	247,880		
Total Recurrent Costs									-	133,520	140,759	146,706	152,557	159,381	164,278	897,200	-	
Total										219,838	170,936	172,088	182,224	178,079	186,386	1,109,552		
ha E-mator qualos por district			h 50 ha nar	district														
Val 5 motor cycles per district			i locludina t	ha hacolina	curvov in the	e firet voor												
(a LCD, sereen etc)		1		inc Dascille	survey in the	s mar yedi												
A Quarterly visite to bandhold Audit Officer and Finance Mans	aor	1	k 2 dove of	training														
A costs included under TA to EAO	iyei	1	3 demo pr	ar district one	a two year	support for	each demo											
If Costs provided under TA for FAO		1	m 2 staff or	ach to Doll o		Support 101	caon uemo											
\a Costs included under TA for FAO		1	n 2 per dist	rict														

Chapter 4: Project Organization and Management

A. Introduction

1. IFAD projects in India use three models of project management: (i) project management structure built into the existing corporations; (ii) a separate PMU built into the line department; and (iii) a separate society established for implementation. The advantages of working with the corporations and societies include the ability to retain unspent funds at the end of the fiscal year enabling these institutions to start project activities without waiting for budget release. For various programmes, the Government of Nagaland (GoN) has opted for the Society model in view of its stated advantages. For example, Nagaland State Rural Livelihoods Mission which is registered as a society implements the National Rural Livelihoods Programme and this society is attached to the Rural Development Department. Similarly, societies have been formed under the Health Department, Education Department and e-governance departments for implementing projects/programmes.

B. Project Management

2. At the central level, the Department of Economic Affairs (DEA) would be the nodal agency for the project. Two broad principles would govern the management structure for this project. They include: (i) alignment to the existing government structure; and (ii) flexibility to make changes based on the requirements that may arise during the implementation phase. The project would be aligned to the existing government structure by making the APC's Office of the GoN as the state level lead implementing and nodal agency. Two options for alignment with the APC's Office were considered. These include: (i) establishing a project management unit within the APC's Office; and (ii) establishing a new society under the APC's Office. In view of the flexibility, the society structure provides in terms of carrying over the unspent balance of the previous year to the next year, and in terms of human resource engagement, the option of establishing a society under the APC's Office was considered appropriate.

3. **State level Project Management:** In order to implement this project, GoN has established a society named Society for Climate Resilient Agriculture in Nagaland (SoCRAN) under the APC's Office, GoN. This strategy of establishing a separate society keeps it outside the government line agency structure to bring in persons of repute as members of the Governing Council. This society would be registered under the Societies Registration Act and would have its own bye laws and financial rules. SoCRAN would have adequate authority to enter into partnership agreements/contracts with agencies, FIGs, Village Councils, *Jhum* Resource Management Committees and other committees under the Village Councils.

4. The Chief Secretary of the State of Nagaland is the Chairperson and the APC is the Vice Chair of the Society. A Governing Council of the society has been constituted comprising the Secretary, Agriculture; Secretary, Horticulture; Secretary Planning and Programme Implementation; Secretary, Finance; Secretary, Animal Husbandry and Veterinary Services; Secretary, Soil and Water Conservation; Secretary, Rural Development, and the Principal Chief Conservator of Forests as the core members. The Governing Council may co-opt additional members based on the requirement. GoN has appointed an officer from the All India Services on a fulltime basis as the Chief Executive Officer who will also be an ex-officio Secretary of the society.

5. The Governing Council of the society would be responsible for: (i) ensuring legal compliance and preparing, reviewing and approving overall policies of the society including administrative, human resource and financial policies; (ii) providing direction and guidance for project implementation; (iii) facilitating coordination and convergence between the project and other government programmes; (iv) reviewing and approving overall AWP&B of the project; and (v) reviewing implementation performance of the project.

6. The project management responsibility would be vested with a Project Management Unit within the society with the Chief Executive Officer/Secretary of the society as the State Project Director (SPD). S/he would report to the APC, who would be the Mission Director. State budget allocations for the project including parallel financing funds from Centrally Sponsored Schemes (CSSs), IFAD loan proceeds, IFAD grant, GoN counterpart funds for IFAD loan, GoN share for CSS funding would flow through the APC's Office by creating a separate line item in its annual budget.

7. Overall, PMU would be responsible for compliance to the stipulation of Financing Agreement signed between GoI and IFAD. More specifically the PMU will be responsible for (a) programme planning, implementation and monitoring; (b) financial management and procurement; (c) management and administration and (d) co-ordination with GoI and IFAD, as follows:

- a. Programme planning, implementation and monitoring/ reporting: organizing project coordination meeting; preparing and submitting AWP&B after consolidating AWP&Bs of districts and a procurement plan for review by IFAD; conceptualizing, supervising and monitoring project activities and their progress towards achieving physical, financial and outcome related targets; establishing an effective MIS and M&E system to track project progress; undertaking knowledge management activities.
- b. Financial management and procurement: incorporating the budget requirements of the project into the overall budget of the GoN and ensuring flow of funds to the society; ensuring release of funds to the DMUs and line departments for implementing project activities; operating Project Accounts for timely release of funds to the districts, line departments and other partners; receiving statement of expenditure and supporting documents related to fund release and keeping an account of fund release and utilization; preparing overall project financial statements; evaluating bids, and finalizing and executing contracts with service providers and suppliers of goods and services for implementing various project activities.
- c. Management and administration: liaising with the State administration and line agencies to ensure coordination and convergence to facilitate project implementation; establishing DMUs in each project district within the District Agriculture Office and recruiting staff for PMU and DMUs; preparing and submitting progress reports semi-annually and annually to IFAD; establishing an effective MIS and M&E system to track project progress.
- d. Reporting and co-ordinating with Gol and IFAD: preparing and submitting withdrawal applications to Gol/CAAA for onward transmission to IFAD; ensuring preparation and submission of annual audit reports and financial statements to IFAD and ensuring compliance to the audit observations; preparing RIMS data for submission to IFAD.

8. The society would be provided with senior technical staff of the rank of Deputy Directors. A Deputy Director-Agriculture, a Deputy Director-Horticulture, a Deputy Director-Animal Husbandry, and a Deputy Director – Soil and Water Conservation would be posted to the PMU on deputation. In addition, a Finance and Accounts Specialist, Manager- Planning and M&E, Manager Knowledge Management and Manager, Gender and Community Institutions and other support staff would be engaged on contract basis. Staff appointments, except those on deputation, would be fixed term contracts of at least three years and the candidates would be recruited from the open-market based on professional competence and experience in various field such as agriculture, horticulture, value chain, livestock finance, planning and monitoring and evaluation etc. The proposed project management structure for this project on Nagaland is provided in Annex 4.1.

9. The society will adopt an Equal Opportunity Policy while recruiting staff. SoCRAN is yet to develop a set of personnel policies guiding engagement of staff. Important personnel policy related actions to be initiated by SoCRAN include: (i) categorization of posts and fixing a pay scale for each position; (ii) fixing leave structure and leave encashment benefits in line with societies established for managing development projects in the state/country; (iii) fixing travel

and daily subsistence allowance structure; (iv) fixing deputation allowance to seek experienced staff from the government departments; (v) fixing provident fund and medical insurance benefits; and (vi) incorporating gender sensitive policies in recruitment.

10. **District Management Units:** The project would establish a DMU in each district within the District Agriculture Office. The District Agriculture Officer (DAO) would be the District Project Manager (DPM). A small team of professionals would be recruited to facilitate project implementation. DMUs would function as an outpost of SoCRAN in each project district. An Agriculture Officer of the rank of Asst. Director will be posted under the DAO by the state government on a full term basis to deal exclusively with the project activities who would be the Field Coordinator of the project. DMUs would be authorised to release funds based on the sanctioned AWP&B.

11. The DMU would be responsible for: (i) coordinating with the circle/block level officers and the farmer interest groups (FIGs) to prepare AWP&B for circle and incorporating the same into the district AWP&B; (ii) submitting in a timely manner, the AWP&B to the state PMU for incorporation into the project AWP&B (iii) obtaining required sanctions for implementing activities; (iv) releasing funds to the FIGs and other implementation partners and monitoring their work; (v) receiving utilization certificates from the FIGs and other implementation partners and reconciling their accounts; (vi) collecting, collating and analysing MIS and M&E data for the district for onward submission to PMU and for providing feedback to implementation partners; (vii) ensuring convergence between project activities and activities of other line departments in the project villages; (viii) conducting audit of books of accounts of FIGs and other implementation partners on a sample basis and submitting reports; (ix) maintaining books of accounts related to project expenditure of the district and prompt settlement of advances with PMU; and (x) ensuring compliance to audit observations.

12. DPM would be responsible for: (i) coordinating with the PMU with regard to implementation of project activities; (ii) coordinating with the District Administration for convergence and support; (iii) supervising field level activities of block/circle level officers, FIGs and other implementation partners; (iv) releasing funds to the FIGs and other implementation partners as per the approved AWP&B; (v) ensuring convergence between project activities and activities of other line departments; (vi) functioning as a focal point to resolve issues faced by implementing partners and block/circle level officers and village level workers; (vii) reviewing field level activities and submitting reports to the Deputy Commissioner/PMU on a regular basis; and (viii) overall management of the DMU as per the directions of SPD including personnel and administrative functions.

13. A technical team comprising officers of mid-level seniority drawn from the Departments of Agriculture, Horticulture, Animal Husbandry and Soil and Water Conservation would be attached full time for this project. In addition, the project would also engage professionals on a contract basis. The project would also engage a Planning and Monitoring Officer, an F&AO and the required junior professionals at the district level on a contract basis.

14. The project would fund capacity building of PMU and DMU staff, development of a computerised accounting system and a Management Information System. The project would allocate funds for engaging Specialist Organizations / Experts to help the project management in conceptualising various project interventions and to provide expert technical advice. The project would also fund contracting of specialist agencies for conducting baseline survey, impact evaluation and other surveys and in preparation of a Project Completion Report at the end of the Project.

C. Project Coordination Mechanisms

1. State Level Coordination

15. The Governing Council of SoCRAN would also function as the state level Project Steering Committee (PSC) for this project. The Chief Secretary, GoN would be the Chairperson of the PSC. The PSC would meet once in six months to review progress, provide overall guidance and policy support and to facilitate inter-departmental coordination specifically with regard to convergence. All the members of the Governing Council would be the members of the PSC. In addition, the PSC would also include the Deputy Commissioners/District Collectors of the project districts. PSC would invite representatives from the National Bank for Agriculture and Rural Development (NABARD), civil society and technical experts of repute to participate in the PSC meetings as Special invitees on a needs basis. The SPD would be the member secretary of the PSC. Project coordination mechanism of this project in Nagaland is provided as Annex 4.2.

16. PSC would meet on a half yearly basis and its function would be to secure interdepartmental coordination and linkages for the project. It would: (i) review progress of the project on the basis of the reports submitted by SoCRAN; (ii) resolve any problems requiring interdepartmental coordination with the line agencies and banks which require higher level of intervention; (iii) resolve any policy bottlenecks that impact project implementation and (iv) review AWP&B as prepared by SoCRAN to ensure adequate budgetary provisions;

GoN would also establish a Project Management Committee (PMC) headed by the 17 APC. Directors of the relevant technical departments such as Agriculture, Horticulture, Animal Husbandry and Veterinary Services, Soil and water conservation and Conservator of Forests as the members and the Chief Executive Officer of the society as the secretary. The PMC would meet quarterly and would be responsible for: (i) reviewing and resolving any problems in the project implementation relating to coordination with the line agencies and banks which require higher level of intervention; (ii) approving action plans for Central Sector Schemes and integrating these action plans into the AWP&B of the project; (iii) ensuring release of CSS funds into the society; (iv) ensuring release of GoN counterpart funding and IFAD loan proceeds to the society; (v) reviewing the labour budgets of MGNREGA activities to be implemented under the convergence activities and to build synergy between the project activities and MGNREGS activities; (vi) provide a forum for dialogue between the state level policy makers and the field level implementers; (vii) review issues arising out of the District level Coordinating Committee reports, monitoring reports, impact assessment studies and evaluation reports and give policy directions to resolve the issues; and (viii) ascertain ways and means of internalizing the lessons learned from the project delivery mode into the regular government programmes.

2. District Level Coordination

18. The project would also establish a District Project Coordination Committee (DPCC) in each project district. The DPCC would meet quarterly to discuss the project implementation progress, constraints and remedies. The most important function of this committee is to ensure flow of MGNREGS funds to the Village Councils/Village Development Boards for implementing Land and Water related activities. The DPCC would be chaired by the Deputy Commissioner / District Collector of the respective project district and the DPM would be the Vice Chairperson. The members of the DPCC would include: (i) District Horticulture Officer; (ii) District Animal Husbandry Officer; (iii) Project Director-DRDA; (iv) District Forest Officer; (v) District Soil Conservation Officer; and (vi) Block Development officers of project blocks. Planning, M&E and Convergence Officer would be the Secretary of this committee. Based on the need, representatives of NABARD and Lead Bank would also be invited to participate in the DPCC meetings. A representative from PMU may attend any of the DPCC meetings if and when required.

3. Block Level Coordination

19. A Block Project Coordination Committee (BPCC) would be established in each block of the project area. The BPCC would meet bimonthly to discuss approval and review of the

MGNREGS activities and their convergence with project activities. This committee would be chaired by the Block Development Officer and the Circle/Block Agriculture Officer would be the Member-Secretary. The members of BPCC would include: (i) Chairpersons of all project Village Councils; and (ii) All block/circle level officers.

D. Implementation Partners

20. **Village Councils:** Village Councils are the most important grassroots institutions. The Village Councils in Nagaland have the overall authority for the administration of justice within the village. Under the Nagaland Village and Area Council Act, 1978, every recognised village in the State has a Village Council. Amongst others, they are vested with the powers to carry out development works within the village and also to allocate area for *jhum* cultivation. These councils would be the focal point for implementation of the project activities mainly with regard to obtaining consent for implementing the activities. Village Council would be the main grassroots institution to coordinate MGNREGS activities. This project being a *jhum* improvement project would have to coordinate with the Village Council for taking up improvement on *jhum* land.

21. **Village Development Boards (VDBs):** In Nagaland, as per the Nagaland Village and Area Council Act, 1978, a VDB has been established in each of the villages vested with powers to take necessary steps regarding welfare and security of the households. These Boards implement MGNREGA activities and the project would coordinate with these Boards for convergence.

22. *Jhum* Resource Management Committees (JRMCs): The project would establish a six member JRMC in each village. These JRMCs would be the focal point for project implementation. This committee would comprise equal number of male and female members with membership of lead farmers, SHG/society members and *jhum* farmers. The chairperson of Village Council and also Secretary of VDB would be the members. JRMCs would elect a Chairperson, a Secretary and a Treasurer who would manage the day-to-day activities of the JRMC.

23. **Farmer Interest Groups:** The project will form FIGs for: (i) *jhum* and fallow management; (ii) wet rice cultivation; (iii) support to existing orchards; and (iv) value chain crops production. Farmer interest groups would comprise of rural households interested in taking up a common economic activity. These FIGs will comprise of 10-20 members and each FIG will open a bank account for receiving project benefits. The project would use the existing FIGs and also promote new FIGs for implementing project activities.

24. **Self Help Groups/Societies/Associations:** The project would also support SHGs that have been promoted under various government programmes. These SHGs are women groups that take up a common activity. These SHGs would be used to implement non-farm activities and livestock related activities. In addition, there are several associations such as Pig farmers association, and the services of these community institutions would be used depending upon the project need during the implementation.

E. Implementation Arrangements

25. The project would use a multi-pronged approach to implement project activities using the grassroots level institutions and also the community level workers. The grassroots level implementation partners include community based organizations operating in the villages and those that would be promoted under the project. These include the *Jhum* Resource Management Committees, Village Development Boards, FIGs, SHGs and Societies. These community based organizations would be supported by Lead Farmers, Community Resource Persons and CAHWs. The project intends to identify and support these community level workers through training and establishment of demonstrations. Block/Circle level officers of the line departments would be the main link between the Village level workers and the DMU for planning, implementation facilitation and supervision.

26. <u>Capacity building:</u> The project intends to build capacity of implementing agencies at three levels. The project would engage FAO to prepare training curriculum and training materials and to train the trainers using a ToT modality. Once the trainers are trained, the project would train all the technical staff at the district and sub-district level. Thereafter, the project would train the block/circle level officers and village level workers to build their capacity. These block/circle level officers and village level workers would be the focal points in the villages for implementing project activities using the Lead Farmers and Community Resources Persons.

27. Land use Planning: The first stage of this activity would be implemented by the PMU. The project would use the Remote Sensing Application Centre in the state to prepare land use maps and land suitability classification maps. These maps would be the basic documents for the community to plan *jhum* cultivation and other settled agriculture related activities taking into account the slope and other parameters. These maps would also facilitate the community to identify the boundaries of the community forest conservation areas and to take up conservation related activities. These maps would also be used to identify the soil and water conservation activities in the community forest areas. The project would train the Lead farmers and members of community based organizations to use the land use maps. Thereafter, Block/Circle level officers along with village level workers would facilitate the community to make plans for *jhum* and settled cultivation and also obtain consent of the community at large for project interventions.

28. <u>Jhum Improvement and settled agriculture:</u> Lead farmers would be the focal point for this intervention. Lead farmers would be trained and thereafter facilitated by the Block/Circle level officers and Village level workers to start the nurseries of horticultural and tree crops required for settled agriculture. Lead farmers would promote FIGs comprising members of *jhum* cultivating households. The FIGs would be the main vehicles for implementing this activity. These FIGs would be provided with project support for implementing activities related to soil fertility improvement, nursery establishment, soil and water conservation activities, and cultivation of plantation and tree crops.

29. <u>Value chain Development- Production Support</u>: The project would identify and train Community Resource Persons (CRPs) to act as focal points to start cultivation of identified value chain crops in a cluster. CRPs would be provided with project support for nursery establishment and to deliver extension messages related to Good Agriculture Practices to the community. The project would introduce digital delivery of extension and using this software, a data base would be developed to facilitate the procurers from outside the state to get information on area under cultivation, expected yield and package of practices used. CRPs would also be responsible for digital delivery of extension and also for entering data into the database.

30. <u>Value chain development – Marketing Support</u>: The project would support marketing support related activities such as buyer seller meets, trade fairs, exhibitions, etc. This activity would be implemented by PMU and DMU officials taking into account marketable crops. PMU and DMU officials would also invite entrepreneurs from outside the state and link them up with local persons to establish a system of aggregation of produce. The project would also support establishment of a marketing unit in the State Agriculture Marketing Board in order to ensure production that is linked to market demand.

31. <u>Livestock Support</u>: CAHWs would be the focal points for implementing this activity. The project would train the CAHWs and after training a system of vaccination of all livestock with a small payment for services of CAHWs would be put in place. These CAHWs would be the village level workers of the project to implement livestock related activities. Block/Circle level officers and Village level workers with support from the officials of PMU and DMU would implement the livestock related activities including demonstration.

32. <u>Market Access</u>: The project would implement the market access activities (cross drainage structure) using contractors selected through competitive bidding. The community

based organizations would be used to identify the infrastructure needs and the locations. Based on these initial assessments, PMU would engage contractors for construction of cross drainage structures under the supervision of qualified and experienced Consulting Engineers.

33. <u>Innovation Fund</u>: PMU would take the lead in implementing this activity by seeking proposals from experienced agencies that have implemented innovative activities. An open invitation calling for proposals would be issued to all interested parties. The proposals received would be appraised by the PMU and selected proposals would be funded by the project.

34. <u>Knowledge Generation and Sharing:</u> The project would engage ICAR in Nagaland to generate knowledge on various aspects of upland agriculture through action research using local institutions. The knowledge generated would be shared through documentation and regional level workshops.

35. <u>Technical Assistance</u>: The project would engage FAO to provide technical assistance in both the states. It would involve training of trainers in new technologies related to soil and water conservation and settled agriculture including value chain promotion. Technical assistance would also cover provision for handholding and also M&E related functions.

F. Implementation Plan

10. The project implementation will comprise the preparatory and implementation phase. The major activities required for implementing the project are detailed below. The phasing plan is provided as Annex 4.3. Draft financial regulations for the society is provided in Annex 4.4, draft by-laws of the society in Annex 4.5, draft terms of reference of in Annex 4.6, scope of FAO Technical Assistance in Annex 4.7 and details of ICAR engagement to support FOCUS is provided in Annex 4.8.

Implementation Phase

a. Capacity building

- FAO to undertake Training of Trainers in various activities identified and priority to be given for nursery management.
- PMU to undertake training of all block and circle level staff using the trainers trained by FAO and training manual prepared by FAO.

b. Land Use Planning

- Entrust the task of preparing land use maps for each village and also village resource maps (in case of villages without village resource maps) to the Remote Sensing Centre.
- Provide assistance to enhance capacity of the Remote sensing centre to upgrade its capacity to assist in land use planning activities of the project.
- Conduct training of the Village Councils and *Jhum* Resource Management Committees to understand the land use maps and also to make land allocation for *jhum* and other activities based on these maps.
- Based on the need, prepare 3 D models of the land use maps and undertake participatory land use planning exercise to allocate steep slopes for maintaining tree cover and moderate slopes for *jhum* and plantation crops.

c. Better Jhum and fallow management

• Identify a Lead Farmer in each project village in consultation with the Village Council and *Jhum* Resource Management Committees. This task will have to be taken up by the Circle/Block level staff and Village level workers of the line departments.

- Youth (including women) and progressive farmers to be preferred as Lead Farmers.
- Take a commitment letter from the selected Lead Farmer to support project activities in the villages and to be the project contact point in the villages.
- Orient the Lead Farmers on their role in project implementation and their role in supporting FIGs and project target households.
- Conduct a training for all Lead Farmers to undertake nursery management and also train them in use of better seed and seedling, fertility management in *jhum*, low cost soil and water conservation measures, linear planting, environmental impact of *jhum* cultivation, FIG formation and management for better *jhum* and fallow management.
- The project has allocated INR 50,000 to support each Lead Farmer. Seek a plan from each Lead Farmer on utilization of this support for establishing a nursery or any activity that will become a model activity for the community.
- Provide support to the Lead Farmers in two instalments after signing an agreement with each Lead farmer. The amount to be released directly to the bank account of Lead Farmers in two instalments and should be based on the implementation of the agreed plan.
- Lead Farmers and Village Level workers to conduct a meeting of *jhum* farmers interested in taking up *jhum* and establish a FIG comprising about 20 farmers and each FIG member having about 20 associate members. Only one FIG per village will be established covering all *jhum* households
- Each FIG to open a bank account and prepare two plans covering: (i) *jhum* cultivation during the next cycle; and (ii) *jhum* to be left fallow.
- FIG to be trained in low cost soil and water conservation, better seeds and seedling, tree plantation, linear planting, fertility enhancement measures and techniques to continue cultivation on the land for more number of years.
- The project support for better *jhum* in about 0.13 ha of land of each *jhum* farmer and also 0.18 ha of fallow land to flow though FIG bank account.
- Each FIG to submit a plan for: (i) better *jhum*; and (ii) fallow management indicating the activities to be undertaken and the costs separately from; (i) centrally sponsored schemes; (ii) IFAD project; and (iii) beneficiary contribution.
- Once the plan is approved by the DMU, FIGs to start implementation and the project to release funds directly to the bank account of FIGs based on progress in work.
- In instances where water harvesting measures are required, the Lead Farmer will support the FIGs to prepare plans for the same and access funds either from the project or from other centrally sponsored schemes.
- FIG support will be repeated during the third year of implementation subject to the farmers continuing the cultivation activities on the same *jhum* plot and taking up soil and water conservation activities.

d. Support to Village Conservation Areas

- Lead Farmer and the Village level workers in consultation with the Village Council to identify village conservation areas of about 20 Ha per village.
- A FIG for village forest conservation to be established and a bank account to be opened.
- FIG to prepare a plan for village forest protection, establishing nursery and for replanting of high value trees.
- The project to release funds based on approved plans and also based on progress in implementation

e. Support to settled Agriculture – Terrace Rice Cultivation

• The Lead Farmer and the Village Level workers of the line departments to form a FIG comprising the terrace rice cultivation farmers. Each FIG to consist of about 10-20

farmers and each FIG member to have 20 associate members. Each farmer to get support for 0.25 Ha.

- Each FIG to open a bank account and prepare a plan covering terrace rice cultivation.
- FIG to be trained in SRI, use of better climate resilient seeds, azolla, rice and fish cultivation, in situ fertility management techniques and double cropping.
- Once the plan is approved by the DMU, FIGs to start implementation and the project to release funds directly to the bank account of FIGs based on progress in work.
- In instances where water harvesting measures are required, the Lead Farmer will support the FIGs to prepare plans for the same and access funds either from the project or from other centrally sponsored schemes.

f. Support to settled Agriculture – Upland Farming

- The Lead Farmer and the Village Level workers of the line departments to form a FIG comprising the terrace rice cultivation farmers. Each FIG to consist of about 10-20 farmers and each FIG member to have 20 associate members. Each farmer to get support for 0.25 Ha.
- Each FIG to open a bank account and prepare a plan covering upland farming.
- FIG to be trained in use of better horticultural practices, intercropping, water harvesting, soil fertility management.
- Once the plan is approved by the DMU, FIGs to start implementation and the project to release funds directly to the bank account of FIGs based on progress in work.
- In instances where water harvesting measures are required, the Lead Farmer will support the FIGs to prepare plans for the same and access funds either from the project or from other centrally sponsored schemes.

g. Value chain – Production support

- Identify clusters for undertaking cultivation of selected value chain crops.
- Identify two Community Resource Persons (CRPs) in each cluster in consultation with the Village Council and Village Development Boards. This task will have to be taken up by the Circle/Block level staff and Village level workers of the line departments.
- Youth (including women) and progressive farmers to be preferred as CRPs. CRPs should have good knowledge about cultivation of selected value chain crops.
- Take a commitment letter from the selected CRPs to support project activities in the villages and to be the project contact points in the villages.
- Orient the CRPs on their role in project implementation and their role in supporting FIGs and project target households.
- Conduct a training for all CRPs to undertake nursery management, fertility management, low cost soil and water conservation measures, linear planting, environmental impact of *jhum* cultivation, and FIG formation and management.
- Each CRP to prepare a plan for developing nursery of selected value chain crop and project to provide support to these CRPs to emerge as nursery entrepreneurs in the clusters.
- The CRPs and the Village Level workers of the line departments to form a FIG comprising the value chain farmers.
- Each FIG to open a bank account and prepare a plan covering value chain crop cultivation. Each farmer to get support for 0.5 Ha.
- FIG to be trained in use of better cultivation practices, intercropping, water harvesting, soil fertility management.
- Once the plan is approved by the DMU, FIGs to start implementation and the project to release funds directly to the bank account of FIGs based on progress in work.
- In instances where water harvesting measures are required, the Lead Farmer will support the FIGs to prepare plans for the same and access funds either from the project or from other centrally sponsored schemes.

h. Value chain – Marketing support

- PMU to establish a Marketing Unit in the State Agriculture Marketing Board.
- The Marketing Unit to identify youth interested in the aggregation of farm produce and marketing.
- The Marketing Unit to establish contacts with the companies from outside the state and assist the entrepreneurs of the state to establish market linkages.
- The marketing Unit to identify local units of processors and value addition units and make plans for quality improvement, expansion and rehabilitation.
- The Marketing Unit to identify community (i.e. FIGs) interested in setting up agro processing units in project locations.
- The Marketing Unit to develop market linkages and establish contract farming arrangements with the farmers.
- The Marketing Unit to facilitate farmers and entrepreneurs attend trade fairs and exhibitions, and organise buyer-seller meets and market exposure visits.
- The Marketing Unit to establish linkages with IDH India and introduce digital delivery of extension.
- The Marketing Unit to identify service providers for facilitating organic certification, sustainable agriculture or good agriculture practices to target premium markets.
- The Marketing Unit to identify locations for constructing common facility centres /collection centres and facilitate construction using project funds.

i. Value chain – Livestock support

- Identify a CAHW in each village in consultation with the Village Council and Village Development Boards. This task will have to be taken up by the Circle/Block level staff and Village level workers of the line departments.
- Youth (including women) and progressive farmers to be preferred as CRPs. CRPs should have good knowledge about livestock rearing.
- Take a commitment letter from the selected CAHWs to support project activities in the villages and to be the project contact points in the villages.
- Orient the CAHWs on their role in project implementation and their role in supporting livestock farmers.
- Conduct a training for all CAHWs in livestock management practices, preventive care, vaccination and first aid.
- CAHWs to conduct vaccination and deworming of pigs and all livestock.
- CAHW to identify persons interested in starting pig breeding unit, conduct training of these persons and provide support for establishment of breeding units.
- Identify persons for purchase of piglets with 50% project assistance and DMU to provide support for supply of piglets.
- Start demonstrations of sweet potato cultivation and supply of fish meal, soya beam meal and oil cakes for supporting pig rearing.
- Mithun and other livestock initiatives to be explored.
- Animal Husbandry and Veterinary Services Department to provide a plan for strengthening of boar stations and expansion of artificial insemination of pigs. The project to provide support to the department for these activities.

j. Innovation Fund

- Innovation fund guidelines to be reviewed and approved by the Project Management Committee.
- Call for concepts to provide funding under Innovation Fund.
- Review the concepts and seek detailed proposal from the selected agencies.
- Review the detailed proposals and sanction the proposals.

• Provide funding, monitor the performance and evaluate the results.

k. Market Access

- The Engineering Section of the Agriculture Department to identify road stretches requiring cross drainage structures.
- Prepare detailed design incorporating climate resilient features and Bill of Quantities and seek IFAD's approval in case the estimated cost exceeds the prior review threshold.
- Invite tender and evaluate the tender and submit the results to the appropriate approving authority of SoCRAN and also to IFAD in case the estimated cost exceeds the prior review threshold.
- Sign a contract with the selected contractors.
- Execute road construction work

3. Project Management

a. Supervision

- PMU and DMU to undertake supervision of the field level activities and ensure implementation of project activities as planned.
- PMU to allocate a state level officer as the Field Coordinator for each district.
- PMU to submit regular reports to PMC and the Governing Council of SoCRAN.
- Action taken report to be submitted on the recommendations of IFAD's Supervision Mission reports within 30 days from the date of receipt of management letter.

b. Preparation of AWP&B

- PMU to provide indicative budget for each DMU.
- Based on the yearly micro-plans of each villages indicative budget, AWP&B for each year to be prepared and submitted to PMU for approval.
- PMU to consolidate and send the same to IFAD for comments and no-objection by 30 January every year.
- Based on comments of IFAD, PMU to rework AWP&B and present it to the Governing Council for approval.
- Based on this, include the AWP&B into the budget of GoN for IFAD and GoN contribution of the project.

c. Fund flow

- As per the AWP&B seek release of funds from GoN (IFAD and GoN).
- Fund to flow from PMU to DMU and other government agencies: The fund recipients to submit statement of expenditure every month certified by the authorised signatory of DMUs and other government agencies.
- Funds to flow from DMUs to FIGs and entrepreneurs: The fund recipients to submit statement of expenditure authorised by the Block/Circle Officers.

d. Monitoring and Evaluation

- FAO to engage an Agency specialized in M&E for conducting Baseline and impact assessment survey. Baseline survey to be undertaken during the first year of the project.
- FAO to engage an agency for developing computerised management information system.
- PMU to conduct annual outcome survey in collaboration with DMUs every year starting from second project year and submit a report by end January every year.
- Maintain pictorial evidence of pre-project and post scenarios with respect to activities implemented under the project. Take google pictures of the *jhum* plot and other plots in each village every year for comparison purposes.

e. Knowledge Management

- Identifying emerging best practices and contributing to the knowledge management related activities of the project.
- Prepare documentation of best practices and lessons for knowledge sharing and also place it on the web site of the project.
- Undertake impact of project interventions on effectiveness of government programmes that have been converged with the project.
- Develop knowledge sharing platforms for knowledge dissemination amongst DMUs and line departments.
- Document replications resulting from such knowledge dissemination exercise.
- Coordinate with ICAR to conduct regional workshops to disseminate the results of the *jhum* cultivation and settled agriculture.

f. Reporting

- Submit half yearly and annual progress reports to IFAD within 45 days of end of the reporting period.
- Submit half yearly financial statements to IFAD within 45 days of end of the reporting period.
- Submit ORMS (RIMS) report to IFAD by end march every year.
- Submit Audited annual report with financial statements and management letter to IFAD by 30 September every year

g. Project Closing

- Conduct a project completion impact assessment survey during the last quarter of the last project year
- Prepare a Project Completion Report and submit it to IFAD- end of last project year
- Make only committed expenditure during the period between project closing date and loan closing date.
- Reconcile and submit all withdrawal applications.



Annex 4.1: Project Management Structure
India Fostering Climate Resilient Upland Farming Systems in the Northeast Draft Project Implementation Manual for Nagaland



Annex 4.2: Project Coordination Structure

Annex 4.3: Project Phasing Plan

s.			Pr€	9		Yea	r 1	Yea	ar 2	Ye	ear 3		Yea	r 4		Yea	5	,	Year	r 6	Pro	biect
No.	Ac	ctivity	proje	ect	2	2018	-19	201	9-20	202	20-2 1	1	2021	-22	2	2022	-23	2	023	-24	Clo	sing
	Pr	reparatory activities																				
		Registration of SoCRAN																				
		Appointment of SPD																				
		Appointment of State Level Project Implementation Team (PMU staff)																				
		Orientation of PMU staff and DCs in New Delhi																				
		Appointment of Finance and Accounts Specialist																				
		Appointment of District Project Implementation Team (DMU staff)																				
		Orientation of DMU and block staff																				
		Opening bank accounts																				
		JRMC establishment																				
		Benefit sharing system developed and notified																				
		Review and approval of financial regulations of SoCRAN																				
		Review and approval of PIM																				
	FÆ	AO - Technical Assistance																				
		Preparation of a TA agreement																				
		Approval of TA agreement by GoN and IFAD																				
		Signing an agreement with FAO																				
	IC	AR - Knowledge Generation and Dissemination																				
		Preparation of a draft MoU with ICAR																				
		Approval of MoU by GoN and IFAD																				
		Signing an agreement with ICAR																				
	Ca	apacity Building																				
		Training of trainers by FAO																				
		Preparation of training modules and materials																				
		ToT on SALT																				
		ToT on TRC																				

s		Pre		Yea	r 1	Yea	ar 2	Yea	ar 3	١	/ear	4	Ye	ar 5		Yea	r 6	Pr	oiect
No.	Activity	project	2	2018	8-19	2019	9-20	202	0-21	2	021-	22	202	2-23	3	2023	8-24	Clc	sing
	ToT on fruits and nuts nursery management																		T
	ToT on spice nursery management																		
	ToT on animal husbandry																		
	ToT on spice cultivation																		
	Training of field staff																		
	Training on SALT																		
	Training on TRC																		
	Training on fruits and nuts nursery management																		
	Training on spice nursery management																		
	Training on animal husbandry																		
	Training on spice cultivation																		
	Component 1: Improvement <i>ihum</i> management																		
	Sub-component 1.1: Better <i>jhum</i> and conservation																		
	Jhum improvement (first year Jhum)																		
	Obtain FPIC																		
	Lead farmer identification and training																		
	Lead farmer support - nursery development																		
	Land use plan preparation and training																		
	Allocation of <i>jhum</i> plot and FIG formation																		
	FIG support and training																		
	Low cost SWC structure construction																		
	Supply of seeds and planting materials																		
	Fallow management (first year fallow)																		
	Allocation of fallow <i>jhum</i> plot																		
	Low cost SWC works																		
	Supply of seeds																		
	Community Conservation Forest																		
	Allocation of CCF for development																		
	Development of nursery																		

S.			F	Pre	Ye	ar 1	Ye	ar 2	Y	ear 3			Yea	• 4	Ye	ar 5		Yea	ar 6	 Pro	iect
No.	Ac	tivity	pro	oject	201	8-19	201	9-20	20	20-2 ⁻	1	2	2021	-22	202	2-23	3	202	3-24	Clos	sing
		Low cost SWC works																			
		Water source protection works																			
		Planting of seedlings and management																			
		Sub-component 1.2: Support to Settled Agriculture																			
		Terrace Rice Cultivation																			
		FIG formation and training																			
		Supply of seeds and planting materials																			<u> </u>
		Irrigation support																			
		Upland farming																			
		Identification of a <i>jhum</i> plot for upland farming																			<u> </u>
		FIG formation and training																			<u> </u>
		Low cost soil and water conservation works																			<u> </u>
		Supply of seeds and planting materials																			
	Co	omponent 2: Value chain and market access																			
		Sub-component 2.1: Value chains																			<u> </u>
		Production support																			<u> </u>
		Cluster identification																			
		CRP support (nursery management)																			<u> </u>
		FIG formation and training																			
		Supply of planting materials																			
		Marketing support																			<u> </u>
		Establishment of marketing unit																			<u> </u>
		Participation in trade fair and exhibitions																			
		Exposure visits																			
		Buyer seller meets																			<u> </u>
		Promotion agro processing units (bamboo etc.)																			
		Organic certification																			
		Contract farming and market linkages																			
		Construction of collection centres/CFC																			
		Livestock support																			1

S.			Pr	e		Year	1		Year	2	Yea	ar 3	Y	ear 4	ļ	Yea	ar 5		Year	6	Pro	ject
No.	Acti	ivity	proj	ject	2	018-	19	2	2019-2	20	2020)-21	20	21-2	2	202	2-23	3	2023-	-24	Clo	sing
		CAHW support - vaccination																				
		Boar station support																				
		Pig breeding unit support																				
		Pig rearing support																				
		Support to other livestock																				
		Demonstrations																				
		Innovation fund support																				
		Approval of innovation fund guidelines																				
		Call for proposals																				
		Appraisal of proposals																				
		Sanction and implementation																				
		Monitoring and evaluation																				
	i	Sub-component 2.2: Market access nfrastructure																				
		Planning, survey and design for cross drain structures																				
		Invite tenders & award works																				
		Execution of works																				
		Maintenance of defective works																				
	Kno	wledge Generation and Dissemination																				
		Settled agriculture in 50 ha on watershed basis																				
		Impact assessment of settled agriculture interventions																				
		Demonstrations																				
		Regional level workshop for knowledge dissemination																				
	Plar	nning, MIS and M&E																				
		Engagement of an agency for MIS development																				
		Development of MIS software																				
		Baseline survey																				
		AWP&B and Procurement Plan submission																				

India

Fostering Climate Resilient Upland Farming Systems in Nagaland and Mizoram Draft Project Implementation Manual for Nagaland

S. No.	Activity		Pr proj	e ect	Yea 2018	ar 1 8-19	Y 20	′ear 2)19-2	0	Yea 2020	ar 3)-21	2	(ear 021-	4 22	Ye 202	ear 5 22-2	; 3	Yea 202:	nr 6 3-24	Pr Clo	oject osing
	A	nnual outcome survey																			
	S	ubmission of ORMS																			
	E	ndline survey																			
	P	roject Completion Report																			

Annex 4.4: Draft Society Financial Regulations

A. Delegation of financial powers

1. The expenditure will be incurred by the society is at two levels: (i) DMU level; and (ii) PMU level. In order to expedite project implementation, it is necessary to delegate financial powers to the officials at these two levels. To streamline expenditure pattern, the financial powers are categorized into four categories. They are: (i) project related procurement and other releases; (ii) administrative and management expenses; (iii) monthly payroll and human resource benefit related expenditure; (iv) staff advances and petty cash; (v) cheque signing powers; and (vi) other finance related powers. It is suggested that the societies delegate powers to the respective authority as detailed below. These powers will have to be approved by the Governing Council of the society. The Governing Council will be able to review and change the powers with a view to expedite project expenditure with requisite checks and balances.

a) Financial Powers of the District Management Unit

2. The financial powers of the DMUs are detailed below. These powers will have to be exercised in consonance with the approved Annual Work Plan and Budget (AWP&B). This means, the overall expenditure for any activity should not exceed the amount budgeted in the AWP&B. In case these is a possibility of exceeding the AWP&B limit, it is necessary to seek an amendment to the AWP&B allocation following the approved procedures.

Nature of Transaction	Transaction Authority	Approval Authority	Approval Authority limit (Rs)
Goods	Transaction Owner	DPM+FAO	Up to 100,000
	(Person who initiates the request)	PMU approval required for	
	,	limit.	
Consulting	Transaction Owner	DPM+FAO	Nil
Services	(Person who initiates	PMU approval required for	
	the request)	any expenditure beyond this limit.	
Non Consulting	Transaction Owner	DPM+FAO	Up to 50,000
Services	(Person who initiates the request)	PMU approval required for any expenditure beyond this limit.	
Financial Support	Transaction Owner	DPM+FAO	Nil
to FIGs and other community Organizations	(Person who initiates the request)	PMU approval required for any expenditure for these activities.	
Innovation Fund	Transaction Owner	DPM+FAO	Nil
	(Person who initiates the request)	PMU approval required for any expenditure under this activity.	

1) **Project related procurement and other releases**

2) Administrative and management expenses

Nature of Transaction	Transaction Authority	Approval Authority	Approval Authority limit (Rs)
Administrative or	Transaction Owner	DPM+FAO	Up to 10,000 (not to exceed
Management expense	(Person who initiates		overall approved AWPB
of DPMU only	the request)		allocation for the year)

3) Administrative and management expenses

Nature of Transaction	Transaction Authority	Approval Authority	Approval Authority limit (Rs)
Monthly Payroll and	Transaction Owner	DPM+FAO	Any amount as per
Human Resource benefit	(Person who initiates		payroll and
as per HR policy	the request)		employment contract

4) Staff advances/petty cash

Nature of Transaction	Transaction Authority	Approval Authority	Approval Authority limit (Rs)
Advance for non-travel	Transaction Owner	DPM + FAO	10,000
related activities DMU	(Staff concerned)		
Advance for travel related	Transaction Owner	DPM + FAO	20,000
activities DMU	(Staff concerned)		
Expense from Petty Cash	Finance Assistant	DPM+ FAO	10,000
in DMU			

5) Cheque signing powers

Nature of	Transaction	Signatories		Approval Authority
Transaction	Authority	1st Signatory	2nd Signatory	limit (Rs)
Signatories to payment instrument of DMU Bank A/C	Finance Assistant	FAO	DPM	Up to 1,00,000

b) Financial Powers of the Project Management Unit

3. The financial powers of the PMU are detailed below. These powers will have to be exercised in consonance with the approved Annual Work Plan and Budget (AWP&B). This means, the overall expenditure for any activity should not exceed the amount budgeted in the AWP&B. In case these is a possibility of exceeding the AWP&B limit, it is necessary to seek an amendment to the AWP&B allocation following the approved procedures.

1) Project related procurement and other releases

Nature of Transaction	Transaction Authority	Approval Authority	Approval Authority limit (Rs)
Goods	Transaction Owner	SPD+FAS	Up to 300,000
	(Person who initiates	MD+SPD+FAS	Up to 50,00,000
	the request)	Society Chairperson's approval required for any expenditure beyond this limit.	
Works and	Transaction Owner	SPD+FAS+EE	Up to 10,00,000
Construction	(Person who initiates	MD+SPD+SE+FAS	Up to 50,00,000
	the request)	Society Chairperson's approval	
		required for any expenditure	
		beyond this limit.	
Consulting Services	Transaction Owner	SPD+FAS	Up to 3,00,000
	(Person who initiates	MD+SPD+FAS	Up to 50,00,000
	the request)	Society Chairperson's approval required for any expenditure beyond this limit.	
Non Consulting	Transaction Owner	SPD+FAS	Up to 3,00,000
Services	(Person who initiates	MD+SPD+FAS	Up to 10,00,000
	the request)	Society Chairperson's approval required for any expenditure beyond this limit.	
Financial Support to	Transaction Owner	SPD+FAS	Up to 10,00,000
FIGs and other	(Person who initiates	MD+SPD+FAS	Full powers as per

CBOs	the request)		approved AWPB
Innovation Fund	Transaction Owner (Person who initiates	SPD+FAS MD+SPD+FAS	Up to 5,00,000 Up to 50,00,000
	the request)	Society Chairperson's approval required for any expenditure beyond this limit.	

2) Administrative and management expenses

Nature of Transaction	Transaction Authority	Approval Authority	Approval Authority limit (Rs)
Administrative or Management expense	Transaction Owner (Person who initiates	SPD+FAS	Up to 100,000
of PMU only	the request)	MD+SPD+FAS	Full powers

3) Administrative and management expenses

Nature of Transaction	Transaction Authority	Approval Authority	Approval Authority limit (Rs)
Monthly Payroll and	Transaction Owner		Any amount as per
Human Resource benefit	(Person who initiates		payroll and
as per HR policy	the request)	SPD+FAS	employment contract

4) Staff advances and petty cash

Nature of Transaction	Transaction Authority	Approval Authority	Approval Authority limit (Rs)
Advance for non-travel	Transaction Owner	SPD+FAS	20,000
related activities DMU	(Staff concerned)	MD+SPD+FAS	50,000 (Max limit)
Advance for travel related	Transaction Owner		
activities DMU	(Staff concerned)	SPD+FAS	Full powers
Expense from Petty Cash in DMU	Finance Assistant	SPD+FAS	10,000

5) Cheque signing powers

Nature of Transaction	Transaction	Signatories1st Signatory2nd Signatory		Approval Authority
	Authority			limit (Rs)
Signatories to payment instrument of PMU Bank	Finance Assistant			Any amount based on administrative
A/C		FAS	SPD	approval

6) Other powers

Nature of Transaction	Transaction Authority	Approval Authority	Approval Authority limit (Rs)
Investment - Term Deposit	FAS	SPD	Any
Investment - other short term	FAS	SPD	Any
Selection of Banks	FAS	SPD	Any
Opening of Bank Account	FAS	SPD	Any
Inter Bank Fund Transfer	FAS	SPD	Any
Creation of Imprest Petty Cash	FAS	SPD	20,000

B. Financial Discipline and Diligence

4. No officer shall incur expenditure or enter into any liability involving expenditure or transfer of moneys or investment or deposit from the Society account unless such expenditure or transfer has been sanctioned by a general or special sanction of the competent authority.

5. The following should be the general principles governing all expenditure incurred from the Society funds :-

- That there should be provision of funds authorized by competent authority fixing the limits within which expenditure can be incurred.
- That the expenditure incurred should conform to the relevant provisions of the Regulations of the Society.
- That there exist sanction either general or special accorded by the competent authority, authorizing the particular item of expenditure.

6. All sanctions of expenditure shall indicate the details of provision under the relevant budget head. A sanction or order shall come into effect from the date of issue unless any other date is specified by the competent authority.

7. No money should be drawn from the Bank in cash unless it is required for immediate disbursement/ replenishment of petty cash balance.

8. Every Officer incurring or authorizing expenditure from the Society funds should be guided by high standards of financial probity.

9. Every Officer shall exercise the same vigilance in respect of expenditure incurred from the society funds as a person of ordinary prudence would exercise in spending his own money :-

- The expenditure should not be prima facie more than what is required.
- No authority should exercise its powers of sanctioning expenditure or pass an order which will be directly or indirectly to its own advantage.

10. The funds of the society shall be used only for the eligible expenditure included in the AWPB and approved by the Project Management committee and IFAD.

11. The amount of allowance granted to meet expenditure of a particular type should be regulated and that the allowances are not on the whole a source of profit to the recipients.

12. Each head of office is responsible for enforcing financial order and strict economy at every step and also for observance of all relevant financial rule and regulations by all.

13. Every claim for payment received by the Society shall be checked before payment to ascertain the submission of supporting documentation.

14. All bills presented for payment shall be examined in accordance with the relevant approvals, contracts or purchase orders and other supporting documents.

15. No claim against the Society which is not presented within six months of incurring the expenditure will be entertained without a special sanction of the competent authority.

16. No cheque shall be signed unless required for immediate delivery to the payee or drawn in favour of a person other than the actual payee. Wherever possible, electronic transfer to the payee account should be adopted. All payments should be payable only to the claimants and third party payments shall not be made under any circumstances.

17. Delay in the indisputable payment due by the Society is contrary to all rules and budgetary principles and should be avoided.

18. Money paid from the Society funds should under no circumstances be left unrecorded for more than a day.

19. Periodical review of the Society's revenue expenditure, investments etc. should be done.

20. Keeping a constant watch over the progress of expenditure is an important step towards financial and budgetary control. It should be always ensured that the expenditure is kept within the

budget provision and where necessary timely action is taken to obtain funds by permissible reappropriation of funds from the available savings with the approval of the Governing Council.

21. The Finance and Accounts Specialist / Finance and Accounts officers are responsible for exercising general supervision over the funds of the Society. S/He is also to advise the Society as regards its financial policy and management.

22. If any Division/ Section of the Society requires advice on financial or accounting matter, it should be referred to the Finance & Accounts Specialist. As a general rule : (i) In all important matters and transactions with financial implications, advice of the SPD/ DPM should be obtained at PMU/ DMU; and (ii) the proposal for financial sanction should be routed through the FAS/ FAO.

23. PMU / DMUs of the Society shall afford all reasonable facilities to Auditors for the discharge of their function and furnish all possible information required by them for the preparation of any official account or report. No. information, books or other documents shall be withheld from presentation to the Auditors as and when required by them.

24. It shall be the responsibility of the FAS / FAO under the supervision of the State Project Director (SPD) to furnish replies to Audit observations within the prescribed time and no objection is allowed to remain unsettled for an unduly long period.

C. Procurement of Goods, Services and Works

25. The procurement of goods, services and works shall be undertaken in compliance to the IFAD Procurement Guidelines and approved Procurement Plan.

26. The Society shall prepare the Procurement Plan for the first 18 months of implementation and submit for the approval of Project Management Committee (PMC)/Mission Director (MD) and IFAD. This Plan shall be updated annually for the subsequent programme years. Any modification/revision in the approved procurement plan shall require PMC/MD and IFAD's approval.

27. The procurement of goods and works in FOCUS shall be done by adopting any of the following selection methods:

- i) Local Competitive Bidding
- ii) Local Shopping
- iii) Direct Contracting

28. The procurement of consultancy and non-consultancy services in FOCUS shall be done by adopting any of the following selection methods:

i) Quality cum Cost Based Selection (QCBS)

- ii) Fixed Budget Selection
- iii) Least Cost Selection
- iv) Selection based on Consultants' Qualification (CQS)
- v) Selection of United Nations agencies and specialised agencies
- vi) Individual Consultants
- vii) Single Source Selection

29. The recommended thresholds for the different selection methods shall be indicated by IFAD in its Letter to the Borrower. Broadly the thresholds are:

Goods

- (i) Local Competitive Bidding: applies to contracts valued over USD 25 000 equivalent.
- (ii) Local Shopping: applies to contracts valued over USD 5 000 equivalent and up to and including USD 25 000 equivalent.
- (iii) Direct contract: applies for contracts up to and including USD 5 000 equivalent.

Works

- (i) Local Competitive Bidding: for contracts valued over USD 50 000 equivalent;
- (ii) Local Shopping: applies to contracts valued over USD 5 000 equivalent and up to and including USD 50 000 equivalent; and
- (iii) Direct contracting: applies for contracts up to and including USD 5 000 equivalent.

Consultancy Services and Non consultancy services

- (i) Adopting any selection method for contracts valued over USD 5000 equivalent
- (ii) Single Source Selection for contracts up to and including USD 5000 equivalent

Procurement through Community organizations

30. Under FOCUS, in order to strengthen the capacity of the community organizations to receive public funds and implementation of activities, procurement of goods and materials (including seeds and planting materials) and works including renovation of existing structures will be allowed. The threshold for the community procurement shall be up to USD 15 000 equivalent. The community organizations will adopt local shopping or direct contracting. The guidelines will be provided by the Society.

31. **Prior Approval/ Review:** For all procurement of goods, service and works exceeding US\$ 100,000 prior approval of IFAD shall be obtained. In the case of auditors, the process of appointment along with relevant documents (advertisement, rating parameters, the TOR etc.) shall be subject to prior review by IFAD. All single source procurements above the threshold level of USD 5000 are covered under prior review. In addition, first three procurements of the project is covered under prior review irrespective of the amount.

32. Detailed guidelines and processes related to procurement are detailed in the Programme Implementation Manual and Procurement Manual.

- 33. Other Matters:
 - All equipment and other assets of capital nature with book value of more than Rs. 5,000 shall be given inventory number, entered in the inventory register and physical verification thereof be carried out annually by PMU/DMU.
 - The equipment, furniture and fixtures of SoCRAN / SCRAM shall be insured as per the guidelines of State Government.
 - A log book shall be maintained on daily basis for each vehicles. The log book should be signed by the user of the vehicle as soon as the travel/journey is completed.

D. Travel cost reimbursement

34. Travel expenditure of MD, SPD and other officials above the rank of SPD shall be reimbursed as per the procedure established by GoI and the respective state government. In respect of all project officials including staff on contract basis, travel costs shall be reimbursed as per the mode of transport approved by the SPD at the time of approving the travel.

E. Daily subsistence allowance reimbursement

For international travel, a lump sum DA of USD 200 equivalent with 50% prescribed for accommodation. In case the hotel accommodation exceeds 50%, the differential will also be paid.

a) SPD and MD

All state and union territory capitals

- 1) Rs. 5000 (exclusive of taxes) per day for overnight stay for lodge subject to submission of hotel bills. If hotel bill for lodge is not produced a lump sum of Rs. 2000 shall be payable.
- 2) Rs. 1500/- per day for board.

All other cities and towns outside the state

- 1) A maximum of Rs. 4000 (exclusive of taxes) per day for overnight stay for lodge subject to submission of hotel bills. If hotel bill for lodge is not produced a lump sum of Rs. 1500 shall be payable.
- 2) Rs. 1000 per day for board.

Travel more than 8 hours without night halt

Rs. 500 per day for board.

b) State level Senior Professional officers

All state and union territory capitals

- 3) Rs. 3500 (exclusive of taxes) per day for overnight stay for lodge subject to submission of hotel bills. If hotel bill for lodge is not produced a lump sum of Rs. 1000 shall be payable.
- 4) Rs. 1000/- per day for board.

All other cities and towns outside the state

- A maximum of Rs. 2000 (exclusive of taxes) per day for overnight stay for lodge subject to submission of hotel bills. If hotel bill for lodge is not produced a lump sum of Rs. 700 shall be payable.
- 4) Rs. 800 per day for board.

Project Villages - outside duty station

1) A maximum of Rs. 750 per day for overnight stay covering both lodge and board

Travel more than 8 hours without night halt

1) Rs. 300 per day for board.

c) District level Professional officer and State level Junior Professional Officers

All state and union territory capitals

- 1) New Delhi, Mumbai, Kolkata, Chennai, Bangalore and Hyderabad Rs. 3000 (exclusive of taxes) per day for overnight stay for lodge subject to submission of hotel bills. If hotel bill for lodge is not produced a lump sum of Rs. 1000 shall be payable
- Other State and Union Territory capital: Rs. 2000 (exclusive of taxes) per day for overnight stay for lodge subject to submission of hotel bills. If hotel bill for lodge is not produced a lump sum of Rs. 800 shall be payable.
- 3) Rs. 600/- per day for board.

All other cities and towns outside the state

- 1) A maximum of Rs. 1500 (exclusive of taxes) per day for overnight stay for lodge subject to submission of hotel bills and subject to actuals. If hotel bill for lodge is not produced a lump sum of Rs. 750/- shall be payable.
- 2) Rs. 500 per day for board.

Project Villages – outside duty station

1) A maximum of Rs. 500 per day for overnight stay covering both lodge and board

Travel more than 8 hours without night halt

1) Rs. 300 per day for board.

d) General Service Staff

All General Service Staff shall be eligible for 80% of the daily subsistence allowances for District Professional officers/Junior professional officers.

Annex 4.5: Society By-Laws

MEMORANDUM OF ASSOCIATION

(Registration under Societies Registration Act, 1860)

1. Name of the society

Society for Climate Resilient Agriculture in Nagaland (SCRAN)

2. Location of Office of the society

- 3. The objectives for which the Society is established are as follows :-
 - (1) To implement 'Fostering Climate Resilient Upland Farming Systems in Nagaland' (FOCUS), an IFAD assisted project in accordance with the Project Design and the Project Implementation Manual.
 - (2) To promote Improved Jhum management
 - (3) To provide market access and promote value chain for the agriculture produce of the rural areas
 - (4) To promote livelihood projects and create enabling conditions for the poor especially women to economically and socially empower them through appropriate livelihood options.
 - (5) Establish, strengthen and empower community based institutions/grassroots institutions based on widespread inclusive community participation especially of poor, women and other vulnerable groups
 - (6) To organize community groups among urban poor for enhanced livelihood options.
 - (7) Promote collective action through community based organization for economic and social purposes.
 - (8) Strengthen capacity of communities for participatory activities for economic empowerment by enhancing their livelihood opportunities and incomes through farm and non-farm activities.
 - (9) To promote market linkages for agricultural and rural non-farm products of the community based organizations of the poor.
 - (10) Promote community driven development interventions for fostering equity in the distribution of wealth, natural resources and common facilities.
 - (11) Creation of capital assets at household and community level through use of local resources particularly rural technology and participatory processes.
 - (12) To promote linkages with micro finance institutions and banks for delivery of financial services to the rural and urban poor.
 - (13) Appropriate vocational skill training to youth after proper demand assessment to facilitate employability and create options for non-farm livelihoods.
 - (14) Natural resources management, with special emphasis on community-based forestry management, Non Timber Forest Produce (NTFP).
 - (15) To provide technical assistance and seed capital for value-addition activities in the downstream segments of relevant supply-chains.
 - (16) To promote partnership and linkages with organizations and bodies of local regional, national and international which will promote the objectives of the society
 - (17) To access funds from Government and semi-government sources, local bodies, banks and other financial institutions, trusts and any other legally constituted

bodies Act the State, national, and international levels engaged in lawful activities to promote the society's' objectives.

- (18) To receive loans, grants, donations and technical services from any bilateral, multilateral, and international bodies such as governments, United Nations, World Bank, International Financial Corporation and other bodies for promotion of livelihoods and natural resource management.
- (19) To document and implement best practices for poverty eradication appropriate to the North Eastern Region.
- (20) To invest in small scale local infrastructure in project areas that are essential to promote the objectives of the Society.
- (21) Support Panchayati Raj institutions and other forms of local self government for responsive effective and transparent service delivery
- (22) To bring in convergence among various poverty reduction and empowerment projects
- (23) To build support and services structures for providing social and technical guidance to the poor in their overall social progress and livelihood development
- (24) Support village governments in becoming more responsive and effective in delivery of services and assisting the rural poor especially women;
- (25) To undertake all relevant activities, including implementation of specific projects funded by government, bilateral, multilateral and other funding agencies for elimination of poverty, and livelihood development of the poor.
- 4. The Executive Committee of the Society is entrusted with the management of the Society. The Executive Committee of the Society shall have a minimum number of three members (Chairperson, Vice Chairperson and Member Secretary) and any other member of the Society nominated by the Government of Nagaland from time to time. *The names, address and designation of the Members of the Executive Committee are:-*

SI. No.	Name in full	Address, Occupation	Designation
1.			
2.			
3.			
4.			
5.			
6.			
7.			

Co-opted members of the Executive Committee - The Executive Committee shall have the right to co-opt eminent persons/officials in the field of activities related to the objectives of the Society. The Executive Committee may co-opt a maximum of three members. The co-opted members shall have a right to participate in the meetings of the Executive Committee but shall not have voting rights and they shall not constitute the quorum. The President can also invite experienced officials and eminent persons for specific issues to the meetings of the executive Committee.

5. We the undersigned are desirous of forming a society in pursuance of this memorandum of Association

SI.No.	Signature in full	Name, address, occupation and designation	Full Name with seal and signature of the
--------	-------------------	---	---

		witness
1.		
2.		
3.		
4.		
5.		
6.		
7.		

Date of establishment.

RULES AND REGULATIONS

(Registration under the Societies Registration Act, 1860)

1. Name of the society

Society for Climate Resilient Agriculture in Nagaland (SCRAN)

2. Address of the main office of the society:

3. Area of operation:-

The area of operation of Society for Climate Resilient Agriculture will be the eight districts of Nagaland and any other location in Nagaland as needed for value chain development. The districts of Nagaland to be directly covered by the field operations are Mon, Longleng, Zunheboto, Wokha, Kiphire, Phek, Mokokchung and Kohima

4. General Scope and Application of the Bye Laws of the Society:

- (1) These byelaws shall extend to all the units and activities of the Society for Climate Resilient Agriculture in Nagaland.
- (2) These byelaws shall come into force from the date on which the Society is registered under the Societies Registration Act, 1860
- (3) The Society will be under overall administrative control of the Government of Nagaland.
- (4) The Government of Nagaland will have absolute and overriding power in respect of Appointment, change and removal of members as also in formation of Committees and Sub-committees under the byelaws mentioned hereinafter. States can nominate their nodal officer.
- (5) The activities and accounts of the Society shall always be open for verification by the Government of Nagaland.
- (6) The Government of Nagaland shall have the power to issue such directions/instructions as may be deemed necessary in proper functioning of the Society.

(ii) Functions of the Society:

- (a) Take all such actions and to enter into all such actions as may appear necessary or incidental for the implementation of the projects of the Society and in particular for the achievement of the vision and objectives referred to in the objectives of the Society.
- (b) Formulate guidelines for implementation of the various programs of the Society;
- (c) Act as Guardian of rules and "non-negotiable principles" of 'Fostering Climate Resilient Upland Farming Systems in Nagaland' (FOCUS), and enforce the rules and guidelines for the implementation of the project;
- (d) Cause creation and development of District Level societies/District Units, including coordinating and guiding their functioning;
- (e) Accept or provide any grant of money, loan, securities or property of any kind and to undertake and accept the management of any endowment trust, fund or donation not inconsistent with the objectives of the Society.

- (f) Purchase, hire, take on lease, exchange or otherwise acquire property, movable or immovable and construct, alter and maintain any building or building as may be necessary for carrying out the objectives of the Society.
- (g) Open bank account, along with the signatories to the account;
- (h) Receive funds from the Government of India/ State Government of Nagaland/ Other Government Corporations/Councils/Societies or other sources through budget releases and release money to the District Societies/District Units based on their requirement and utilization of funds previous released;
- (i) Incur expenditure after drawing up a budget and with due regard for economy and propriety.
- (j) Make rules and regulation for the conduct of the affairs of the Society and add or amend, vary or rescind them from as and when required.
- (k) Establish its own organizational structure, offices and employ, retain or dismiss personnel as require, decide salary and benefit structure for the Society.
- Accept, make, enclose or otherwise execute cheques, drafts, receipts, bills of exchange or other instruments and securities as required for the conduct of the business of the Society.
- (m) Enter into contracts without a requirement for government approval, other than by Government representatives on the Executive committee and undertake any legal action that may be necessary to ensure the fulfillment of contracts made between the Society and others.
- (n) Exercise overall responsibility for management of all projects on behalf of the Government of Nagaland within the framework of project guidelines.

5. Objectives of the Society :-

- (1) To implement 'Fostering Climate Resilient Upland Farming Systems in Nagaland' (FOCUS), an IFAD assisted project in accordance with the Project Design and the Project Implementation Manual.
- (2) To promote Improved Jhum management
- (3) To provide market access and promote value chain for the agriculture produce of the rural areas.
- (4) To promote livelihood projects and create enabling conditions for the poor especially women to economically and socially empower them through appropriate livelihood options.
- (5) Establish, strengthen and empower community based institutions/grassroots institutions based on widespread inclusive community participation especially of poor, women and other vulnerable groups.
- (6) To organize community groups among urban poor for enhanced livelihood options.
- (7) Promote collective action through community based organization for economic and social purposes.
- (8) Strengthen capacity of communities for participatory activities for economic empowerment by enhancing their livelihood opportunities and incomes through farm and non-farm activities.
- (9) To promote market linkages for agricultural and rural non-farm products of the community based organizations of the poor.
- (10) Promote community driven development interventions for fostering equity in the distribution of wealth, natural resources and common facilities.

- (11) Creation of capital assets at household and community level through use of local resources particularly rural technology and participatory processes.
- (12) To promote linkages with micro finance institutions and banks for delivery of financial services to the rural and urban poor.
- (13) Appropriate vocational skill training to youth after proper demand assessment to facilitate employability and create options for non-farm livelihoods.
- (14) Natural resources management, with special emphasis on community-based forestry management, Non Timber Forest Produce (NTFP).
- (15) To provide technical assistance and seed capital for value-addition activities in the downstream segments of relevant supply-chains.
- (16) To promote partnership and linkages with organizations and bodies of local regional, national and international which will promote the objectives of the society
- (17) To access funds from Government and semi-government sources, local bodies, banks and other financial institutions, trusts and any other legally constituted bodies Act the State, national, and international levels engaged in lawful activities to promote the society's' objectives.
- (18) To receive loans, grants, donations and technical services from any bilateral, multilateral, and international bodies such as governments, United Nations, World Bank, International Financial Corporation and other bodies for promotion of livelihoods and natural resource management.
- (19) To document and implement best practices for poverty eradication appropriate to the North Eastern Region.
- (20) To invest in small scale local infrastructure in project areas that are essential to promote the objectives of the Society.
- (21) Support Panchayati Raj institutions and other forms of local self government for responsive effective and transparent service delivery
- (22) To bring in convergence among various poverty reduction and empowerment projects
- (23) To build support and services structures for providing social and technical guidance to the poor in their overall social progress and livelihood development
- (24) Support village governments in becoming more responsive and effective in delivery of services and assisting the rural poor especially women;
- (25) To undertake all relevant activities, including implementation of specific projects funded by government, bilateral, multilateral and other funding agencies for elimination of poverty, and livelihood development of the poor.

6. MEMBERSHIP:

(a) Qualification to become Member

A person will be appointed or nominated as a member of the Society for Climate Resilient Agriculture in Nagaland by virtue of office held by him and his membership of the Society shall terminate when he ceases to hold the office and vacancy so caused shall be filled by his successor to that office.

The Government, for maximum duration of 3 years will appoint the first non official member. The society will appoint members in place of the retiring members.

The Society shall function, notwithstanding that any person entitled to be member by reason of his office, is not represented on the society for the time being. The proceedings of the Society shall not be invalidated by the existence of any vacancy or any defects in the appointment of any of these members.

(i) Members of the General Body:

The Members of the General Body of the Society will be nominated by the Government of Nagaland its subordinate/autonomous organizations. The initial members of the General Body of the Society will be as follows:-

SI.No.	Name	Designation and Address
1.		
2.		
3.		
4.		
5.		
6.		
7.		

The full membership of the general body will include nominated members as follows:

SI. No.	Name	Designation
1.		Chairperson
2.		Vice-Chairperson
3.		Member Secretary
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

(ii) Termination of Membership:

Membership of the Society shall ipso facto terminate if a member

- a) dies, or permanently leaves India; or
- b) tenders his resignation in writing to the Society; or
- c) Is declared insane by a competent authority; or
- d) Operation of the provisions of section 5.2 above
- e) Found guilty by any court

(iii) Register of Members

The Society shall, at all time, maintain and keep available for inspection by the IG, Registration, a Register of Members at its registered office, which shall be the permanent

record of the Society and shall contain the names and addresses of the members, the date on which the member was admitted and the date on which member ceases to be member. Every member shall sign the Register. No member shall be entitled to exercise rights and privileges of a member unless he has signed the register as aforesaid.

- (b) Subscription, donation etc.
- (c) Collection of Fund
- (d) Control of fund

The source of funds of the Society shall consist of the following:

- a) Recurring and non-recurring grants made by the Government of India and/or the State Governments for the furtherance of the objectives of the Society;
- b) Income from investment.
- c) Grant/loan from external funding agencies, other sources through permitted channels;
- d) Grant, Ioan, donation or assistance of any kind from foreign Governments and other agencies with prior approval of the Central/State Governments
- e) Grants, loans, donation or assistance of any kind from any Government agency or others in India

There shall also be a 'Special fund', which would consist of:

- a) such amounts as are received with a specific condition that income there is alone shall be used for the purpose of the Society(with the Corpus being left intact);
- b) Such other amounts as the General Body may decide to divert from the regular fund to be used in the manner specified in clause (a) above.

The financial year of the Society will be from first day of April to the 31st day of March of the succeeding year.

7. Procedure of the General Body Meeting

(i) Meeting of the General Body

The Society shall hold a general Body Meeting of all its members once a year within the three months from the end of the financial year and this meeting shall be called annual General Body Meeting. Provided that for any reason if it is not practical to convene the annual General meeting within the aforesaid period the executive Committee have powers to extend the date of such AGM for a further period not exceeding three months.

(ii) Special Meeting of the General Body

In addition of the Annual General Body meeting, a Special General Body meeting may be called at any time on the requisition of the executive Committee or one third of the total members of the General Body. The special General Body Meeting shall be convened within fifteen days from the date of requisition and will be called Extra Ordinary General Meeting.

(iii) Notice of Meetings of the General Body

For every meeting of the General Body, a notice of not less than ten clear days specifying the place, date, time and agenda for the meeting shall be delivered personally or sent by post to the members of the society. An adjourned meeting can be called on the notice of at least five days. The notice must indicate the place date and hour thereof as well as the item of the agenda.

(iv) Business of the General Body

Every meeting of the General Body shall be presided over by the President or in his absence by the Vice-President or in the absence of both, by one of the other members, elected by the members present from among themselves. Each member including the member presiding at the meeting of the

General Body shall have one vote but the presiding members shall also have a casting vote in addition to his vote as member, in case of equality of votes. All the matters shall be decided by a majority of votes.

(v) Minutes of the General Body Meeting

A copy of the minutes of the proceedings of each meeting shall be furnished to the General Body members as soon as possible after the completion of the meeting. The President or the Member of the General Body who chairs the meeting, as the case may be shall approve the proceedings of the meeting. Proceedings of every meeting shall be kept by the Member Secretary and shall be read out as its next meeting and confirmed by the members present.

(vi) Resolution of the General Body

Every resolution of the General Body shall be passed by a majority of members present and voting for the resolution to be valid. In case of expediency, the member Secretary of the Society may circulate a resolution for approval and such resolution so passed by circulation shall be recorded in the proceedings of the next meeting of the general Body. A member can move a resolution at a meeting of the General Body only with the prior permission of the President.

(vii) Functions of the General Body:-

- i) The General Body shall provide overall policy guidance and direction for the efficient functioning of the Society in fulfilling its vision and objectives as laid down in article 3 and 7 of the Memorandum of Association;
- ii) It shall meet at least twice a year, the gap between any two meetings not exceeding six months.
- iii) It shall consider the Balance sheet and annual audited accounts of the Society presented by the Member Secretary along with the remarks thereon by the Executive committee.
- iv) It shall consider the Annual Report presented by the Member Secretary along with the comments thereon by the Executive Committee.
- v) It shall recommend the Annual Action Plan and budget for the ensuing year for the final approval by the Central Project Steering Committee of the Government of Nagaland.
- vi) It shall ensure that the Society adheres to the memorandum of Understanding entered with the Government of Nagaland from time to time and fulfils all the agreements, covenants and contracts enumerated in the Financing Agreements including the SCRAN.

(viii) Powers of the General Body:

The General Body shall have powers to

- i) Undertake all activities necessary for the fulfillment of the vision and objectives as laid down in Article 4 and 7 of the memorandum and Articles of Association.
- ii) Expand the strength of its membership provided the expanded strength is filled in the manner prescribed for enlisting the original membership.
- iii) Add, modify or amend the Memorandum and Articles of Association and these bye-laws after approval from the Government of Nagaland provided that all such additions, modifications or amendments shall be aimed at promoting the objectives of the Society.
- iv) Recommend the removal of a member on the grounds listed in the bye-laws under clause 5(a)(ii).
- v) Approve the Annual Report, Balance Sheet and the annual audited accounts of the Society.
- vi) Approved the appointment of the Auditors of the Society.

vii) Delegate to the Executive Committee or the Member Secretary any of the above powers.

8. Quorum of the General meeting:-

The quorum for all General Body meeting of the Society shall be one third of the total strength of the members for the proceedings to be validly conducted. In case the quorum is not met, the meeting will stand adjourned and the member secretary must convene an 'adjourned meeting'. If in the adjourned meeting also, the quorum is not present the members present shall constitute the quorum. The members present at such 'adjourned meeting' may transact the business for which the meeting was called.

9. Election procedure of the Executive Committee

The Members of the Executive Committee will be nominated by the Government of Nagaland, its instrumentalities and the respective State Governments.

10. Short description of the Executive body:-

The Executive Committee of the Society is entrusted with the management of the Society. The Executive Committee of the Society shall have a minimum number of three members (Chairperson, Vice Chairperson and Member Secretary) and any other member of the Society nominated by the Government of Nagaland from time to time. The names, address and designation of the Members of the Executive Committee are:-

SI. No.	Name in full	Address, Occupation	Designation
1.			Chairperson
2.			Vice Chairperson
3.			Member Secretary
4.			
5.			
6.			
7.			

(i) **Co-opted members of the Executive Committee -** The Executive Committee shall have the right to co-opt eminent persons/officials in the field of activities related to the objectives of the Society. The Executive Committee may co-opt a maximum of three members. The co-opted members shall have a right to participate in the meetings of the Executive Committee but shall not have voting rights and they shall not constitute the quorum. The President can also invite experienced officials and eminent persons for specific issues to the meetings of the executive Committee.

(ii) Functions and Powers of Executive Committee

Subject to the provisions of the Memorandum of Association and the Rules, the Executive Committee shall have the control and management of the business and affairs of the Society and shall have all advisory, executive and financial powers to conduct the affairs of the Society through its member Secretary. All the duties, powers, functions and rights, whatsoever, consequential and incidental to the carrying on of the objectives of the Society shall only be exercised or performed by the Executive Committee.

In particular and without prejudice to the generality of the foregoing provision, the Executive Committee will

a) consider the annual budget and the annual action plan, its subsequent alterations placed before it by the Member from time to time and pass it with such modifications as the Executive committee may think fit;

- b) accept donations and endowment or give grants upon such terms and conditions as it may think fit;
- c) delegate its powers, other than those of making rules, to the President;
- d) appoint committees, sub-committees, expert panels, task-force, working or study groups and Boards etc. for such purpose and on such terms as it may deem fit, and to remove any of them;
- e) set HR Policy including staff positions and salary and incentive structure of the Society
- f) appoint auditors for auditing the accounts of the Society with the approval of the General Body;
- g) ensure that the Society considers any comments made by funding agencies on the progress in the implementation of the projects sponsored and funded by them;
- h) monitor the financial position of the Society in order to ensure smooth income flow and to review annual audited accounts;
- i) monitor the financial position of the Society in order to ensure smooth income flow and to review annual audited accounts;
- j) do generally all such acts and things as may be necessary or incidental to carrying out the objectives of the Society or any of them. Provided that nothing herein contained shall authorize the Executive committee to do any act or to pass any bye-laws which may be repugnant to the provisions hereof, to the powers hereby conferred on the Executive Committee and other authorities, or which may be inconsistent with the objectives of the Society.

11. The term of the Executive body:-

The term of the Executive Committee shall be term of the Society. However, the Executive committee shall continue in office till the next Executive Committee comes into existence for the next term by way of reconstitution by the General Body.

12. Procedure of re-election of the members of the Executive body

The Members of the Executive Committee will be nominated by the Government of Nagaland.

13. Procedure of the meeting of the Executive body

(i) General Meeting of the Executive Committee –

The Executive Committee shall meet as and when necessary with the permission of the president, for the management of the affairs of the Society, provided that the executive committee shall meet at least once in three months.

(ii) Special Meeting of the Executive Committee –

In addition to the General meetings, a Special meeting may be called at any time with the permission of the President. The special meeting may be convened within five days from the date of requisition, provided further that the President may, whenever deemed fit, direct the Member Secretary to call a Special Meeting.

(iii) Notice of the Meeting of the Executive Committee

For every meeting of the Executive Committee, a notice of not less than seven working days specifying the place, date, time and agenda for the meeting shall be given to all the members. If an Executive committee meeting is adjourned due to want of quorum, an adjourned meeting can be called on a date fixed by the President. But in case of emergency, the President may reduce the above period of notice to such number of days as he deems fit in the circumstances of the case.

(iv) Business of the Executive Committee

Every meeting of the Executive Committee shall be chaired by the President, or, in his/her absence by one of the other members, elected by the members present from among themselves. Each member, including the member presiding at the meeting of the Executive committee shall have one vote but the presiding member shall also have a casting vote in addition to his vote as member in case of equality of votes. All the matters shall be decided by a majority of votes.

(v) Minutes of the meeting of the Executive Committee

A copy of the Minutes of the proceedings of each meeting shall be furnished to the Executive committee members as well as to all the members of the General body as soon as possible after the completion of the meeting. The President or the member of the Executive Committee who chairs the meeting, as the case may be shall approve the proceedings of the meeting. Proceedings of every meeting shall be properly kept by the Member Secretary and shall be confirmed at its next meeting.

(vi) Resolution of the Executive committee

Every resolution of the Executive Committee shall be passed by a majority of members present and voting for the resolution to be valid. In case of expediency, the Member Secretary of the Society may circulate a resolution for approval and such resolution shall be deemed to have been passed if a majority of the members approves it, provided that such resolution shall be valid if and only if the President is also one among the member approving the resolution. The resolution so passed by circulation shall be recorded in the proceedings of the next meeting of the Executive Committee.

14. Quorum for the meeting of the Executive Committee

The quorum at all meeting of the Executive Committee shall be not less than one third of the total strength of the members of the Executive committee as per section 7.1 for a proceeding to be validly conducted. In case the quorum is not met and the meeting is adjourned, the member Secretary must reconvene the adjourned meeting.

(i) Chairperson of the Executive Committee:

The Chief Secretary, Government of Nagaland shall be the Chairperson of the Executive Committee of the Society.

(ii) Powers and Duties of the Chairperson of the Executive Committee:

The Chairperson shall have power to:

- (a) Call, or ask the Member Secretary to call, a meeting of the Executive committee at any time and on the receipt of such requisition the member Secretary shall forthwith call such a meeting;
- (b) Authorize acquisitions by gift, purchase, lease or otherwise, any property, moveable or immovable, and to construct, operate and maintain any building for purpose of the Society as deemed appropriate by the Executive Committee.
- (c) Authorize investment of the funds of the Society in such securities and/or to sell or transfer such investments in such a manner as the Executive Committee may consider necessary, for the safety and benefit of the Society and to convert or change such investments, as required by the Executive Committee, subject to the laws applicable.
- (d) Sanction and incur expenditure per instance as may be fixed by the general body for achieving the objectives of the Society.
- (e) Tender & award contracts and incur expenditure on civil works and consultancy to achieve the objectives of the Society up to the limit as may be fixed by the general body.
- (f) Act upon powers as may be delegated to Chairperson by the Society and the Executive Committee.

- (g) Carry out powers and functions of the Executive Committee whenever the exigency so demands and place the action taken before the next meeting of the Executive Committee for ratification.
- (h) Can delegate any or all of the above powers to the Member Secretary of the Society.

(iii) Member Secretary

The Project Director of the SCRAN shall be the:

- (a) Member Secretary of the Executive Committee. His appointment will be normally for a term of five years, or as decided by the Government of Nagaland.
- (b) Member Secretary who shall ordinarily be a senior IAS officer and act as Project Director will be equivalent in status to Joint Secretary/Director to the Government of India.
- (c) The recruitment of the Project Director and any other All India Service officer for any post in the Society for Climate Resilient Agriculture in Nagaland will be done by the Government of Nagaland as per the Service Rules of IAS officers and applicable guidelines of the Department of Personnel and Training, Government of India.

(iv) Functions and Powers of the Project Director:

- (a) The Project Director shall be the Chief Executive of the Society.
- (b) The Project Director shall be responsible for the management of day-to-day affairs of the Society and the Project Management Unit (PMU). He/She shall have overall responsibility for planning and executing the work of the Society. She/He shall be responsible for the implementation of all the policies laid down by the General Body/Executive committee and shall attend to statutory requirements imposed on the functioning of the State Society.
- (c) The Management and control of the day to day administration and control of finance within sanctioned budgets of the State Society shall be vested with the Project Director and through him with the respective functional heads. She/He shall function as the controlling authority of all employees of the State Society.
- (d) The Project Director shall sign or cause to be signed all documents and proceedings requiring authentication by the Society. The Project Director shall also represent or cause to be represented the Society in business and legal transactions. She/He shall receive on behalf of the Society and disburse all funds of the Society based on instructions from the Executive Committee. The Project Director through functional heads will handle necessary documents including bank cheques and other negotiable instruments on behalf of the Society, as authorized by the President/Executive Committee of the Society.
- (e) Project Director shall appoint bankers of the Society with the approval of the Executive committee. All funds of the Society shall be paid into the Society's account with the said bankers.
- (f) The Project director, as Member Secretary, shall in consultation with the President, convene the meetings of the General Body/Executive Committee at stipulated intervals or otherwise and shall maintain all minutes, records and registers of the Society.
- (g) The Project Director shall also perform such functions as may be delegated to him by the Society, President and/or Executive Committee from time to time.
- (h) The Project Director shall ensure handling of all correspondence on behalf of the Society.
- (i) The Project Director as the Member Secretary shall cause implementation of all the resolutions passed in the General Body/Executive Committee of the Society.
- (j) The Project Director shall also perform such functions as may be delegated to him/her by the State Society, President and/or Executive Committee from time to time, and
 - (a) Shall cause to prepare for the Society the Annual Reports and Financial Statements etc. with due audit.

- (b) Shall cause to maintain the accounts, cause due verification of the monthly transactions and the monthly receipt and expenditure statement, which shall be put up to Executive Committee as required. He shall be responsible for overall financial discipline.
- (c) Shall verify the physical and financial usage of the funds disbursed by the State Society to the various participating organization and submit a quarterly report to the Executive Committee.
- (k) The Project Director will liaison with the State Governments, Government of India and other agencies for any matter pertaining to the operations of the Society.
- (I) The Project Director shall appoint staff for the PMU/ DMUs and for the Projects implemented by the Society. However, approval of the Government shall be obtained for the creation of regular posts in the Society.
- (m) The Project Director shall have powers to take disciplinary actions over any staff of the Society as per the deputation rules/contract rules.
- (n) The Project Director shall sanction and incur expenditure as decided by the governing body for day to day activities, or as delegated by the Executive Committee.
- (o) The Project Director shall tender & award contracts and incur expenditure up to a ceiling as may be decided by the government, for civil works and consultancies, in line with the objectives of the Society.
- (p) The Project Director shall perform any of the functions of the Executive Committee with the approval of the President, during the interval between meetings of the Executive whenever it is urgent to do so and place a report in respect thereof, before the Executive Committee for its consideration/ratification.
- (q) The Project Director may also delegate any of his powers to the functional heads and staff of SU for efficient functioning of the Society.
- (r) The Project Director will delegate administrative & Financial Powers to the District units for the smooth functioning of the project with the approval of the Executive Committee.

(v) Project Management Unit (PMU)

- (1) The day to day affairs of the Society shall be conducted by the PMU under the supervision, guidance and control of the Project Director.
- (2) The PMU shall be headed by the Project Director, SCRAN, who will also be the Member Secretary of the Executive Committee.
- (3) The PMU shall be formed with various Specialists in disciplines like agriculture, forestry, horticulture, soil and water conservation, monitoring and evaluation, communication, procurement, finance and accounts, administration etc. with necessary supporting staff. The specialists/staff shall be drawn from government departments on deputation and/or out sources for open market on contract basis.
- (4) Subject to the approval of the Government of Nagaland for creation of regular posts, the Executive Committee shall recruit employees of the Society and District, required for the running of the PMU and also for the implementation of various projects implemented by the Society. For the purpose of administrative matters and disciplinary action, the Project Director will be the appointing authority.
- (5) The Society shall subject to approval by the Executive Committee establish district Project Management Units which may be registered for implementation of the project at district level.
- (6) The Project Director shall appoint District Project Managers and other officers and Staff with the approval of the Executive Committee for managing day to day affairs of the project under the overall supervision and guidance of the Project Director.

(vi) District Project Management Unit:

- (1) The affairs of the District Project Management Unit shall be conducted under the supervision and guidance of the District Magistrate/Deputy Commissioner.
- (2) The District Project Management Unit would be managed by the District Project Manager who would also be the Convener and Member Secretary of the District Executive Committee. The Deputy Commissioner/District Magistrate will be the Chairman of the District Project Implementation Unit.

15. Expulsion/termination of membership of the Society :-

The Government of Nagaland can terminate the membership of any organization/its representative/NGO from the Society without assigning any reason.

A person holding membership of the Society on ex-officio basis will cease to be a member when he ceases to hold that post.

The membership of the Society shall ipso facto terminate if a member dies, or permanently leaves India; or tenders his resignation in writing to the Society; or is declared insane by a competent authority; or operation of the provisions of section 5.2 above and found guilty by any court.

16. Auditor

A qualified Auditor will be appointed by the Executive body who shall audit the accounts of the society at least once in a year and annual Audit Report will be submitted to the Registrar of Societies regularly.

The Audit year of the Society shall begin on the first day of April and end on the 31st day of March next year.

The Society shall maintain proper accounts and other relevant records as well as documents comprising the receipt and payment accounts, statement of assets and liabilities and balance sheet.

The accounts of the Society shall be audited by a Chartered Accountant, to be appointed by the Executive Committee of the society. The nature of the audit to be applied and the detail arrangement to be made in regard to the account and their maintenance and the presentation of the accounts for audit shall be as per project guidelines. The Auditor shall also submit a report showing the exact state of financial affairs of the Society. The copies of the balance sheet and the auditor's report shall be certified by the auditor, and filed with the concerned Government Agencies.

The Accounts will be open to audit by the Accountant General.

16A. Legal procedure:-

- (a) According to the provision laid down in the section 6 of the societies Registration Act XXI of 1980, the society may sue or may be sued in the name of the President and Secretary of the Society
- (b) The Society may sue or be sued in the name of the Society through its Member Secretary.
- (c) No suit or proceeding shall abate by reason of any vacancy or change in the holder of the office of the President, the Member Secretary or any office bearer authorized in this behalf.
- (d) Every decree or order against the Society in any suit or proceedings shall be executable against the property of the Society and not against the person or the property of the President, the Member Secretary or any office bearer.
- (e) Any person, including a member of the Society who damages, injures or destroys and property of the Society or otherwise acts in a manner resulting in pecuniary loss to the Society can be sued by the Society. The fact that such person may be a member of the Society shall not in any manner prevent the Society from proceeding against him in a court of law.

17. Dissolution – if necessary the society may be dissolved and the properties remained after dissolution may be handed over according to the provision laid down in Sections 13 and 14 of the Societies Registration Act, XXXI of 1860

Subject to the provisions of the Act, the Society may be dissolved by a resolution passed at a special meeting of the General Body of the Society duly convened for the purpose and supported by at least two-third of the total members of the Society. The General Body shall prescribe procedure for such dissolution by such resolution. The General Body may on such resolution decide to take action for liquidation of assets and liabilities of the society shall or can be given over to organizations with similar aims and objectives as that of the society, strictly in accordance with the provisions of Act, or surrendered to the Government. In either case, the decision of the Government shall be final.

(i) Management of the Society

The Management of the affairs of the Society shall be vested with the executive Committee as enshrined in the Byelaws frame for the purpose.

(ii) Authority to Correspond

The Member Secretary of the Society shall be the authority to correspond on behalf of the Society.

(iii) Powers of the Government of Nagaland

The Government of Nagaland shall have the power to issue and directions as it deems fit to:-

- a) Alter, add or delete any item of the memorandum of Association
- b) Alter, add or delete any item of Article of Association
- c) Terminate and/or make an appointment in place of any member of the Society mentioned under item 12 of the Memorandum of Association or any Member of the executive Committee mentioned under 7(1) of the Article of association
- d) Exercise final supervisory power and give any directives regarding the objectives, activities, procedures, membership and any other aspect relating to the Society. Instructions/directives of the Government of Nagaland will supersede or hold good on the occasion of any conflict or differences between the General Body and the Executive Committee or any other kind of differences.
- e) The exercise of the powers of the Government of Nagaland on the above shall be final.

(iv) Annual Report

The Member Secretary shall prepare an annual report of the proceeding of the Executive committee and all work undertaken during the year. This report and the duly Audited Annual Accounts of the Society shall be placed for approval before the Executive Committee.

The Annual Report and annual Accounts as approved by the Executive Committee shall be placed before the annual General Body meeting of the General Body before the 31st July of the year. A copy of the annual Report and Annual Accounts as approved by the General Body may be forwarded to the Government within 30 days and shall be filed with the Registrar of Societies having jurisdiction over the society, along with:

- a) a list of names, address and occupation of the office bearers of the Society, certified by the Project Director; and
- b) A copy of the balance sheet and the auditor's report certified by the auditor.

The Annual Report of all the Society and its District Units shall be placed before the Executive Committee of the Society.

(v) Properties of the Agencies

(a) All properties of the Society shall belong to the Society itself. The Society may acquire purchase or otherwise own, take on least or hire movable or immovable properties in furtherance of the objectives of the Society.

- (b) The income and the property of the Society shall be utilized only towards the promotion of the objectives as set forth in the Memorandum of Association of the society. It will be subject to terms and conditions as the Executive Committee may impose in respect of expenditure to be incurred from grants sanctioned to the Society from time to time.
- (c) No portion of the income or the property of the Society shall be paid or transferred directly or indirectly by way or profits to persons, who may at any time be or have been members of the Society.
- (d) No member of the Society shall have any personal claim on any movable or immovable property of the Society or make any profit whatsoever by virtue of his membership.
- (e) Provided that nothing herein contained shall prevent payments in good faith of remuneration, allowances, or honorarium in return for any service rendered by them to the Society.

(vi) Validation of Acts

No action taken by the Society shall be rendered invalid or void only due to the reasons that:

- (i) There existed one or more vacancies in the General Body/Executive Committee on the day on which the resolution was passed; or
- (ii) There was a defect in the appointment of any of its members; or
- (iii) The resolution in pursuance of which the said act was done has subsequently been modified or revoked by the General Body/Executive Committee.
- (iv) The authority entitled to make such appointment shall fill a vacancy in the General Body or in the Executive Committee of the Society.

(vii) Modification of the Bye Laws:

After obtaining the permission of the Government of Nagaland and subject to the provisions to the Society Registration Act, 1860, the Society may amend, add to, alter or delete any of these by laws by a resolution passed at the Special Meeting of the General Body duly convened for the purpose. The modified by laws shall be deemed to have come into force in accordance with the provision of the said Act.

(viii) Contracts:

- (i) All contracts and other instrument for and on behalf of the Society shall, subject to the provisions of the Act, be expressed to be made in the name of the Society and shall be executed by the persons authorized by the Executive Committee.
- (ii) No contract for the sale, purchase or supply of any goods or materials shall be made for and on behalf of the Society with any member of the Society or the Executive Committee, or his/her relative, or firms in which such member is a partner/shareholder, or with any other partner or shareholder of a firm or a private company in which the member is a partner or Director.
- (iii) All contracts shall be fielded, finalized and entered upon in accordance with the guidelines of the SCRAN and specific direction of the Government of Nagaland.

(ix) Common Seal

The Society shall have a common seal of such make and design as the Executive Committee may approve.

(x) Notice

Notice may be served upon any member of the Society either personally or by post to the address of such member at the address mentioned in the register of members. Any notice so served by post shall be deemed to have been served on the day following that on which the letter, envelop or

wrapper containing the same is posted and in providing such service, it shall be sufficient to prove that cover containing such notice was properly address and delivered to the post office.

(xi) Records of the Society:

(i) the Society shall keep in its registered office proper books of accounts, in which should be entered accurately.

- (a) All sum of money received and the source thereof, all sums of money expended by the Society and the object or purpose for which such sums are expended.
- (b) The assets and liabilities of the Society.

(ii) The records will be as follows:

- (a) Member register;
- (b) Proceedings Register of the General Body;
- (c) Proceedings Register of the Executive committee
- (d) Cash Book, Bank Book and General Ledge;
- (e) Records of the Employees of the Society;
- (f) Records of the Accounts and Claims;
- (g) Stock Register;
- (h) All such other records required for proper and systematic running of the Society.

18. Certified to the true copy of the Rules and Regulations of the Society for Climate Resilient Agriculture in Nagaland

Signature of the three Executive Members:-

Annex 4.6: Staff Terms of Reference

1. Project Support Specialist - Nagaland

Qualification:

• Postgraduate/Bachelor degree in Agriculture and allied activities/ MBA with rural development experience/Post Graduate Diploma in Rural Management.

Experience:

 About 15 years of experience in case of postgraduate and 20 years in case of Bachelor degree holder in natural resource management and upland agriculture related activities of the government/national NGO with experience in managing multilateral and bilateral projects. Experience working with tribal households and knowledge about development issues related to tribal communities will be an advantage.

Location of Job: SoCRAN - PMU, Nagaland

Reporting Line: State Project Director (SPD) of FOCUS, SoCRAN, Nagaland

Job Description:

- Assist the SPD in preparation, review and revision of annual budgets and work plans of DMUs and PMU as per AWPB guidelines of IFAD and FOCU strategy and priorities.
- Assist the SPD in ensuring compliance to reporting requirements related to the project activities including preparation of Annual Progress reports, quarterly progress reports and M&E requirements.
- Assist SPD in organizing management meetings, project performance reviews, AWPB planning and review meetings and other review meetings.
- Prepare a summary of issues articulated in the Fact Sheet submitted by FOCUS staff after field visits and submit to the SPD for necessary action.
- Assist the SPD in holding six monthly and annual performance appraisals of senior programme staff at the HO and the DPMs.
- Assist the SPD in preparing proposals for submission to Gol and coordinating with the relevant departments to obtain release of CSS funds and coordinating submission of utilization certificates related to CSS funding to the respective line departments.
- Assist the SPD in Coordination with the Rural Development Department to make a convergence plan on an annual basis to ensure convergence of MGNREGS and other funds with that of FOCUS.
- Assist the SPD in coordinating with National Rural Livelihoods Mission (NRLM) and other mission to ensure synergy between the activities of these missions with that of FOCUS.
- Assist the SPD in facilitating the DMUs to access convergence related benefits to the project target group to address poverty and gender related issues.
- Any other task assigned by the SPD

2. Finance and Accounts Specialist

Qualification:

• Member of the ICAI (Chartered Accountant)/ ICWAI (Cost Accountant)/ M.Com

Experience:

- Minimum 7 years of experience (15 years for M.Com) in financial accounting of project/ company
- Computer literacy and proficiency in Tally and use of spreadsheets
- Good knowledge of Accounting Standards and Chart of Accounts
- Knowledge of audit requirements for financial compliances.

Location of Job: SoCRAN – PMU, Nagaland / SCRAM- PMU, Mizoram

Reporting Line: State Project Director of FOCUS, SoCRAN / SCRAM

Job Description:

- Budgeting and accounting of the project
- Expediting the release of funds for timely implementation of different activities by the PMU and the DMUs
- Consolidating accounts of the PMU and the DMUs
- Monitoring fund utilization at the PMU and the DMUs
- Maintaining records of all financial matters related to the project.
- Preparing periodical financial statements and submission of half yearly and annual financial statements to IFAD
- Preparing requests for release of funds from the State as well as the Central Government and preparation and submission of withdrawal requests to IFAD
- Reviewing, supervising and inspecting the finance section of DMUs and provide the required guidance to them
- Ensuring that the expenditure is within approved budgets and seek amendments to the AWPB and prepare supplementary budgets, if needed
- Ensuring internal and statutory audit and preparation of statements for the purpose
- Ensuring timely settlement of advances
- Ensuring procurement guidelines of IFAD are being followed
- Keeping proper record of procurements made, fixed assets and carrying out periodical physical verification of the assets
- Ensuring compliance with legal and statutory requirements such as filing of TDS and income tax returns and filing of annual audited accounts with the Registrar of Societies.
- Any other task assigned by the SPD

3. Finance Officer

Qualification:

• M. Com/ B Com

Experience:

- Minimum 5 years of experience (3 years for M.Com) in financial accounting of project/ company
- Computer literacy and proficiency in Tally and use of spreadsheets
- Good knowledge of accounting
- Working knowledge of audit requirements for financial compliances.

Location of Job: SoCRAN – PMU, Nagaland / SCRAM- PMU, Mizoram

Reporting Line: Finance and Accounts Specialist of FOCUS, SoCRAN / SCRAM

Job Description:

- Maintaining the project accounts of the PMU
- Preparing Bank Reconciliation Statements of the PMU every month
- Preparing monthly progress report every month with the actual and budgeted figures for each activity and the variance thereof
- Facilitating timely disbursal of project funds to DMUs
- Following up with the DMUs to ensure that they submit their monthly statements within the stipulated time

- Assisting the FAS in preparation of the financial statements and the withdrawal application
- Providing accounts, statements and other documents as may be required by the Statutory/ Internal Auditor to ensure the timely completion of their assignment
- Maintaining the record of fixed assets, contract register and contract monitoring forms
- Providing support and assisting the FAS in all other duties as may be assigned by the FAS or the Project Director.

4. Audit Officer

Qualification:

• Intermediate CA/ M. Com/ B Com

Experience:

- Minimum 5 years of experience (3 years for Intermediate CA/ M.Com) in financial accounting/auditing of project/ company
- Computer literacy and proficiency in Tally and use of spreadsheets
- Good knowledge of accounting and audit
- Working knowledge of audit requirements for financial compliances.

Location of Job: SoCRAN – PMU, Nagaland / SCRAM- PMU, Mizoram

Reporting Line: Finance and Accounts Specialist of FOCUS, SoCRAN / SCRAM

Job Description:

- Ensuring that all books of accounts are updated, bank accounts reconciled and books of accounts are printed on a monthly basis.
- Ensuring that all necessary supporting documents, records have been separately filed in respect of all project activities and that clear nexus exist between supporting documents, accounting books and records and the periodic financial reports of the DMUs and the PMU.
- Reviewing the internal control systems, its effectiveness in project implementation and suggest improvements if required.
- Reviewing of the monthly/ quarterly expenditure statement submitted by the districts indicating the approved budget provision and expenditure during the month, cumulative expenditure against the activity / sub activity during the period and ensure that it is in accordance with the books of accounts
- Ensuring that all funds have been used in accordance with the conditions of the relevant legal agreements and only for the purposes for which the financing was provided.
- Ensuring that the records of all procurement, agreement, work / purchase orders, invoices, receipts, stock registers etc. are the properly maintained, duly linked and retained.
- Reviewing statutory compliances as may be applicable such as proper deduction and filing of TDS, Income tax, PF returns and other applicable
- Ensuring that the SOEs are submitted in timely manner, whether releases of funds are conditional to receipt of SOEs and reports exceptions if any.
- Ensuring that adequate records are maintained regarding the assets created and assets acquired by the project, including description, details of cost, identification and location of assets. Carry out physical verification of a sample of assets created out of the project and comment on its utilization and whether they are adequately safeguarded.
- Ensuring that the accounting for the advances to COs and project implementing staff/units are properly recorded in the accounting books; whether systems are in place for monitoring the receipt of periodic financial reports and follow up on overdue reports are adequate. Exceptions should be identified and reported.
- Ensuring that the accounting records of the COs are properly kept with supporting documents and authorization of the approving committee; goods procured by the COs have followed a

transparent procurement process and the basic tenets of economy, efficiency and social equity have been followed;

- Ensuring that the compliance report on audit observations pointed out in the reports relating to earlier audit is made and corrective actions taken on those points are furnished in the audit report of the subsequent phase.
- Providing support and assist the internal/ statutory auditor/ FAS in all other duties as may be assigned by the FAS or the Project Director.

5. Manager-Planning and M&E

Qualification:

• Postgraduate degree in Agriculture Economics/Statistics/Economics

Experience:

- About 5-7 years of experience in rural development projects specifically in developing M&E frameworks, data analysis and report preparation
- Experience in establishing systems for preparation of AWPB.
- Experience in undertaking research/studies related to impact assessment to evaluate project performance
- Prior experience of working in and/or familiarity with development issues in the North East will be an advantage.

Location of Job: SoCRAN - PMU, Nagaland / SCRAM- PMU, Mizoram

Reporting Line: State Project Director (SPD) of FOCUS, SoCRAN /SCRAM

Job Description:

- Consolidating and finalizing the AWPB and Procurement plan for all stakeholders including districts and the state level.
- Establishing a computerised management information system including developing formats and procedures for data collection taking into account the disaggregation of data by gender and youth.
- Collating and analysing data from the DMUs and providing inputs to SPD on project performance and preparing semi-annual and annual progress reports for submission to IFAD.
- Preparing and submitting quarterly reports to the Governing Council and Project Management Committee of SoCRAN.
- Designing questionnaire, undertaking annual outcome surveys and preparing reports based on the results of the survey.
- Undertaking studies/survey/case studies of outputs, outcome and impact with approval from the management and as per AWPB.
- Supporting the agencies engaged by FAO for conducting Baseline and Endline surveys.
- Collating data and analysing data for submission of information related to ORMS (RIMS) reporting.
- Collating data required for preparation of a Project Completion Report.
- Ensuring mainstreaming of gender in M&E work.
- Coordinating with the Manager-Gender and Community Institutions to ensure all activities follow the principles of the Gender Strategy.
- Ensuring capture of knowledge related to M&E in coordination with the Knowledge Management Manager
- Any other task assigned by the SPD.

6. Manager – Knowledge Management *Qualification:*

 Postgraduate/ Bachelor degree Agriculture /Horticulture/ Agribusiness/ Social Work/ Journalism/Humanities

Experience:

 3-5 years of experience in case of a postgraduate degree holder and 7-10 years of experience in case of a Bachelor degree holder in implementing rural development projects with relevant experience in knowledge management. Proficiency in written English is essential and knowledge of a local language is desirable. Proven experience in documenting and publishing case studies and/or research papers. Prior experience of working in and/or familiarity with development issues in the North East will be an advantage.

Location of Job: SoCRAN - PMU, Nagaland / SCRAM- PMU, Mizoram

Reporting Line: State Project Director (SPD) of FOCUS, SoCRAN /SCRAM

Job Description:

- Undertaking review visits to the project villages, identifying issues constraining implementation and preparing case studies detailing these issues.
- Preparing case studies containing best practices emerging in implementation of project activities and undertake dissemination of the best practices for replication within the project area.
- Setting up a project website with IT support and publishing regular news and updates as well as case studies and articles on the website,
- Preparing project brochures and supporting M&E team in preparing six monthly and annual progress reports with inputs from concerned professional staff.
- Providing support to professional staff in identifying areas requiring preparation of implementation manual, training manual, training material preparation and preparation of required guidelines, manuals and materials.
- Identifying and documenting learning sites from the project.
- Organising learning events, exchange visits and exposure programmes for the communities
- Preparation and of advocacy and policy reform within the jhum and settled agriculture related activities with other staff and partners for pursuing the agenda on advocacy and policy reform.
- Acting as a focal point for all knowledge management activities with inputs from other professional staff related to knowledge generation, knowledge dissemination and tracking uptake of relevant knowledge.
- Any other task assigned by the SPD.

7. Manager-Community Institution and Gender

Qualification:

• Post Graduate degree in Social Work, Gender Studies or a related subject.

Experience:

• 5-7 years of experience in implementing community mobilization and gender related work. Prior experience of working in and/or familiarity with development issues in the North East will be an advantage.

Location of Job: SoCRAN - PMU, Nagaland / SCRAM- PMU, Mizoram

Reporting Line: State Project Director (SPD) of FOCUS, SoCRAN /SCRAM

Job Description:

- Preparing guidelines for mobilization of community institutions (FIGs and JRMCs) and the modalities to support these community institutions.
- Co-ordinating all capacity building training for Community Institutions with concerned technical experts.
- Establishing social audit guidelines and setting up a system of social audit in all project villages to assess the relevance, efficiency and effectiveness of the activities implemented under the project.
- Undertaking field visit and preparing a Fact Sheet on project implementation performance specifically related to empowerment and entitlements of the community and submit the same to SPD.
- Undertaking specific studies/surveys/case studies related to community institutions, gender and youth.
- Designing a gender strategy for FOCUS and support the project team in engaging youth within the designed project activities.
- Ensuring gender mainstreaming in all relevant project activities in close collaboration with professional staff.
- Any other task assigned by the SPD

8. Deputy Manger – MIS and Systems Analyst

Qualification:

• Graduate Degree in Computer Science /MCA/ B.Tech or equivalent qualification

Experience:

• 3-5 years of experience in developing MIS Software/ Websites and experience setting up and maintaining management information systems in rural development projects.

Location of Job: SoCRAN - PMU, Nagaland / SCRAM- PMU, Mizoram

Reporting Line: State Project Director (SPD) of FOCUS, SoCRAN /SCRAM

- Ensuring that field data is gathered and registered and also ensuring that quality of data entered for initial statistical analysis.
- Collecting data from DMUs on a monthly basis and entering data and prepare analytical tables for data interpretation by the Planning and M&E Manager.
- Revising the information needs of all key stakeholders that need to be integrated into the local database in consultation with the Manager Planning and M&E in the PMU.
- Refining, if necessary, the methods for regular information collection and for special studies arising from project needs in consultation with Manager Planning and M&E and M&E officers in the Districts.
- Defining the principal automated outputs that the system should provide, based on IFAD, GoN/GoM, and GoI requirements.
- Assisting the agency engaged by FAO in developing MIS including the choice of software according to database requirements, degree of user-friendliness, possibilities of updating the database and the technical facilities available in the field.
- Maintaining Local Area Network (LAN) so that every user in FOCUS can share network resources and use it without any difficulty (internet, printer sharing of files etc.).
- Providing technical advice as regards procurement of hardware, software, network related products and maintenance.
- Developing website and hosting and updating the same on regular basis to facilitate PMU and DMU, IFAD, other central Government to access project updates.
- Monitoring MIS software and checking the data coming from the District offices is complete in every manner.
- Training and support of hardware and software as and when required at SoCRAN.
- Any other task assigned by the SPD

9. Procurement Consultant

Qualifications:

• Post graduate in commerce, business, finance or management / Post Graduate Diploma in Material/Supply Management /MBA from any recognised university or institute.

Experience:

- Minimum ten (10) years of professional experience in international and national bidding procedure, procurement procedure, especially preparation of Expression of Interest, Notice Inviting Tender, Terms of Reference, Request for Proposal and bidding document for procurement of consultant services, goods and works.
- Preference will be given for experience in handling World Bank/International Financial Institution procurement procedures.
- Good written and verbal communication skills, proficient in English, computer literacy general MS package, proficient in computer based spread sheets for data analysis, proactive, work with minimum supervision, and as a team builder

Location of Job: SoCRAN – PMU, Nagaland / SCRAM- PMU, Mizoram

Reporting Line: State Project Director (SPD) of FOCUS, SoCRAN /SCRAM

- Prepare and include relevant Community Procurement Guidelines and formats and include in this PIM. With reference to the project design document, IFAD procurement guidelines and Procurement Handbook, draw up draft project procurement manual for the project for approval by PMC and IFAD.
- Update the 18 month Procurement Plan prepared during design and ensure that the Plan is continuously updated in accordance with the procedure and procurement plan agreed with IFAD.
- Liaise with IFAD procurement staff.
- Co-ordinate with concerned subject matter specialist on procurement matters, especially preparation of TOR, technical specification etc.
- Collaborate closely with State Project Director and others for preparing advertisements, short listing, bidding documents, evaluation, letters of awards, draft contracts etc. in the procurement of good/works and services including consultancies.
- Co-ordinate with State Project Director regarding submission of advertisements bidding documents, letters of invitation, evaluation reports, contracts, etc. to IFAD for those items subject to prior review.
- Facilitate/assist in getting NOC from IFAD wherever required.
- Co-ordinate with project team, organize and support evaluation committees for prompt evaluation.
- Make necessary arrangement for contract signatures.
- Maintain Contract Management forms as per the formats of IFAD and prepare amendment letters to the contracts. As part of the contract management, in coordination with the concerned officials monitor the contractual provisions for compliance.
- Monitor the progress of procurement activities against procurement timetables, highlight variations in progress, record reasons and identify remedial actions, if any.
- Assist State Project Director for placement of various documents/papers before Project Management Committee for review and approval, all types of audits of procurement activities, post review of IFAD etc.
- Liaison with any other appropriate authority for any dispute among the parties relating to procurement.

- Provide documentations and data to IFAD fielded Supervision Mission and Implementation Support Missions
- Perform any other relevant work related to the project assigned by the Project Director.

10. Design Engineer

Qualification:

• Minimum Bachelor Degree in Civil Engineering or similar subject or minimum diploma in civil engineering.

Experience:

- 10 years of professional experience with at least 5 years of experience in geometric design using MX Road software, in the Himalayan Mountain region for Bachelor's degree in civil engineering.
- 15 years of professional experience and 10 years of experience in Geometric design using MX Road software in the Himalayan Mountain region for Diploma in civil engineering.

Location of Job: SoCRAN – PMU, Nagaland / SCRAM- PMU, Mizoram

Reporting Line: State Project Director (SPD) of FOCUS, SoCRAN /SCRAM

Job Description:

- Interact with the Department of Agriculture, Nagaland/Mizoram, and the engineers, Public Works Department, the District Agriculture Officer, the District engineers and other relevant agencies to understand the need.
- Make familiar with the Technical Guidelines for link Roads and Pradhan Mantri Gram Sadak Yojana (PMGSY). The Nagaland/Mizoram Government Road Survey and Design Manual if available may also be referred to for methodology and adaptation of standards.
- Study the topo maps and aerial photographs and fix the alignment. Interpret the alignment in the field and fix control points to enable ghat tracing. At least three alignment option shall be selected for selection of most stable, economical and shortest alignment.
- Carry out the necessary survey activities along the recommended alignment for the design purpose. Equipment used shall provide the necessary detail/ accuracy and topo measurements shall be taken for 50' either side of the centreline. A Total station TS 06 shall be preferably used.
- Collect sufficient data to undertake the detailed design in accordance with the Technical Guidelines for Link Roads. Detailed drawings and inventory shall be developed.
- Continuously work with local counterpart engineers and train in all steps of design. When the counterpart engineers gain knowledge in the design, they should carry out the design under the full guidance of the consultant.

11. Survey Engineer

Qualification:

• Minimum Bachelor's Degree/500 course in Survey Engineering or similar subject or at least a diploma in civil engineering or a minimum of 300 surveying course.

Experience:

 At least 5 years of professional experience with at least 3 years of experience in topographic survey using Total station, in the Himalayan Mountain region for the bachelor's degree or 10 years of professional experience and 5 years of experience in Topographic survey using Total station in the Himalayan Mountain region for diploma in surveying or with professional experience of 5 years and similar experience of 3 years. Location of Job: SoCRAN – PMU, Nagaland / SCRAM- PMU, Mizoram

Reporting Line: State Project Director (SPD) of FOCUS, SoCRAN /SCRAM

Job Description:

- Interact with the Department of Agriculture, Nagaland/Mizoram, the engineers, Public Works Department, the District Agriculture Officer, the District engineers and other relevant agencies to understand the need, The consultants shall also make themselves familiar with the Technical Guidelines for link Roads and Pradhan Mantri Gram Sadak Yojana (PMGSY). The Nagaland/Mizoram Government Road Survey and Design Manual if available may also be referred to for methodology and adaptation of standards.
- Study the topo-maps and aerial photographs and study the alignment. The consultant shall interpret the alignment in the field and fix control points to enable ghat tracing on the selected alignment.
- Carry out Ghat tracing
- Carry out the necessary topographic survey activities along the recommended alignment in consultation with the design consultant. Equipment used shall provide the necessary detail/ accuracy and topo measurements shall be taken for 50' either side of the centre-line. A Total station TS 06 shall be preferably used. The GPS coordinate should be recorded for the station point to trace in future. Mark permanently the station point and other reference points so that they are not lost.
- Pick up all important features that are essential for the purpose of design and road construction. The consultant shall maintain the list of features as per the standard code list of the equipment.
- Continuously work with local counterpart engineers and train in all steps of survey. When the counterpart engineers gain knowledge in the survey, they should carry out the topographic survey under the full guidance of the consultant.

12. Junior Engineer - DMUs

Qualification:

• Minimum bachelor's degree in Civil Engineering or minimum Diploma in Civil Engineering

Experience:

• At least 5 years of professional experience and minimum 3 years of similar work experience for Bachelor's Degree in civil Engineering or at least 8 years of professional experience and minimum 5 years of similar work experience for Diploma in Civil Engineering.

Location of Job: SoCRAN – DMUs, Nagaland / SCRAM – DMUs, Mizoram

Reporting Line: State Project Director (SPD) of FOCUS/District Project Manager, SoCRAN /SCRAM

- Approving the Contractor's work plan, material sources, camp location, etc.
- Preparing and issuing monthly/quarterly and annual reports as defined subsequently.
- Approving and/or issuing working drawings, approving the setting out of the works, and giving instructions to the Contractor.
- Reviewing and monitoring of the quality control activities of the Contractors.
- Inspecting and testing all materials and works to ensure compliance with specifications and giving immediate notice to the Contractor in the event that such materials and works fail to comply with the specifications.
- Accepting or rejecting any part or parts of the completed works.

- Making measurements and keeping measurement records and other books of accounts required by the contract.
- Maintaining records, correspondence, and diaries, including labour and equipment attendance;
- Certifying work volume and interim certificates for progress payments.
- Assisting DOA with the maintenance of consolidated project accounts, and with preparation of financial statements.
- Assisting DoA in certifying completion of part or all of the works.
- Checking periodically the remaining quantities, and undertaking constant monitoring of the contract's running costs.
- Reviewing and recommending to DOA variation orders, extensions of time, claims, and other matters that may come from the Contractor.
- Negotiating with the Contractor and recommending to DOA the rates for any unscheduled items of work that may arise.
- Advising the DOA on all matters relating to the execution of the works; and assisting the representative with processing the Contractor's possible claims.
- Ensuring compliance with Environmental requirements of civil works, and providing information to DOA on those processes in the monthly progress reports.
- Assisting in preparing a consolidated project completion report in a format provided by DOA at the completion of the contract.
- Inspecting the works at appropriate intervals during the defects liability period and certifying the defects liability certificate for issuance by the DOA;
- Preparing reports for the Employer with complete records, inception, monthly, and completion reports; and
- Assisting the Employer to provide on-site training where required for District Engineering Cell field staff on quality assurance and contract administration.
- Ensuring that all State Occupational Health requirements are complied with by the Contractor as well as any health and safety provision as required in the Contract.

13. Planning, M&E Officers - DMUs

Qualification:

• Post Graduate degree in Agriculture Economics/Statistics/Economics

Experience:

 About 2-3 years of experience in rural development undertaking research/studies related to impact assessment, evaluating project performance and establishing systems for preparation of AWPB and monitoring results. Prior experience of working in and/or familiarity with development issues in the North East will be an advantage.

Location of Job: SoCRAN – DMUs, Nagaland / SCRAM – DMUs, Mizoram

Reporting Line: State Project Director (SPD) of FOCUS/District Project Manager, SoCRAN /SCRAM

- Consolidating and finalizing the AWPB and Procurement plan of the district.
- Collating and analysing district level data, entering into computerised MIS and submission data analysis reports to DMU and the Deputy Commissioner.
- Providing input to prepare semi-annual and annual progress reports of PMU for submission to IFAD.
- Undertaking annual outcome surveys and collating data of the survey as required by PMU.
- Supporting the agencies engaged for conducting Baseline survey, Endline survey to assess the impact of the project.

- Assisting the Manager Knowledge Management to identify success stories and facilitate dissemination of best practices from field level implementation.
- Any other task assigned by the DPM

14. Finance and Administration Officers - DMUs

Qualification:

• M Com/ B Com

Experience:

- Minimum 5 years of experience (3 years for M.Com) in financial accounting of project/ company
- Computer literacy and proficiency in Tally and use of spreadsheets
- Good knowledge of accounting
- Working knowledge of audit requirements for financial compliances.

Location of Job: SoCRAN - DMUs, Nagaland/ SCRAM - DMUs, Mizoram

Reporting Line: District Project Manager of FOCUS, SoCRAN / SCRAM

- Maintaining the project accounts of the DMU
- Preparing of Bank Reconciliation Statements every month
- Preparing of monthly progress report every month with the actual and budgeted figures for each activity and the variance thereof
- Facilitating timely disbursal of project funds to JRMCs/ COs
- Following up with the JRMCs/ COs to ensure that they settle their advances promptly
- Following up with the JRMCs/ COs to ensure that they submit their monthly statements within the stipulated time
- Providing the statement of expenditure in the prescribed format to the FAM for preparation of the WA
- Providing accounts, statements and other documents as may be required by the Statutory/ Internal Auditor to ensure the timely completion of their assignment
- Maintaining the record of fixed assets, contract register and contract monitoring forms at the DMU
- Providing support and assist the DPM/ FAS in all other duties as may be assigned by the DPM/ FAS or the State Project Director.

Annex 4.7: Scope of FAO Technical Assistance to Nagaland and Mizoram

A. Introduction

1. IFAD is providing a grant funding of USD 1.00 million to the states of Nagaland (USD 550,000) and Mizoram (USD 450,000). This grant will be used by both the states to hire Food and Agriculture Organization (FAO) to provide technical assistance support. FAO support is expected to largely cover five areas. They include: (i) Training of trainers (ToT) in various core areas of the project including preparation of training materials and teaching aids; (ii) technical backstopping by experienced consultants; (iii) exposure visits both international and national; (iv) establishing a computerised management information system (MIS); and (v) conducting a baseline and end-line survey to assess the project impact.

B. Training of Trainers (ToTs)

2. FAO will be required to initially train a batch of trainers (50 from Nagaland and 25 from Mizoram) for each ToT. The participants will be mainly state and district level project staff and selection of participants for each training programme will be undertaken by the respective state governments. FAO is required to prepare the training materials and teaching aids for all the training programmes and conduct the training. All costs of travel, lodging and boarding of the participants have been factored into the training cost and will be charged to the grant. The participants of these training programmes are required to train the Block/Circle level officers and subsequently train all the village level workers (Agriculture Field Assistants, Soil and Water Conservation Assistants and Veterinary Field Assistants). FAO will have to prepare the training manuals for training materials for two levels of training covering; (i) Block and Circle level officers; and (ii) Village level workers. These training manuals will have to be in English and also in the local language. FAO appointed Consultants will have to make quality checks while conducting the training for Block/Circle level officers and village level workers.

a) TOT for Sloping Agricultural Land Technology (SALT)

3. SALT has been promoted as an alternative method of managing agriculture on sloping areas, especially in the Hindu Kush Region by ICIMOD, Kathmandu, and also widely used in South East Asia. FAO will arrange a Training of Trainers for the state and district level officers on planning and implementation of SALT. The broad areas to be covered in the training program will include the following:

- 1) Low cost soil and water conservation measures that are applicable to jhum land.
- 2) Applicability of SALT in NER context and the issues with regard to implementation of SALT in NER.
- 3) Other interventions similar to SALT being implemented in other countries and their relevance to NER.
- 4) Criteria for selection of area for using SALT technology (in which situations SALT is useful and required).
- 5) Procedures for demarcating the jhum area for treatment (for using SALT).
- 6) Methods for marking contour lines in the selected area using "A" frame, water levels, etc.
- 7) Criteria for deciding vertical intervals based on the slope, and marking diversion channels for proper drainage.
- 8) Decision -making on the crops and trees to be grown using SALT based on the slope, soil type and soil depth.
- 9) Planning workshop of the farmers on how to use SALT in their jhum area.
- 10) Monitoring the effect of SALT on farm performance using this technology
- 11) Managing and maintaining SALT practicing farms over time.

b) TOT for Terrace Rice Cultivation

4. The terrace rice cultivation is extremely important in all the sloping areas in the north-east region of India. This is also known as wetland rice cultivation (WRC) in Nagaland. The productivity of rice is generally low and unstable, which needs to be improved. FAO will arrange a training programme for the trainers of the state and district levels. The broad areas to be covered in the training program will include the following:

- 1) Characterization of Terraced areas and TRC, in terms of the physico-chemical, biological, hydrological and socio-economic aspects
- 2) Diagnosis of the problems faced by the farmers in TRC, including the causes of the low and unstable productivity and possible locally applicable solutions to overcome them
- 3) Land preparation for TRC, including land shaping, construction and maintenance of bunds to avoid breaches, handling and management of stubbles and straw from previous crop, soil soaking, ploughing, puddling, and leveling, etc.
- 4) Soil fertility maintenance and improvement technologies and interventions, including production and use of organic manures, inorganic fertilizers, bio-fertilizers, crop rotations, mixed cropping, reducing losses, etc.
- 5) Variety and seed selection, seed testing and treatment of selected paddy seeds
- 6) Nursery establishment and seedling production, including seedling production methods, seeding rate in the nursery, nursery care (insect-pest and diseases management), water management, seedlings preparation for transplanting, etc.
- 7) Transplanting of paddy seedlings; seedling age, seedling uprooting, transport, plant spacing, number of seedlings per hill, time of transplanting, etc.
- 8) Fertilizer application rates, frequency and methods of application, critical crop stages to apply fertilizers at especially under limited availability of fertilizers, and nutrient delivery through nano-technology, especially the micro nutrients
- 9) Weed management, including manual, mechanical, and chemical methods, including the handling of non-crop competing and useful plant species present in the field
- 10) Insect-pest and diseases control and management, including using integrated pest management aspects, identification of friendly insects, use of bio-control agents, etc.
- 11) Water management (irrigation and drainage aspects), methods of irrigation, amount of water delivery per irrigation at different crop growth stages, and drainage of excess water from the field when needed
- 12) Harvesting, threshing, drying and storage; determining crop maturity for harvesting, threshing methods, drying and determining grain moisture before storing the grains.

Note: Items number 6, 8, 9, and 10 should also take environmental security and human and livestock health considerations in the plans and in implementing those plans.

c) TOT for Fruit and Nut Nursery establishment and production of high quality planting material

5. The nursery establishment and production of high quality planting of various tree (fruit and nuts) and other species has been identified as an important component of the FOCUS, because finding high quality planting material has been a nagging problem throughout the country, especially in the north-eastern region. Therefore, the training of trainers in this area is very important. This training will have two main aspects—Establishment of Nursery, and production of high quality planting material. Some of the topics related to these sub-topics should include the following aspects:

6. Nursery Establishment

1) Criteria and considerations in site selection for establishing the nursery, site position in the general landscape, proximity to the habitation, forests, riverine, safety from wild life and stray animals and security,

- 2) Decision making on the nursery area based on the number of plants to be produced, methods of plant propagation, such as through seeds, asexual methods, use of the root trainers, mist-chambers, bags (plastic, bio-degradable fibers, jute), and plants on the nursery bed, or field floor, on steps, on ridges; producing seedlings, saplings, propagules, use of different horticultural techniques, etc.
- 3) Creating infrastructure and facilities, fencing, water sources, shades, tool area, storage area for manures, soil, moss, and other inputs, etc.

7. **Production of planting material:**

- 1) Estimating the demand for different species,
- Criteria for identification, sourcing and collecting the mother stock; (i) Seeds of trees for different uses—timber, fruit, fodder, buying seeds, storing seeds, sowing seeds; and (ii) Vegetative active plant parts; selecting vegetatively active plant parts for asexual propagation.
- 3) Using standard horticultural tools and techniques for the asexual propagation; layering, grafting methods, budding methods, micro grafting and micro propagation, their suitability for different species, success rates and failure causes.
- Guidelines for nursery care and management till the seedlings attain usable height; nursery bed, fertilizing and watering nursery plants, weed, insect and disease management.
- 5) Criteria for checking the quality of the propagated material for worthiness of sale and transplanting in terms of free from pathogens, vigor and overall general health.
- 6) Enforcement of nursery acts, rules and regulations, familiarization with the country and state acts and rules and regulations, etc.

d) TOT for Spice Nursery and spices production

8. Training of trainers for producing the nursery of Spices has special significance in the FOCUS project because the spices crops will undergo value addition and marketing venture for generating cash income to the farmers. The nursery for spices will have two aspects and they are different from each other, the nursery for chillies will be for producing high quality seed and seedling and seeds and suckers for large cardamom, while the nursery for ginger/ turmeric will require producing high quality rhizomes. *The ToT for Spice nursery should also include and /or take advantage of topics covered in the above training on Fruit and nut tree nursery aspects.* The topics to be covered for spices may include the following:

- Criteria for the identification of suitable land and determine nursery size based on the number of plants/ seedlings to be raised; site location in the general land scape, water sources and irrigation facilities, proximity to habitation, forest, risk of wild life intrusion, floods, etc.
- 2) Check compatibility of crops if raising a nursery of more than one crop, e.g. chilli vs ginger, requiring different soil moisture regimes, propagation techniques and methods, etc.
- 3) Obtaining good quality mother stock of the crops, chilli seeds, large cardamom suckers and ginger / turmeric rhizomes of the preferred varieties, their packing and transport methods, especially of the ginger / turmeric, treatment, and storage.
- 4) Testing the germination and seedling vigor of the stock, especially for chillies, appropriate seed treatment of the stock before planting for multiplication.
- 5) Planting material multiplication methods for the seed and asexual propagation of the desired species of spices.
- 6) Raising the nursery beds and soil treatment, especially for avoiding or minimizing the soil borne fungal infection, etc. (if needed) through various methods.
- 7) Application of manures/ fertilizers in the nursery beds used for seed multiplication, seedling raising and propagation of rhizomes for planting.

- 8) Weeding practices and culling out rogue plants from the nursery
- 9) Undertake appropriate plant protection measures against insect-pest and diseases in the nursery.
- 10) Identify methods of transporting seedlings by farmers (Bags/ baskets, trays, seedling bundles, etc).
- 11) Planting methods to be adopted for the selected seedlings/plants
- 12) A catalogue of spices production agronomic practices, separately for the seed based and rhizome based spices

e) TOT for Veterinarians

9. The Veterinarians have adequate knowledge relating to animal health and management practices. However, it is necessary that the veterinarians need to be trained keeping in view the needs & requirements of the farmers at the grass-root level. Therefore, it is necessary to upgrade their skills so that they are able to train the Veterinary Field Assistants (VFAs) to make them Master trainers for providing training to farmers on various aspects of livestock management, nutrition and animal health. The ToT will include the following topics.

- Understanding the prevailing pig rearing system with its importance on livelihood; (i) Prevailing pig production and marketing system in the state/district/ village/locality; (ii) Major problems faced by the pig producers; (iii) Economics of pig keeping; (iv) Role of pig on livelihood of the poor/ small pig keepers; and (v) Scope for improvement of the prevailing production system.
- 2) Prevailing Housing System of Pigs; (i) Open Ranging; (ii) Open Enclosure; and (iii) Penning
- Scientific Housing: (i) Points to be considered in the construction of pig sty; (ii) Location Orientation of House; (iii) Type of Pig House; (iv) Floor; (v) Drainage System; (vi) Construction Material; (vii) Feeding and Water Troughs; and (viii) Wall.
- Provision of housing for Pregnant and Lactating Sow/ Boar /Diseased Pigs: (i) Floor Space Requirement.
- Identification of better germplasm Available Breeds of Pigs & detailed description on: (i) Large Black; (ii) Large White Yorkshire; (iii) Hampshire; (iv) Ghungroo; (v) TND(Tamworth and Desi) Breed; and (v) Non-descript.
- 6) Selection of Pig/ Piglets for Rearing
- 7) Artificial Insemination (AI): (i) Setting up of boar semen station (requirements); (ii) Identification of breeding boar (species); (iii) Maintenance of semen station (semen collection, processing, preservation and transport); and (iv) Maintenance of cold chain during transport and AI.
- 8) Restraining and Transporting Live Pigs: (i) Method of restraining piglets; (ii) Restraining of older pigs; and (iii) Points to be considered during transportation.
- 9) Care and management of different categories of pigs: (i) Care and management of pregnant and lactating sow; (ii) Care and management of neonate/ piglet; (iii) Care and management of growing and finishing pig and boar; (iv) Culling; and (v) Maintenance of Records.
- 10) Reproductive Cycle of Sows: (i) Factors influencing puberty; (ii) Oestrous Cycle; and (iii) Sign of Heat.
- Selection of Breeding Animals and Breeding System: (i) Parameters for selection of breeding male(boar); (ii) Parameters for selection of breeding female; (iii) System of breeding; and (iv) Type of Breeding.
- 12) Feeding different categories of Pigs: (i) Main Components of Nutrients; and (ii) Commonly Used Feed Stuff by small pig producers.
- 13) Computation of Ration with locally Available Feed Resource; (i) Nutrient Requirement for Different Category of Pigs; and (ii) Cultivation of Food Feed Crops for pigs.
- 14) Common Diseases of Pigs and their preventive Measures; (i) Assessment of Diseased Pig; and (ii) Most Important Diseases of Pigs & poultry, their treatment and control measures.

- 15) Economics of Small Piggery unit.
- 16) Credit and Insurance scheme for pigs.
- 17) Field Visits (Backyard Farm, Commercial Farm, Demonstration of food-feed crop plots, Demonstration of silage making, operation of Feed grinding machine, compost / vermi-compost making, Demonstration & use of first-aid kit)

f) Training manual for CAHWs

10. The project intends to train CAHWs as the grassroots level service providers. In order to facilitate this, FAO will be required to prepare training manual /resource book for use by these CAHWs in local language. The training manual/resource book will have to cover the following topics.

A. Animal Health and First Aid:

- 1) Diseases of domestic Animals in North Eastern Region and preventive Measures.
- 2) Assessment of diseased animal.
- 3) Most Important / common Diseases of Pigs, their prevention, treatment and control measures.
- 4) Important Diseases of Poultry, their Prevention, treatment and control.
- 5) Immunization/ Preventive vaccination against major diseases of pigs (CSF, FMD) and poultry (RD, IBD & Fowl Pox).
- 6) Role and Responsibilities of the CAHWs to overcome the disease problem.
- Mode of Transmission of germs and adoption of hygienic practice for prevention and control of germs.
- 8) First Aid to wounds Equipment and medicines requirement.
- 9) Surgical Procedures for the Minor problems of Pigs (Castration, atresia ani (no anus), Ear notching, First-aid to cut wounds, Dressing of maggoted wounds.
- 10) The vaccination/ vaccination schedule as well as treatment of minor ailments of poultry diseases will also form part of the training to the CAHWs.

B. Pig / poultry production system

- 1) Production issues
- 2) Marketing Issues
- 3) Livelihood Importance
- 4) Advantages of Pig Rearing
- 5) Prevailing Housing System of Pigs
- 6) Scientific Housing
- 7) Provision for Pregnant and Lactating Sow/ Diseased Pig/ Boar
- 8) Identification of better germplasm Available Breeds of Pigs & detailed description
- 9) Restraining and Transporting Live Pigs
- 10) Care and management of different categories of pigs:
- 11) Reproductive Cycle of Sows
- 12) Feeding different categories of Pigs
- 13) Cultivation of Food /Feed Crops for pigs
- 14) Exposure visits within and outside the state

C. Technical backstopping

11. FAO is required to field experience consultants to provide technical backstopping to the implementing agencies in both the states. The specializations in which consultants required, qualifications, experience and job description are provided below:

a) Agroforestry Expert

Educational Qualification:

• Postgraduate degree in Natural Resources Management, Forestry, Agroforestry or a related subject.

Experience:

- At least 15 years' experience in sustainable agroforestry, farming systems, forestry projects.
- Specific experience in institutional capacity assessment of agroforestry / forestry and natural resources management institutions.

Job Description:

- Coordination with other experts such as, Agronomy and Soil and Water Conservation (SWC) in the planning and preparation of land use maps for selected villages
- Identification of tree species and leguminous crops for propagation of planting material through seed and asexual methods, and raising their nursery
- Training of Village Council members and lead farmers on nursery management of tree species
- Contribution in the preparation of plans, especially of tree planting aspects for the selected Village Forests Conservation areas / Community Conservation Areas in consultation with VCs /JRMs
- Providing support and guidelines for nursery management, and time to time oversee nursery operation
- Demonstration of planting methods for selected tree species in the jhum and Village Forest Areas / community conservation areas
- Contribution to the management of Community Conservation Areas including weeding and stabilization of SWC measure
- Providing support on any emerging issues, as needed.

b) Agronomy Expert

Educational Qualification:

Postgraduate degree in Agronomy / Agriculture/ Natural Resources Management, or a related field

Experience:

• At least 15 years working experience in agronomy, soils, either in the research institutions / universities, or in the private sector with knowledge of farming systems

- Assisting in selection of improved varieties of crops cultivated in current jhum areas, including paddy in Jhum and terraced wetlands
- Supervise bio-fertilizer growing and use in TRC, rice nursery management, and rice growing agronomy in TRC
- Preparing a simple charts for different aspects of package of practices for selected crops including spice crops to be grown in jhum areas
- Associate with the implementation of linear planting of crops and trees for better space utilization and improved crop management in jhum areas
- Provide technical support to mixed / multiple cropping in jhum areas

- Dissemination of soil fertility improvement options in current jhum, jhum fallows and in TRC
- Demonstration of non-toxic and efficient pest management (insect and diseases) practices, and harvesting and threshing methods of select field crops
- Provide support on any emerging issues, as needed.

c) Soil and Water Conservation Expert

Educational Qualification:

• Postgraduate degree in Agriculture/ Agriculture Engineering, or other related field

Experience:

- Experience of at least 15 years of working in the field of soil and water conservation in either research or development sector
- Good knowledge and experience in the design, planning and implementation of soil and water conservation measures

Job Description:

- Participate in the preparation of land use plans together with the Village Councils and communities and Soil and water conservation department
- Coordinate with other departments like Agriculture and Environment and Forest for planning and implementation of SWC measures
- Technical support on soil and water conservation measures and technologies, including Slopping Agriculture Land Technology (SALT) planning and implementation, construction of water harvesting structures, trenches, buds, etc.
- Contribute to the elaboration of environmental and social impact assessments for the individual measures to be implemented.

d) Spice Production Expert

Educational Qualification:

• Postgraduate degree in Horticulture / Agronomy / or a related subject.

Experience:

- At least 15 years' experience in public or private sector on sustainable spices production, value addition and marketing
- A good level of knowledge in market intelligence and demand assessment of spices will be desirable
- A combination of experience in agronomy and economics of spices production will be an added advantage.

- Coordination with other experts such as, Agronomy and Soil and Water Conservation (SWC) in the planning and preparation of land use maps for selected villages, especially for identifying the clusters for spices production
- Contribution in the preparation of plans, especially of spices growing aspects in contiguous clusters, including the delivery of farm inputs, harvesting of the commodities and their post-production handling
- Providing support and guide the spices nursery management, and time to time oversee nursery operations, and demonstrate planting methods for selected spice crops
- Training of Village Council members, lead farmers and CRPs on nursery, crop production management, and aggregation and storage of the selected spices
- Market assessment for demand and prices and feeding this information to the community
- Providing support on any emerging issues, as needed.

e) Livestock Expert

Educational Qualification:

- Bachelor Degree in Veterinary Sciences & Animal Husbandry (BVSc & AH) or equivalent.
- Postgraduate degree in any field of Veterinary Science.

Experience:

- Minimum fifteen years of experience of working in the government or private sector in the field of animal production and animal health.
- Experience in piggery/poultry production and agro-economics relevant to the North East Region and the country as a whole;
- Knowledge of development and Management of projects, particularly in the piggery and poultry sector
- Previous experience with the projects financed by International Financial Institutions
- Demonstrated ability to set priorities and to work with minimum supervision in order to meet changing deadlines;
- Fluent in English is essential and working knowledge of local language is preferential.
- The expert should have a good health status and fit to accept travel assignments.

Desired qualification and experience:

- Experience of working in NE states
- Experience in conducting trainings on piggery and poultry sectors will be preferred.

Job Description:

- 1. Development of plans for livestock/animal husbandry sector according to the following key parameters:
 - Housing ((prevailing animal housing system, suggestions for improvement of housing structures, quality assurance to local needs);
 - Breeding (Breeding program, litter size and egg-laying performance, piglet & chicken sales);
 - Feed supply (feed production and cultivation practices, concentrates, feed purchasing strategy, premixes, suppliers, timing);
 - Feeding operations (pig and poultry starter, grower, pregnant and finisher rations, facilities for feed analysis);
 - Farm management, planning and performance (prevailing animal management system and suggestions for improvement;
 - Animal health disease control, treatment protocols, preventative vaccination program, bio-security & disease reporting);
 - Business processes (piggery and poultry farm business processes).
 - Development of hygienic meat /marketing system, quality profile, waste management.

2. Operationalization of results at livestock Sector:

- Ensure improved management (feeding and reproduction) to stimulate maximum productivity amongst animals with special reference to piggery and poultry sector.
- Work with farm veterinary specialist and implement veterinary action plan to ensure effective prevention and control of pig/poultry diseases
- Field visits of the project locations to analyse existing animal husbandry practices and help the field veterinarians to solve the challenges faced by farmers in project districts
- Streamline breeding techniques; augment artificial inseminations, management of pregnant sows and piglet raising.
- Develop performance and incentives system performance targets and the level of decision-making power needed to achieve them;
- Support ToT experts in conducting the grass-root level trainings.

f) Marketing Expert

Educational Qualification:

• .A MBA/PGDBM/Post Graduate degree in Marketing, Agribusiness, Supply Chain Management.

Experience:

- At least 15 years of relevant experience in marketing, value chain development, and subsector analysis, and market linkages, work experience with Agricultural MNCs, Indian agribusiness companies and other similar donor funded projects.
- Experience of working in project states, North East Region, and other similar hilly regions.
- Proven experience of establishing market linkages for selected value chain commodities (preferred), spices and other agriculture produce.
- Knowledge of agriculture marketing systems prevalent in the country.
- Strong written and oral communication skills, ability of making effective presentations to diverse audiences. Fluency in English essential; knowledge of local language would be an advantage.

Job Description:

- Study and analyse characteristics (quality, features, and uses) of selected value chain commodities to list out USP (Unique Selling Proposition) for preparing a marketing pitch relevant to the select commodity.
- Make field visits to project locations to analyse existing marketing practices, channels, terms of trade and challenges faced by farmers in project districts.
- Study and list out latest marketing arrangements being established in project states and across the country between market players and farmer communities.
- Design and develop appropriate marketing strategies for identified value chain commodities in project states and prepare a plan for implementation of these strategies by the project
- Identify, list out and inform marketing team about prerequisite for product standardisation, taxation, licensing and certification (BIS, ISO, FSSAI) requirements for facilitating market linkages.
- Work in close coordination with state level marketing unit to help prepare AWPB and roll out an action plan at cluster level for facilitating market linkages.
- Prepare and educate relevant project marketing staffs at state and district level about key requirements and processes involved in forging sustainable market linkages with private sector players.
- Identify large scale, reputed and commodity specific market players (state and national level) such as aggregators, wholesalers, processors, exporters etc. that would be interested to procure select commodities from project states and facilitate agreements between local aggregators and processors with the commodity specific market players.

D. Exposure Visits

12. FAO is required to plan and implement both international and national exposure visits. These visits will have to be planned in consultation with the respective state government and IFAD. Exposure visits will be to other projects and locations relevant to various project components. Preference will have to be given to projects/locations that are relevant to multiple project components. The details need to be worked out during the course of implementation.

E. Management Information System (MIS) Development

13. FAO will assist the project in establishing an MIS system in the first year of project implementation to generate, monthly, quarterly and annual progress reports on physical and financial progress and on project outputs and outcomes - and should have a GIS interface so that key data can be shown on maps. FAO will engage an agency to provide assistance in the process of drawing up a

system specification and also in developing a computerized management information system. As a part of computerized MIS, use of tablet computers for field data collection and monitoring will be piloted. The cost of procurement tablets have been factored into the total MIS costs covered under IFAD grant. FAO will employ a specialist to monitor the performance of the system, and take a lead in adapting and refining the system so that it works better and meets the needs of project management.

F. Baseline and End-line survey

14. The main tool for impact evaluation will be the baseline and end-of-project surveys. These surveys will be the responsibility of FAO. Both base-line and end-line surveys will be conducted by FAO by engaging a reputed agency with specific expertise in such assessments. Baseline and end-line surveys will take into account the logframe indicators related to impact and outcomes.

G. Estimated costs

15. The overall cost of FAO technical assistance is estimated at USD 1.00 million with an allocation of USD 550,000 to Nagaland and USD 450,000 to Mizoram. Details of estimated cost breakdown by activity is provided in the table below. The total costs worked out below do not cover the management costs of FAO and also contribution of FAO to this project.

		Nagaland	ł		Mizoram	
		Estimated	Estimated		Estimated	Estimated
Activity	Unit	Quantity	cost (USD)	Unit	Quantity	cost (USD)
ToT on SALT	persons	50	26,000.00	persons	25	18,000.00
ToT on Terrace Rice						
Cultivation	persons	50	18,000.00	persons	25	12,000.00
ToT on fruit and nut nursery	persons	50	26,000.00	persons	25	18,000.00
ToT on spice production and						
nursery management	persons	50	26,000.00	persons	25	18,000.00
To Fon Animal husbandry to	persons	50	26,000,00	parsons	25	18 000 00
Veterinariaris	Lump		20,000.00		25	18,000.00
Training manual for CAHWs	sum		6 000 00	sum		6 000 00
Training manual for	Lump		0,000.00	Lump		0,000.00
Veterinary Field Assistants	sum		6.000.00	sum		6.000.00
Preparation of an Agro-	Lump		-,	Lump		-,
climatic Atlas	sum		10,000.00	sum		10,000.00
	Lump			Lump		·
MIS Development	sum		115,000.00	sum		100,000.00
	Lump			Lump		
Baseline survey	sum		60,000.00	sum		50,000.00
	Lump			Lump		
End-line survey	sum		70,000.00	sum		60,000.00
Technical Assistance - Agro-	Lump			Lump		
forestry	sum		17,000.00	sum		13,000.00
Technical Assistance –	Lump			Lump		
Agronomy	sum		17,000.00	sum		13,000.00
Technical Assistance - Soil	Lump			Lump		
and water conservation	sum		11,000.00	sum		9,000.00
Technical Assistance -	Lump		47.000.00	Lump		40,000,00
	Sum		17,000.00	Sum		13,000.00
Technical Assistance -	sum		17 000 00	sum		12 000 00
	Lump		17,000.00	Lump		13,000.00
Technical Assistance -	sum		17 000 00	sum		13 000 00
Marketing	Lump		17,000.00	Lump		10,000.00
International Exposure visits	sum		45,000.00	sum		40,000.00
National Exposure Visit	Lump		20,000.00	Lump		20,000.00

		Nagaland	d	Mizoram				
Activity	Unit	Estimated Quantity	Estimated cost (USD)	Unit	Estimated Quantity	Estimated cost (USD)		
	sum			sum				
Total			550,000.00			450,000.00		

H. Next Steps

- (a) FAO to draft Technical Assistance Agreements in consultation with the respective state government by (i) updating the budget to include their contribution as well as their management costs; (ii) providing a chronogram for implementation of activities over six years taking into account frontloading of the activities related to ToT, MIS and baseline survey during the first quarter of project implementation; and (iii) any other issues of relevance for effective delivery of proposed activities.
- (b) GoN and GoM to obtain concurrence of IFAD on the draft Technical Assistance Agreements.
- (c) The Project Management Unit (PMU) of the respective state to obtain approval from the Governing Council /Project Steering Committee to the proposed Technical Assistance Agreement
- (d) PMU of the respective state to sign a Technical Assistance Agreement with FAO.

Annex 4.8: ICAR engagement to support FOCUS in Nagaland and Mizoram

A. Introduction

1. The project intends to generate and share knowledge with external stakeholders and the wider development community through generation of knowledge products, such as newsletters, briefs, training materials, technical manuals, booklets, posters, videos, etc. The project will also aim to be a platform for learning for the other states in NER wherever *jhum* is being practiced. FOCUS being a two state project with both *jhum* improvement and settled agriculture, it is necessary to engage a specialist organization which has expertise in upland farming systems as well as good knowledge of the region.to generate concurrent impact data and to demonstrate the effectiveness of these approaches. This exercise will also generate knowledge that may be useful for developing informed policies and practices by other states in the NER.

2. The project intends to engage the Indian Council for Agricultural Research (ICAR) for taking up the tasks of knowledge generation and dissemination. Initial discussions were held between the representatives of both Nagaland and Mizoram states and Deputy Director General (Extension) of Indian Council for Agricultural Research (ICAR). It was agreed in principle that the ICAR Regional Centre in Barapani and the Regional ATARI which co-ordinates the work of all KVKs in the NER will undertake these tasks under the overall supervision of the DDG (Extension), ICAR.

B. Proposed Activities

3. It is proposed to have a set of activities each to be implemented by Agriculture Technology Application Research Institute (ATARI) and ICAR Regional Office in Barapani. However, at the central level, the Deputy Director General (Extension), ICAR will be the focal point and responsible for overseeing implementation. The activities proposed to be implemented by ATARI through KVKs and by the ICAR Regional Office through its state level centres in Mediziaphema in Nagaland and Kolasib in Mizoram are detailed below:

a. Proposed activities of ATARI in association with KVKs

4. **Action Research:** It is proposed to undertake action research on settled agriculture in all the projects districts. Action research will be conducted either by the KVKs themselves or using the local institutions where necessary. Suggested action research topics include:

- a. Screening of rice and other dominant crop varieties with farmers participation.
- b. Comparison of local rice varieties with the improved ones in farmers' fields.
- c. Demonstration of increased cropping intensity, especially in TRC through a second crop of rice, garlic, legumes, etc. after "Kharif paddy".
- d. Demonstration of goat rearing through stall feeding.

5. ICAR in consultation with the respective state government will be able to decide on the additional topics for action research taking into account priorities of the state. All action research activities will have to be taken up on the farmers' field and the farmers will have to be identified in consultation with the project officials. Action research results will have to be documented for dissemination amongst project stakeholders and also other development partners in the NER.

6. **Supply of quality planting materials:** KVKs and ATARI will be responsible for supply of quality seeds and planting materials. KVKs in consultation with the respective state government will have to make an estimate of the seed and planting material requirements for each season taking into account the ability of KVKs to source them. Only tested and disease free seeds and planting materials need to be provided after making a thorough verification of supply source.

7. **Development of improved varieties of seeds (paddy) using local seeds**: There is a need to develop improved varieties using local seeds. KVKs can take up this activity by developing seed clusters in the project villages. Farmers for participation in these seed clusters will have to be selected in consultation with the project officials.

8. **Technical backstopping and training of village level workers:** The technical staff of KVKs will be required to undertake technical backstopping visits to the project sites and submit reports on new technologies to be implemented and also improvements required in implementation methodology. In addition, KVKs will also be engaged to train the lead farmers from all the project villages.

9. **Demonstrations:** KVKs will be required to implement demonstrations relevant to the states and have the potential for scaling up. Some of the suggested demonstrations include: (i) establishment of demonstrations of pig breeding units (ii) stall fed goat units; and (iii) backyard poultry hatchery and brooding units. Any other demonstration which is relevant to the state can be decided in consultation with the project officials. These demonstrations will have to be undertaken with the identified CAHWs trained and supported by the project.

b. Proposed activities of ICAR centres in Medziaphema – Nagaland, Kolasib -Mizoram and ICAR Regional Centre in Barapani

10. **Demonstration of settled agriculture models**: ICAR centres in Medziaphema and Kolasib will be largely responsible for demonstration of settled agriculture models on a micro-watershed basis in about 50 ha per district. These centres in consultation with the project will have to identify about 50 ha of jhum plot in a district and implement various activities related to soil and water conservation and settled agriculture. These plots will be demonstration plots for the entire district for the jhum framers and field level functionaries of the project to visit and learn from the experience.

11. **Knowledge sharing:** ICAR Regional Centre in Barapani will be responsible for conducting impact assessment of the settled agriculture related activities of the project and for conducting regional workshops to disseminate the results. The regional workshops will be attended not only by the project stakeholders from both the states but also from the other states with interest to replicate the results. In addition, the regional workshops will also disseminate the results of action research conducted by the KVKs/ATRIs.

C. Estimated costs

12. It is estimated that the total cost of activities in Nagaland works out to INR 31.62 million and in Mizoram works out INR 16.55 million. These costs will be have be deliberated between the representatives of the respective state governments and the ICAR and ATRI representatives. Indicative cost details are provided in the table below:

		Nagaland			Mizoram	
		Esitmated	Estimated cost		Esitmated	Estimated cost
Acitvity	Unit	Quantity	(INR)	Unit	Quantity	(INR)
KVKs under ATARI operating in Nagal	and and Mizoram					
Action Research - settled agriculture	per district	8	4,800,000.00	per district	4	2,400,000.00
Supply of quality planting material	per village	650	6,500,000.00	per village	272	2,720,000.00
Development of improved variety of						
seeds using local varieties	per district	8	2,400,000.00	per district	4	1,200,000.00
Technical backstopping and training of						
village level workers	per district	8	640,000.00	per district	4	320,000.00
Training of village level workers	per village	650	975,000.00	per village	272	408,000.00
				per		
Field level demonstrations	per demonstration	24	2,400,000.00	demonstration	12	1,200,000.00
Sub-total			17,715,000.00			8,248,000.00
ICAR Regional Centres in Nagaland						
and Mizoram						
Demonstartion of settled agriculture	per district	8	9,600,000.00	per district	4	4,800,000.00
Technical backstopping	per district	8	1,600,000.00	per district	4	800,000.00
Impact evaluation of settled agriculture	on of settled agriculture per study 3 1,80		1,800,000.00	per study	3	1,800,000.00
Knowledge sharing workshops	per workshop	3	900,000.00	per workshop	3	900,000.00
Sub-total			13,900,000.00			8,300,000.00
Total			31,615,000.00			16,548,000.00

E. Next Steps

(a) The Deputy Director General (Extension), ICAR to conduct a meeting at ICAR Regional Centre in Barapani by inviting the project officials from Nagaland and Mizoram and ICAR

and ATRI officials to work-out the details of activities to be implemented. timelines and also costs.

- (b) ICAR to draft a Memorandum of Agreement incorporating the activities, timelines and costs in consultation with IFAD and the respective state government.
- (c) The Project Management Unit (PMU) of the respective state to obtain approval from the Governing Council /Project Steering Committee to the proposed Technical Assistance Agreement.
- (d) PMU of the respective state to sign a Memorandum of Agreement with ICAR.

Chapter 5: Procurement Procedures

A. Applicability of the Procurement Provisions

1. The Financing Agreement and the Project Agreement for the FOCUS project states that the procurement of goods, works and consultancy services shall be done in accordance with the provisions of IFAD Procurement Guidelines and Procurement Handbook, 2010, amended from time to time. For the purpose of the implementation of procurement under the FOCUS Project by the Society, IFAD Procurement guidelines takes precedent over Government rules and regulations, to the extent such are inconsistent with the IFAD Procurement Guidelines. The PMU established under the Society has the overall responsibility on the interpretation, the update of this Manual, and obtain the necessary agreements, clarifications and no objection from IFAD.

B. Guiding principles of Procurement

Transparency, Competition, Fairness and Elimination of Arbitrariness

2. Public procurement should be conducted in a transparent manner to bring competition, fairness and elimination of arbitrariness in the system. This will enable the prospective bidders to formulate competitive tenders with confidence. The following are some important measures to achieve the same and, thus, secure best value for money:

- **a.** The text of the bid document should be user-friendly, self-contained, comprehensive, unambiguous, and relevant to the objective of the procurement. The use of terminology used in common parlance in the industry should be preferred.
- **b.** The specifications of the required goods/terms of reference for consultants should be framed giving sufficient details in such a manner that it is neither too elaborately restrictive as to deter potential bidders or increase the cost of procurement nor too sketchy to leave scope for substandard supply.
- **c.** The bid document should clearly mention the eligibility criteria to be met by the bidders such as minimum level of experience, past performance, technical capability, manufacturing facilities, financial position, ownership or any legal restriction etc.
- **d.** The procedure for preparing and submitting the bids; deadline for submission of bids; date, time & place of public opening of bids; requirement of earnest money and performance security; parameters for determining responsiveness of bidders; evaluating and ranking of bids and criteria for full or partial acceptance of bids and conclusion of contract should be incorporated in the document in clear terms.
- e. Bids should be evaluated in terms of the criteria already incorporated in the bid document, based on which bids have been received. Any new condition, which was not incorporated earlier, should not be brought into consideration while evaluating the bids.

Efficiency, Economy and Accountability

3. Public procurement procedures must conform to exemplary norms of best practices to ensure efficiency, economy and accountability in the system. To achieve this objective, the following key areas should be taken care of:

- **a.** To reduce delays, PMU should prescribe appropriate time frame for each stage of procurement; delineate the responsibility of different officials and agencies involved in the purchase process and delegate, wherever necessary, appropriate purchase powers to the lower functionaries with due approval of the competent authority.
- **b.** PMU should ensure conclusion of contract within the original validity of the bids. Extension of bid validity must be discouraged and resorted to only in absolutely unavoidable, exceptional circumstances with the approval of the competent authority after duly recording the reasons for such extension.

Value for money

4. Underpinning all of the above is the need to obtain value for money for all project procurement activities through the optimum combination of several factors, including:

- **a.** Applying sound, internationally recognized procurement principles.
- **b.** Ensuring that the goods, works or services procured meet the requirements for the task and are not over-specified.
- **c.** Ensuring that the goods, works or services are contracted on the best possible terms, taking into account their expected life cycle.
- **d.** Ensuring that the provider/supplier of the goods, works or services is qualified, legally entitled and competent to execute the contract.

5. Best value does not necessarily mean the lowest initial price option, but rather represents the best return on investment, taking into consideration the unique and specific circumstances of each procurement activity; the balance of time, cost and quality required; and the successful overall outcome of the contract in meeting its original objectives.

General Provisions

6. The procurement of goods, works and consulting services under FOCUS project is to be undertaken by observing the following specific requirements.

- **a.** Procurement is to be carried out in accordance with the IFAD's Procurement Guidelines, the respective loan agreement, and any duly agreed amendments thereto.
- **b.** Procurement is to be conducted within the project implementation period, except where the loan agreement provides for retroactive financing and then within the limits therein specified.
- **c.** The cost of the procurement is not to exceed the availability of duly allocated funds as per the loan agreement.
- **d.** Procurement is to be consistent with the duly approved annual workplan and budget (AWP/B) including a procurement plan for at least the initial 18 months and subsequently updated annually.
- e. Procurement is to result in the best value for money as defined by the IFAD Procurement Guidelines.

C. Codes of Conduct and Conflicts of Interest

Codes of Conduct

7. Negative perceptions of procurement can quickly and easily be formed by individuals or groups looking in at the process from the outside. It is therefore imperative that procurement is not only conducted in an ethical, transparent and fair manner, but that it is <u>seen</u> to be conducted that way.

8. The ethical conduct require that no person shall use his/her authority, position or office for personal gain, which will be defined as soliciting, accepting or otherwise benefiting from anything of material value, in any form, either in person or indirectly through close relatives or associates, as a result of procurement financed by IFAD. The officials of PMU and its district units shall respect the confidentiality of information gained in the course of duty and not use such information for personal gain or for the unfair benefit of any bidder or supplier or contractor. Information given in the course of his or her duty shall be true, fair and not designed to mislead.

Gifts and Hospitality

9. Any official of the PMU/DMUs involved in IFAD- funded procurement activity shall:

- **a.** not be permitted to accept any business gifts from current or potential suppliers, contractors or consultants unless such gifts are of very small intrinsic value such as a calendar or business diary.
- **b.** refrain from accepting any business hospitality that might be viewed by others as having an influence in making a business decision as a result of accepting that hospitality; and
- **c.** has a duty to promptly report refer any cases of irregular practices which include but not limited to fraud and corruption as defined in IFAD's Anti-Corruption Policy by a colleague, bidder, supplier, contractor or consultant to IFAD and National Authorities as required

Conflicts of Interest

10. It is a requirement of the IFAD Procurement Guidelines that any public official of the Borrower/recipient involved in IFAD-funded procurement activity shall declare any personal interest that may affect, or might reasonably be deemed by others to affect, impartiality in any matter relevant to his duties (conflict of interest).

11. Upon being aware of such a situation of this nature arising or having the potential to arise, the official(s) concerned should immediately recuse themselves from any aspect of the procurement process to avoid being placed in a position of conflict.

12. Where IFAD becomes aware of a situation where a conflict of interest may have existed but was not declared then this is sufficient grounds to declare mis-procurement in line with the IFAD Procurement Guidelines.

13. Where there is doubt that a conflict of interest, or potential conflict of interest, may exist or arise, IFAD may be consulted for advice or guidance, however the general principle is that if it there is uncertainty then it is safer to recuse oneself from the process than to risk a negative perception of the process and mis-procurement being declared.

14. A firm/entity/individuals participating in a procurement process under this FOCUS Project shall not have a conflict of interest. Any firm/entity/individuals found to have a conflict of interest shall be ineligible for award of a contract.

15. A conflict of interest is a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations, and that such conflict of interest is not acceptable under the FOCUS Project. The Borrower will take appropriate actions to manage such conflicts of interest which may include rejecting a proposal for award if it determines that a conflict of interest has flawed the integrity of any procurement process.

- 16. A firm shall be considered to have a conflict of interest in a procurement process if:
 - **a.** such firm is providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of a project that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm.; or
 - **b.** such firm submits more than one bid, either individually or as a joint venture partner in another bid, except for permitted alternative bids. This will result in the disqualification of all bids in which the Bidder is involved; or
 - c. such firm (including its personnel) has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly involved in the preparation of the bidding documents or specifications of the contract, and/or the bid evaluation process of such contract; or (ii) would be involved in the implementation or supervision of such contract unless the conflict stemming from such relationship has been resolved acceptable to IFAD throughout the procurement process and execution of the contract; or

d. such firm does not comply with any other conflict of interest situation as specified in the Bidding Documents relevant to the specific procurement process.

17. It is the duty of all project staff and any other public employee directly or indirectly involved with the procurement process and particularly the preparation of bid documents, bid evaluation, contract negotiations, contract management and payments to avoid any potential conflicts of interest. A conflict of interest arises when the individual has a direct or indirect relationship with a bidder, consultant, contractor, service provider or supplier.

18. In the event that a project staff or a member of the PC or an employee who is directly involved with the procurement process feels that there is the potential for a conflict of interest they shall declare it to the PC and remove themselves from the procurement process.

Standard of Ethical Conduct

19. All project staff and consultants involved in procurement activities, shall observe the Code of Business Ethics as outlined below.

20. No individual shall use his/her authority or office for personal gain. Personal gain includes accepting or requesting anything of material value from bidders, prospective bidders or suppliers for the individual, his or her spouse, parents, children or other close relatives, or for other persons from whom the individual might gain direct or indirect benefit of the gift.

21. An individual shall seek to maintain and enhance the reputation of the Government by:

- **a.** Maintaining the highest standards of honesty and integrity in all relationships both inside and outside the Entity in which he works.
- **b.** Developing the highest standards of professional competence.
- **c.** Using funds and other resources for which he/she is responsible to provide the maximum benefit to the Government

22. Conflict of interest - An individual shall declare any personal interest that may affect or might reasonably be deemed by others to affect impartiality in any matter relevant to their duties.

23. Disclosure of personal relationships – an individual shall declare any relationship with a bidder, supplier, contractor, service provider or consultant and shall take no part in either the decision making process or the implementation of any contract where such a relationship exists. A personal relationship is defined as consanguinity or affinity up to the third civil degree.

24. Confidentiality and accuracy of information - An individual shall respect the confidentiality of information gained in the course of duty and shall not use such information for personal gain or for the unfair benefit of any bidder, supplier, contractor or consultant.

25. Information given by an individual in the course of their duty shall be true, fair and not designed to mislead.

26. Competition - All bidders, suppliers, contractors and consultants shall be treated with fairness and impartiality, and avoid any business arrangement that might prevent the effective operation of fair competition.

Examples of Unethical Conduct

The following are examples of the type of conduct prohibited by this Code of Ethics:

- a. Revealing confidential or "inside information" either directly or indirectly to any bidder or prospective bidder;
- b. Discussing a procurement with any bidder or prospective bidder outside the official rules and procedures for conducting procurements;

- c. Favoring or discriminating against any bidder, prospective bidder or consultant in the Preparing of technical specifications, terms of reference or standards or the evaluation of bids and proposals;
- d. Destroying, damaging, hiding, removing, or improperly changing any formal procurement document;
- e. Accepting or requesting money, travel, meals, entertainment, gifts, favors, discounts or anything of material value from bidders or prospective bidders, suppliers, contractors or consultants;
- f. Discussing or accepting future employment with a bidder or prospective bidder, suppliers, contractors or consultants;
- g. Requesting any other person to violate the public procurement rules or procedures;
- h. Ignoring evidence that the Code of Ethics has been violated; and
- i. Ignoring illegal or unethical activity by bidders or prospective bidders, suppliers, contractors, service providers or consultants, including any offer of personal inducements or rewards or otherwise.

D. Role of Lead Implementing Agency in Procurement

27. The 'Lead Implementing Agency for FOCUS is SOCRAN/SOCRAM which has overall responsibility for the execution of the project and retains overall responsibility and accountability for the project to IFAD and the State Government. In respect of procurement, the PMU would be responsible for the entire procurement process, including but not limited to functions such as:

- a. preparing procurement plans;
- b. preparing statements of requirements, specifications, terms of reference and/or bills of quantities;
- c. agreeing with IFAD on the procurement method or method of selection for each procurement activity;
- d. undertaking pre-qualifications, advertising, management of expressions of interest and shortlisting;
- e. preparing bid solicitation documents and draft contracts;
- f. issuing bidding documents, responding to clarification requests and overall management of the bidding process;
- g. bid receipt, bid opening and bid evaluation;
- h. evaluation reporting;
- i. bid cancellation;
- j. contract award and negotiation;
- k. drafting contract documents and contract placement;
- I. contract management;
- m. invoicing and payment;
- n. dispute resolution;
- o. contract completion and assessment.

E. Procurement methods

28. Procurement of goods, works and consultancy services under FOCUS will be obtained using any one of the following selection methods:

Goods and Works

- a. National Competitive Bidding
- b. National Shopping
- c. Direct Contracting

Consultancy Services

- a. Quality cum Cost Based Selection (QCBS)
- b. Fixed Budget Selection (FBS)
- c. Least Cost Selection (LCS)
- d. Selection based on Consultants' Qualification (CQS)
- e. Single Source Selection (SSS)
- f. Individual Consultants

29. Each of these selection methods involve different processes like preparation of bid documents, preparation of technical requirements, selection criteria and evaluation. These processes are described in the IFAD Procurement Handbook. FOCUS PMU will also develop a detailed Procurement Manual adopting the provisions contained in the IFAD Procurement Handbook and other requirements.

F. Project Procurement Plan

30. It is a requirement of the IFAD Procurement Guidelines that at the outset of each project, the Borrower/recipient, in conjunction with IFAD, establishes a procurement plan covering the first 18-months of the project followed by 12 month successive plans synchronised with the Annual Work Plans and Budget during implementation.

31. Planning is a critical part of the procurement process to enable objectives and priorities to be set, workloads to be estimated and resources allocated. It enables the procuring entity to plan, organise, forecast and schedule its procurement activities and to identify potential areas for aggregation of needs.

32. As far as possible, procurement planning should be integrated with financial planning of a project so that budgets and procurement needs are synchronised as far as is practical.

33. Each procurement plan shall identify procedures which must be implemented by the Lead Project Agency to ensure consistency with the IFAD Procurement Guidelines. As provided in appendix I, paragraph 1 of IFAD's Procurement Guidelines, IFAD review of and no objection to the Borrower/Recipient's procurement plans is compulsory and the first 18 month procurement plan and the update for the subsequent 12 month procurement plan submitted by the Borrower/Recipient must include as a minimum:

- a. A brief description of each procurement activity to be undertaken during the period and name of the implementing agency responsible for the procurement;
- b. The estimate value of each procurement activity;
- c. The method of procurement to be adopted for each procurement activity and;
- d. The method of review IFAD will undertake for each procurement activity indicating either post review or prior review.

34. Any amendments to the Consolidated Procurement Plan shall be subject to the Fund's no objection. A draft procurement plan for works, goods and services are provided in Annex 5.1, 5.2 and 5.3 respectively.

G. Prior Review by IFAD

35. In accordance with the IFAD Project Procurement Guidelines, the following will be subject to prior review by IFAD:

36. Award of any contract for works, goods and equipment to cost USD 100 000 or equivalent or more. The following will be reviewed:

- a. Prequalification documents and shortlist when prequalification is undertaken;
- b. Bid Documents for goods and works;
- c. Evaluation Reports and Recommendations for Award; and
- d. Draft contracts and subsequent amendments.

37. Award of any contract for consulting services estimated to cost USD 100 000 or equivalent or more. The following will be reviewed:

- a. Prequalification documents and shortlist when prequalification is undertaken;
- b. Request for Proposal (RFP);
- c. Technical Evaluation Report;
- d. Combined (technical and financial) evaluation report and the recommendation for award; and
- e. The minutes of Negotiation, draft contracts and subsequent amendments.

38. All direct contracts for goods and civil works above the prescribed procurement method thresholds (indicated in the Letter to the Borrower issued by IFAD) shall be undertaken in accordance with the provisions of IFAD Procurement Guidelines for direct contracting and single source selection and subject to IFAD prior review. All the single source selection of consultancy services (national/international organizations/UN agencies) would require a detailed proposal including budget and deliverables, which will be evaluated by the project and submitted to IFAD's prior review before entering into the contract.

39. In addition to prior review threshold of consultancy services (ii) above, the first two procurement actions of consultancy services, irrespective of the selection methods, in a programme year, will also subject to IFAD prior review.

H. Procurement involving Community Participation

40. Procurement with community participation is not a distinct method of procurement and it therefore requires the same adherence to all principles and standards set out in the public procurement.

41. Under the term "community participation", it is understood that the community may play the following roles during project implementation.

42. As a provider of goods, works or services directly to the project, communities are permitted to undertake works or provide goods or services to the project where:

- **a.** It is an implementation modality within the project design document; or
- **b.** It is not an implementation modality but it is agreed with IFAD that this represents a cost effective and practical alternative to procuring externally. The factors such as fostering ownership, the sustainability of project activities, effective operation and maintenance of a project facility are also considered for selecting this approach.

43. Under FOCUS, community groups will be empowered to undertake procurement of goods including planting materials and small works (including construction, renovation and maintenance) up to USD 20,000 equivalent in each case. The community groups, otherwise a legal entity, to receive public funds and have the capacity to enter into contracts will be considered for the procurement. The

detailed processes including approvals from the office bearers and social audit provisions will be included in the Procurement Manual.

Annex 5.1: Procurement Plan for 18 months (Jan 2017 – March 2019) related to Works - Page 1 of 2

	Country-India Project Title / Loan/Grant Ref:FOSTERING CLIMATE RESILIENT UPLAND FARMING SYSTEMS IN THE NORTH EAST (Nagaland)													
					Project Executive A	gency: Departm	ent of Agriculture, Go	vernment of Nagala	nd					
					Pro	ject Implementi	ng Agency: PMU, SO	CRAN						
	DATE OF	GPN:			Thresholds: > USD 100,000 equivalent for works, and > USD 100,000 equivalent for procurement of goods and > USD 100,000 equivalent for consultancy and services require IFAD prior review . The threshold are established on a Project to Project basis and are referenced in the Letters to the Borrowers.									
	IFAD APPI	ROVAL DATE	E: Original:	Current:										
	SL No.	Package No.	Review by Bank Prior/Post	Description of Works/Goods	Estimated Cost (Local Currency) InINR	Method of Procurement	Design/ Investigation/Specs . Completed (Date)	Final Estimate Prepared & Sanctioned (Date and Value) INR	Finalization of Bidding Document (Date)	IFAD's No Objection to Bidding Document (Date)**	Bio	ds Opened op	Contract Award decided (Date/Value/Curre ncy)	IFAD's No Objection to Contract Award (Date)**
	1	2		3	4	5	6	7	8	9	10	11	12	13
PP R A	1	1		Cross drainage structures with protective features side drains such as slab or pipe culverts for the existing road segments with climate resilient protective features with longitudinal GPS coordinates from xx to xx for approximate distance of 10 km in District xx.	4,537,000.00									
PP R A		2		Cross drainage structures with protective features side drains such as slab or pipe culverts for the existing road segments with climate resilient protective features with longtitudinal GPS coordinates from xx to xx for approximate distance of 10 km in District xx	4,537,000.00	4,537,000.00 4,537,000.00 4,537,000.00								
PP R A	_	3	Prior	Cross drainage structures with protective features side drains such as slab or pipe culverts for the existing road segments with climate resilient protective features with longitudinal GPS coordinates from ax to xx for approximate distance of 10 km in District xx.	4,537,000.00									
PP R A	-	4		Cross drainage structures with protective features side drains such as slab or pipe culverts for the existing road segments with climate resilient protective features with longitudinal GPS coordinates from ax to xx for approximate distance of 10 km in District xx.	4,537,000.00									
PP R A	-	5		Cross drainage structures with protective features side drains such as slab or pipe culverts for the existing road segments with climate resilient protective features with longitudinial GPS coordinates from xx to xx for approximate distance of 10 km in District xx.	4,537,000.00									
PP R A		6		Cross drainage structures with protective features side drains such as slab or pipe culverts for the existing road segments with climate resilient protective features with longitudinal GPS coordinates from xx to xx for approximate distance of 10 km in District xx	4,537,000.00									
PP R A		7		Cross drainage structures with protective features side drains such as slab or pipe culverts for the existing road segments with climate resilient protective features with longtitudinal GPS coordinates from xx to xx for approximate distance of 10 km in District xx	4,537,000.00	.000.00								
PP			1	Cross drainage structures with protective features side drains such as										
R	1	8	Prior	slab or pipe culverts for the existing road segments with climate resilient protective features with longtitudinal GPS coordinates from	4,537,000.00	LCB								
А	1			xx to xx for approximate distance of 10 km in District xx										
PP			1	Cross drainage structures with protective features side drains such as		1								
R]	9		slab or pipe culverts for the existing road segments with climate resilient protective features with longitudinal GPS coordinates from	4,537,000.00									
А				xx to xx for approximate distance of 10 km in District xx										
PP			1	Cross drainage structures with protective features side drains such as		1								
R]	10		slab or pipe culverts for the existing road segments with climate	4,537,000.00									
A				xx to xx for approximate distance of 10 km in District xx	,,									

Procurement Plan for 18 months (Jan 2017 – March 2019) related to Works - Page 2 of 2

PP R A	2 1		Aggregation cum Common facility centre with equipments at District xx	1,600,000.00					
PP R	2		Aggregation cum Common facility centre with equipments at District xx	1,600,000.00					
PP R	3	-	Aggregation cum Common facility centre with equipments at District xx	1,600,000.00					
PP R	4	Prior	Aggregation cum Common facility centre with equipments at	1,600,000.00	LCB				
A PP R	5	-	Aggregation cum Common facility centre with equipments at	1,600,000.00					
A PP R	6	_	Aggregation cum Common facility centre with equipments at	1.600.000.00					
A			District xx						
PP R	7		Aggregation cum Common facility centre with equipments at District xx	1,600,000.00					
PP R	8	1	Aggregation cum Common facility centre with equipments at District xx	1,600,000.00					
A PP R	9	Prior	Aggregation cum Common facility centre with equipments at	1,600,000.00	LCB				
A PP R	10	-	Aggregation cum Common facility centre with equipments at	1,600,000.00					
A PP	3 1		One Boar Semen Station in District vy	300 000 00					
A PP		_	One Processing lab, store and office for Al station for pigs						
R A PP	2	_	including refrigerator with solar unit and other equipments in District xx	2,366,670.00					
R A	3	_	One Boar Semen Station in District xxx	300,000.00					
R A	4	Drior	One Processing lab, store and office for AI station for pigs including refrigerator with solar unit and other equipments in District xx	2,366,670.00	LCB				
PP R	5	Pilor	One Boar Semen Station in District xxx	300,000.00	LCB				
PP R	6	-	One Processing lab, store and office for AI station for pigs including refrigerator with solar unit and other equipments in	2,366,670.00					
A PP R	7	-	District xx One Boar Semen Station in District xxx	300,000.00		 			
A PP	0	-	One Processing lab, store and office for AI station for pigs	2 366 670 00					
A	0		District xxx	2,000,070.00					L
L			Total	72,036,680.00					
*PP: Targe ** Applicab	et dates agreed as per ble in case of 'Prior Re	Procurement Plan riew' by IFAD	R: revision 1,2 etc.	A: Actual dates					

Annex 5.2: Procurement Plan for 18 months (Jan 2017 – March 2019) related to Goods - Page 1 of 2

				Project Title / Loa	n/Grant Ref FOSTERING CLIN	LOUNTY ATE RESILIENT	UPLAND FARMING	SYSTEMS IN THE N	ORTH FAST (Nagala	and)				
					Project Executive Agen	cy: Department of	of Agriculture, Gove	rnment of Nagaland	entin 1900 (nagan					
					Project	Implementing A	Agency: PMU, SOCR	AN						
	DATE OF	F GPN:			Thresholds: > USD 100,000) equivalent for wo	orks, and > USD 100,0	000 equivalent for and services require						
	STATUS	AS OF (D	ate):		IFAD prior review . The three refere	shold are establish nced in the Letters	ed on a Project to Pro to the Borrowers.	ject basis and are						
	IFAD API	PROVAL E	DATE: Original:	Current:										
	SL No.	Package No.	by Bank Prior/Post	Description of Works/Goods	Estimated Cost (Local Currency) In INR	od of Procurement	Design/ Investigation/Spec s. Completed (Date)	Final Estimate Prepared & Sanctioned (Date and Value) INR	Finalization of Bidding Document (Date)	IFAD's No Objection to Bidding Document (Date)**	Bi	ids	Contract Award decided (Date/Value/Curre ncy)	IFAD's No Objection to Contract Award (Date)**
			Review			Metho					Invitation (Date)	Opened on (Date)		
	1	2		3	4	5	6	7	8	9	10	11	12	13
*PP														
R	1	1		8 Laptops for PMU, 4 desktops for PMU (INR 600,000)	600,000.00									
Α														
*PP						1								
R	1	2		6 printer cum scanners for PMU (INR 72,000)	72,000.00									
A			Prior			LS								
*PP				1 heavy duty photocopier (A3/A4 AN connectivity)										
B	-	3		(INR 150,000)	150,000.00									
<u>κ</u>	-													
*PP														
	2	1		Furniture sets for PMU	500,000.00	LS								
R														
A														
*PP	4													
R	3	1		13 desktop computers (PMU 4, DMU 8, Mktg 1) 48 laptops	455,000.00									
A			Prior			LCB								
*PP						100								
R		2			2,160,000.00									
A														

Procurement Plan for 18 months (Jan 2017 – March 2019) related to Goods - Page 2 of 2

						-						
*PP		_										
R		3		754 GPS sets to VLWs and 3 GPS to PMU	22,710,000.00							
*PP												
R		4		120 nos. 8 inch screen android tablets with wi-fi	1,440,000.00							
A				connectivity								
*PP				9 per internet enabled LED TV with webcam for video								
R		5		conferencing	1,200,000.00							
A												
*PP					000 000 00							
R		ь	Prior	8 hos. medium size B&vv photocopier (A4) for DMUs	600,000.00	LCB						
*PP												
R		7		9 nos. LCD projectors (1 for PMU and 8 for DMUs)	720,000.00							
A												
*PP						1						
R		8		storage, etc)	500,000.00							
A												
*PP				One NT Server for M&E database and other	000 000 00							
R		9		equipments	300,000.00							
A												
PP	4	1		21 4WD (1 Marketing, 1 Market Access, 8 DMUs, 11 PMU) Minimum 1400 CC, Diesel driven BS-IV	17 850 000 00							
A	-			standard	17,000,000.00							
*PP												
R		2		2 premium 4WD Minimum 2000 cc, diesel driven and BS-IV Emission standard	3,400,000.00	LCB						
A												
*PP				1 mini bus with 10+1 capacity, BS-IV Emission								
R		3	Prior	standard (Non-AC)	800,000.00							
*DD												
R		4		1 Multipurpose vehicle BS-IV Emission standard Non-	1 800 000 00							
A				AC	.,,							
*PP												
R		5		40 Motor cycles upto 125 CC	3,000,000.00							
A												
*PP				Equipments and kits for 74 VEA: Equipments and kits								
R	5	1	Post	for 377 CAHW	2,988,000.00	LCB						
A												
PP	6	1		Euroiture sets for District xx	200.000.00	IS						
A	0				200,000.00	10						
*PP												
R		2		Furniture sets for District xx	200,000.00	LS						
А												
*PP												
R		3		Furniture sets for District xx	200,000.00	LS						
A												
- РР		4		Euroiture sets for District xx	200.000.00	LS						
A		-			200,000.00	10						
*PP			post							1		
R		5		Furniture sets for District xx	200,000.00	LS				1		
A												
*PP												
R		6		Furniture sets for District xx	200,000.00	LS						
A *DD												
R		7		Furniture sets for District xx	200 000 00	LS						1
A		·			,000.00							
*PP			1				İ	1	1	i i		
R		8		Furniture sets for District xx	200,000.00	LS						
A						L						
L				Sub Total	61,523,000.00							
				Total								
*PP: Targ	get dates	agreed as	per Procurer	nent Plan R: revision 1,2 etc.			A: actual dates					
** Applica	able in ca	se of 'Prio	r Review' by I	FAD								

Annex 5.3: Procurement Plan for 18 months (Jan 2017 – March 2019) related to Services - Page 1 of 1

No. No. <th></th> <th colspan="13">Country-India Project Title / Loan/Grant Ref:FOSTERING CLIMATE RESILLENT UPLAND FARMING SYSTEMS IN THE NORTH EAST (Nagaland) Project Executive Agency: Department of Agriculture, Government of Nagaland Project Implementing Agency: PMU, SOCRAN</th>		Country-India Project Title / Loan/Grant Ref:FOSTERING CLIMATE RESILLENT UPLAND FARMING SYSTEMS IN THE NORTH EAST (Nagaland) Project Executive Agency: Department of Agriculture, Government of Nagaland Project Implementing Agency: PMU, SOCRAN														
Bit with the problem in the		DAT	EOF	3PN:		Thresholds: > USD 100,0	00 equivalent	for works, and a	> USD 100,0	00 equivaler	t for procurem	nent of good	s and > USD			
Normal with the second of the secon		STA	TUS A	S OF (E	Date):	100,000 equivalent for co	to Project bas	sis and are refere	enced in the	Letters to the	e Borrowers.	established	on a Project			
n n		IFAI	APPF	ROVAL	DATE: Original: Current:											
Image: Note the set of the set o		SL No.	Package No.	Review by IFAD Prior/Post	Description of Services	Estimated Cost (INR)	Method of Selection	Advertising for EOI (Date)	TOR/Shortl ist Finalized (Date)	RFP Final Draft forwarded to IFAD (Date)**	IFAD's No Objection for TOR Shortlist/Fin al REP (Date)**	RFP Issued (Date)	Proposals Received by the Project Authorities (Date)	Evaluation Finalized (Technical /# Combined/Dra ft Contract/Final Contract)	Contract Award decided (Date)	IFAD's No Objection (Technical /# Combined/Dr aft Contract/Fina I Contract)
Control Control <t< td=""><td></td><td>1</td><td>2</td><td></td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td></t<>		1	2		3	4	5	6	7	8	9	10	11	12	13	14
Image: Control Control Prior Prio Prior Prior	*PP	pone	ent 1 -		Preparation of 8 land use mans 754 village land			NA								
Part of the stand of	R	1	C1	Prior	suitability classification maps and institutional capacity support from NIRSAC	21,680,000.00	SSS									
Import Import Import Constitution for a month on Pool Survey and provide and	*PP R A	2	1	Prior	Technical Assistance on different thematic areas through UN FAO financed by In-Loan Grant	37,400,000.00	SSS	NA								
Process Process <t< td=""><td>*PP R A</td><td>з</td><td>1</td><td>Post</td><td>Consultancy for 4 months on Road Survey and Design</td><td>1,200,000.00</td><td>cqs</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	*PP R A	з	1	Post	Consultancy for 4 months on Road Survey and Design	1,200,000.00	cqs									
Image: sector is all sector	*PP R A	4	1	Post	Consultancy support from Nagaland Agricultural Research Station	3,000,000.00	SSS									
Image: problem is any problem is	*PP R A	5	1	Post	Cusotmisation of accounting software for financial reporting	600,000.00	SSS									
Trpp T <tht< th=""> T T T</tht<>	*PP R A	6	1	Post	Consultant agency for design, training and marketing linkage for bamboo products	1,500,000.00	CQS									
TPP A A A Past Example and it through CA firm 400,0000 QCB3 A A A A A A A A A B A B A B A B A B A B A B A B B B B B B B B Consultance of an and and it through CA firm 400,0000 CBB A A A A A A A A A A B Past Consultance of an and and it through CA firm A Consultance of an and and it through CA firm A Consultance of an and and it through CA firm A Consultance of an and and it through CA firm Consultance of an and and it through CA firm Consultance of an and and it through CA firm Consultance of an and and it through CA firm Consultance of an and and it through CA firm Consultance of an and and it through CA firm Consultance of an and and it through CA firm Consultance of an and and it through CA firm Consultance of an and and it through CA firm Consultance of an and and it through CA firm Consultance of an and and it throug	*PP R A	7	1	Post	Internal audit including handholding support for PMU and DMUs	1,800,000.00	QCBS									
TPP N Pot 2 Subsector outcome survey 2,000,0000 CGB C <thc< th=""> C C C</thc<>	*PP R A	8	1	Post	External audit through CA firm	400,000.00	QCBS									
Image: problem Part Producting Annual Outcome 1.000.000.00 QCBS Image: producting Annual Outcome Image: producting Annual	*PP R A	9	1	Post	2 Subsector outcome survey	2,000,000.00	QCBS									
PP A P <t< td=""><td>*PP R A</td><td>10</td><td>1</td><td>Post</td><td>Consultancy for conducting Annual Outcome Survey</td><td>1,000,000.00</td><td>QCBS</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	*PP R A	10	1	Post	Consultancy for conducting Annual Outcome Survey	1,000,000.00	QCBS									
PP A Pote Engaging numerators through agency for M&B 187,8000 LCB A	*PP R A	11	1	post	Engaging enumerators through agency for M&E Surveys District x	187,500.00	LCS									
PPP R Post Engains enumerators through agency for M&E 187,50.0 LCS Image: Constraint of the second	*PP R A	12	1	Post	Engaging enumerators through agency for M&E Surveys District x	187,500.00	LCS									
PP A A APestPestEngaing enumerators through agency for M&E Surveys District x187.500.00LCSImage: Constraint yImage: Constraint y </td <td>*PP R A</td> <td>13</td> <td>1</td> <td>Post</td> <td>Engaging enumerators through agency for M&E Surveys District x</td> <td>187,500.00</td> <td>LCS</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	*PP R A	13	1	Post	Engaging enumerators through agency for M&E Surveys District x	187,500.00	LCS									
PFR A 	*PP R A	14	1	Post	Engaging enumerators through agency for M&E Surveys District x	187,500.00	LCS									
PP A Pote Engaging enumerators through agency for M&E 187.500.0 LCS A B	*PP R A	15	1	Post	Engaging enumerators through agency for M&E Surveys District x	187,500.00	LCS									
PP R 1 P B Bigging enumerators through agency for M&E 187,500.0 LCS A B A B <td>*PP R A</td> <td>16</td> <td>1</td> <td>Post</td> <td>Engaging enumerators through agency for M&E Surveys District x</td> <td>187,500.00</td> <td>LCS</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	*PP R A	16	1	Post	Engaging enumerators through agency for M&E Surveys District x	187,500.00	LCS									
$ \frac{ FP }{ F } $	*PP R A	17	1	Post	Engaging enumerators through agency for M&E Surveys District x	187,500.00	LCS									
$ \frac{ FP }{R} P P P P P P P P P $	*PP R A	18	1	Post	Engaging enumerators through agency for M&E Surveys District x	187,500.00	LCS									
$ \frac{ FP }{R} 2 1 Pos Engaging consultancy agency for preparing the climate risk assessment 2 0 1 Pos Engaging consultancy agency for preparing the climate risk assessment 2 0 0 0 0 0 0 0 0 0$	*PP R A	19	1	Prior	Technical assistance from ICAR and ATARI for capacity building and knowledge sharing	17,000,000.00	SSS									
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	*PP R A	20	1	Post	Engaging consultancy agency for preparing the climate risk assessment	500,000.00	CQS									
*PP R 22 1 Post Designing and hosting of project website 800,000.0 CQS Image:	*PP R A	21	1	Post	Consultancy for climate impact assessment study and other studies	3,000,000.00	QCBS									
Otal 93,380,000.00 PP: Target dates agreed as per Procurement Plan B: revision 1.2 etc.	*PP R A	22	1	Post	Designing and hosting of project website	800,000.00	CQS									
					Total PP: Target dates agreed as per Procurement	93,380,000.00 Plan R: revision 1.2 e	tc.	1					A: actual dates	3		İ

Chapter 6: Financial Management

A. Introduction and financing

1. This chapter lays down the basic principles of financial management of the project. It lays down the system of funds flow to the project and within the project, the disbursement systems, submission of withdrawal application for reimbursement of funds, the system of recording transactions, reporting the same and the audit requirements.

2. **Project costs and financing arrangements**: The total project cost is estimated at about USD 90.06 million and will be financed by an IFAD loan of USD 40.25 million, a GoN counterpart funding of USD 17.42 million, Parallel financing from CSSs of USD 14.81 million, IFAD grant of USD 0.55 million, Beneficiary contribution of USD 3.90 million and convergence funding USD 13.13 million. Convergence funding will be mainly through MGNREGS funding to Village Development Boards. The indicative financing by component and by financier is indicated in the table below.

	IFAD	GoN counterpart	Parallel finance	GoN contribution	IFAD	Benefici-	Conver-			
3. Components/Sub-	Loan	Funds ^{1/}	$(CSSs)^{2/2}$	to $CSSs^{3/2}$	Grant	aries	gence ^{4/}	Total		
components Amount in USD million										
A. Improved Jhum Cultivation										
1. Better Jhum and Conservation	14.31	5.97	3.15	0.35	0.00	0.95	0.00	24.73		
2. Settled Agriculture Promotion	6.03	0.28	0.00	0.00	0.00	0.34	0.00	6.66		
Subtotal	20.35	6.25	3.15	0.35	0.00	1.29	0.00	31.39		
B. Value Chain and Market										
1. Value Chain Development	9.22	0.87	4.23	0.47	0.00	2.60	0.00	17.39		
2. Market Access Infrastructure	4.34	0.87	5.88	0.73	0.00	0.00	13.13	24.95		
Subtotal	13.56	1.74	10.11	1.20	0.00	2.60	13.13	42.35		
C. Project Management										
1. Project Management	6.34	9.43	0.00	0.00	0.55	0.00	0.00	16.31		
Subtotal	6.34	9.43	0.00	0.00	0.55	0.00	0.00	16.31		
Total PROJECT COSTS	40.25	17.42	13.26	1.55	0.55	3.89	13.13	90.06		

¹/ Pertains to GoN counterpart funding. This includes GoN contribution to IFAD loan for tax related reduction in disbursement.

²/ Pertains to Parallel Financing from Central Sector Schemes.

³/ Pertains to GoN share of 10% towards Central Sector Schemes.

^{4/} Pertains to GoN convergence largely through MGNREGS and other funding.

4. **Lending terms:** The project will be implemented over a period of six years and the IFAD loan will be on blend terms with service charge of 0.75% and interest of 1.25% repayable over 25 years with 5 years of grace period. The loan will be denominated in US Dollars.

5. Retroactive financing: Facilities for financing certain key activities from the date of design of the project until entry into force will be provided as retroactive financing as an exception to the general conditions. Some of the activities that can be funded under retroactive financing of up to USD 300,000 will be: (i) costs related to society registration; (ii) operating costs of the society; (ii) staff recruitment cost including advertisement cost and salary cost of only Finance and Accounts Specialist (FAS); (iii) purchase of a minimum set of equipment and materials like computers with related software, minimum furniture, accounting software; (v) preparation of the 3D maps and models; and (vi) activities related to baseline survey. To be eligible for retroactive financing, goods and services must have been procured according to the procurement procedures applicable to loan financing. The relevant category or categories, maximum amount that may be withdrawn for retroactive financing, and date after which expenditures become eligible for financing will be indicated in Design Report. Expenditures eligible for retroactive financing should be claimed in a separate application for reimbursement after entry into force. Amount eligible for retroactive financing shall be reimbursed only after the financing agreement has entered into force and any conditions precedent to disbursement have been met. GoN is expected to release INR 2.00 crore being first tranche as endowment to the society which will be used for the preparatory activities. Subsequently about 85% of the expenditure made will be reimbursed by IFAD. The balance need to be reimbursed by GoN to the society to maintain the size of the

endowment amount. IFAD will communicate the start date of retroactive financing eligibility, quantum and procurement procedure to GoN.

B. Fund Flow mechanism:

6. **To the Project:** The Project will be funded from the following sources: IFAD Loan, IFAD Gant, GoN contribution to SoCRAN (comprising of CSS and its own share towards such schemes), GoN contribution by way of taxes, contributions from beneficiaries and by way of convergence from other Govt schemes. Funds from IFAD loan will flow to a Special/Designated Account maintained in USD in a bank acceptable to IFAD and operated by the Ministry of Finance (MoF), Government of India (GoI). MoF will transfer the IFAD loan to the State Treasury of the Government of Nagaland (GoN) through the prescribed national procedures for budgetary support to State Governments. The GoN will release these funds to SoCRAN as soon as it receives the same from GOI. Besides IFAD contribution, the GoN will deposit its contribution (including CSS funds) in the project account of SoCRAN in accordance with the approved AWPBs.

- a) IFAD Funds: Proceeds of IFAD loan funds will be disbursed using one of the following four methods: (i) advance withdrawals or replenishments to the bank account(s) designated to receive loan resources; (ii) direct payment; (iii) Special Commitment (under letter of credit); and (iv) reimbursement. IFAD will make an initial advance of USD 3 million which is about six months of IFAD allocation towards the project into the Designated Account and then replenish the Designated Account on the basis of Withdrawal Applications submitted by the Project through the State Government to the CAA&A, Government of India.
- b) Counterpart Funding
- (i) Budgetary Allocations: The PMU of SoCRAN will be responsible for preparing the Annual Work Plan & Budget (AWPB) for the Project by consolidating the AWPBs of all DMUs which will be based on village level activities as proposed by JRMCs. The AWPB comprising of IFAD and GoN funds (including CSS contribution) will be a separate line item in the budget of the APC Department for Grant-in-Aid and will be presented for legislative sanction from the State Assembly. Fund will flow from the APC to SoCRAN bank account as Grants-in-Aid in one or two tranches once the annual State budget is approved by the State Assembly. Since the funds from the GoN will be by way of Grants-in-Aid, the Treasury would not insist on certification of the Accountant General's Office for further release of funds.
- (ii) Funds of Centrally Sponsored Schemes (CSS): APC will dovetail the CSS funds and its own share towards those schemes for the project districts and include it the APC budget for the project (which will be a separate line item in the State budget) and these funds will be released by the APC to the SoCRAN project bank account in one or two tranches as per the projections in the approved AWPB. SoCRAN will release funds to the DMUs depending upon the approved AWPB for implementation of project activities.
- c) Beneficiary Contribution: The beneficiary contribution shall be in kind (labour provided by the beneficiaries). The DMUs shall evolve a system to collect information in respect of beneficiary contribution to the project on a regular and ongoing basis. This could form part of the reporting system by the FIGs/ JRMCs to the DMUs. The utilization certificates of funds disbursed for activities which involve beneficiary contribution could be used as a basis for accounting the beneficiary contribution.

7. **Within the Project:** Initially the PMU shall provide an advance to the DMUs to cover the expenditure for six months based on their AWPB. The DMUs shall submit monthly statements of expenditure to the PMU. The DMUs shall seek replenishment of the amount spent when it has utilized at least 50% of the amount advanced earlier by submitting a utilization certificate. Accordingly, whatever amount has been spent by the DMU shall be reinstated to them by the PMU. The DMUs will fund the JRMCs and all other activities at village level.

8. The FIGs/ JRMCs shall maintain separate bank accounts in respect of funds received from the Project and the amounts utilized towards the project activities. A copy of such bank account statement shall be submitted to the DMUs every month along with the utilization certificate. The project staff or any person authorized by it shall be entitled to verify the books of accounts and all supporting documents and records of the JRMCs in respect of the project expenditure.

9. Accounts by type: designated account, project account, district cell account etc., operation of accounts and accountability: A Designated Account in USD will be opened by the Gol at Reserve Bank of India (RBI) to which funds will flow from IFAD. Gol will transfer IFAD assistance to GoN. The advance funding from IFAD to the Designated Account will be equivalent to six months of projected annual budget. GoN will make a request to DEA to transfer the advance funding received from IFAD to the state and thereafter GoN will release this amount to the SoCRAN. In addition, GoN will transfer the estimated budget chargeable to the identified missions / centrally sponsored schemes (CSS) including state share to the Society in a timely manner in two instalments. SoCRAN will submit WAs for the IFAD financed eligible expenditures as per the procedures and formats agreed with IFAD to the Office of CAA&A, Ministry of Finance, Gol.

10. The society will submit Utilisation Certificates to the APC (nodal department) for the eligible expenditures under the CSS budget. Disbursements to the district offices shall be made by the PMU. The funds from the district offices shall be advanced/disbursed to the communities through the JRMCs. The JRMCs shall be required to provide utilization certificate for each quarter based on which further releases shall be made. The districts shall provide expenditure statements to the PMU every month based on which the PMU shall prepare and submit withdrawal applications every quarter after consolidating the actual expenditure incurred at the PMU and districts. The counterpart funds, other than salaries to the GoN staff, (which will be paid directly by the Govt) will also be made available by the GoN to the PMU account from which expenditure will be incurred. GoN will provide the details of expenditure incurred by it directly (salaries and allowances) towards the project, to enable consolidation and reporting of total expenditure of the project.

C. Disbursement procedures, withdrawals and Withdrawal Applications (WA)

11. There are four standard procedures that are used for disbursing Loan funds from IFAD

12. **Procedure I: Special/ Designated Account**: This procedure provides a mechanism like a revolving fund to assist the government in financing eligible expenditures defined in the Financing Agreement as payment falls due. While the project implementation is underway the account is replenished when satisfactory evidence of expenditure incurred is received. Deposits to replenish the Special/ Designated Account are claimed under this procedure using Application for Withdrawal – Form 100.

13. Summary sheet (SS) Form 101 is used when additional space is required, that is, more than one contractor, or if expenditures relate to multiple suppliers on a reimbursement basis. Summary sheet Form 101 is used to summarise several invoices or receipts claimed for replenishment. Separate summary sheets are used for each disbursement category.

14. SS Form 102 is used when expenditures are claimed under Statement of Expenditures (SOEs). If expenditures are claimed under an SOE, supporting documents are not required to be submitted with the withdrawal applications. SS Form 102 is attached to the withdrawal application, supported by Summary Sheet(s) in Form 101 in which the corresponding itemised expenditures and related information is provided. Also if supporting documents are not required, the project shall itemize every single claim by indicating relevant data (good/services provided, date, amount disbursed, bill number, etc.)

15. If the expenditures are not claimed under a SOE, the supporting documents (bills, invoices, receipts, evidence of payment and evidence of shipment) are submitted and attached to the withdrawal application.
16. **Procedure II: Direct Payment**. Under this procedure, the government requests the Fund to pay suppliers directly from the loan funds. The procedure is similar to Procedure I described above but the payment is made direct to the third party as advised and instructed by the Government.

17. **Procedure III: Direct Payment to a foreign supplier**. Under this procedure, the government uses a Letter of Credit (L/C) as a mode of payment to a foreign supplier. Form 301, an Application for a Special Commitment, Form 302 Letter of Commitment from IFAD to a Bank and Form 303 Bank's Request for Payment. This is extensively used for financing import of goods and under this procedure IFAD gives assurance to the suppliers.

18. **Procedure IV: Reimbursement.** All eligible expenditures pre-financed by the government are claimed for reimbursement under this procedure using Application for Withdrawal –Form 100 and Summary sheets Forms 101 & 102 as with Procedure I above. This type of disbursement will be very common with the project. This procedure is followed when expenditures have already been incurred, that is, the suppliers of goods or services have already been paid by the Government from its own funds. The reimbursement procedure is generally suitable for payment of (i) local currency costs, (ii) petty purchases; and (iii) small civil works payments. The reimbursement procedure normally requires full documentation. However, there are special cases where the IFAD accepts simplified documentation:

- a. Statement of Expenditures (SOE) this is applicable where it is impractical or unduly burdensome to submit full documentation in support of application for withdrawal of loan proceeds.
- b. Force Account Works. This procedure is applicable when the implementation agency uses its own work forces, equipment, and other resources in carrying out civil works. This procedure involves submission of periodic certification of progress or completion of civil works in support of application for withdrawal of loan proceeds instead of the usually required supporting documentation such as invoices, bills and receipts.

Disbursement Procedure	Disbursement Type	Description	Form
Procedure I	Special/ Designated	This is for advance funding from	Form 100
	Account	IFAD for start up activities and is	Form 101A
		used for claiming further deposits	Form 102B
		to replenish the Special/	Form 103
		Designated Account	Form 104
			Form 105
Procedure II	Direct Payment	IFAD makes direct payment to a	Form 100
		third party on the basis of	Form 101B
		Government instructions	Form 105
Procedure III	Special Commitment	This is used for items imported by	Form 301
		the Project under a Letter of Credit	Form 302
		requiring guarantees for	Form 303
		reimbursement	
Procedure IV	Reimbursement	This procedure is used for claiming	Form 100
		reimbursement where eligible	Form 101A
		project expenditure reimbursable	Form 102B
		by IFAD have been pre-financed	Form 103
		by the Government	Form 105

The formats of the above mentioned forms will be provided at the time of start-up of the project.

19. **Checklist for compiling a withdrawal application**: Following aspects need to be checked and verified before an Application for withdrawal is sent to IFAD for reimbursement or payment:

- Designation of WA signatory
- Designation for operation of the special/designated account

- WA Sequential number and coverage period
- WA signatory
- Currency and the amount due
- Account number
- Banking instructions
- Correspondent bank
- Supporting documents
- Percentage of Financing
- Disbursement procedure used
- Procurement details
- Contract or purchase order no and date
- Description of goods, works or services
- Currency and total amount of contract
- Invoice numbers and net amount of invoice covered by this application
- Withdrawal details: category and % of expenditures to be financed by IFAD

20. Withdrawals from the Loan Account may be made against statements of expenditure (SOEs) in respect of Eligible Expenditures in such amounts/ or at such intervals as IFAD may designate from time to time by notice to the GoI and GoN. The records evidencing such expenditures need not be submitted to IFAD, but will be retained by the GoI and GoN and made available for inspection by the representatives of IFAD. The PMU will retain the relevant documents and make them readily available for inspection and review by joint review missions and the auditors. No taxes and duties will be financed out of the proceeds of the IFAD loan. Requests for replenishment with necessary supporting documents or certification of SOEs will be made by the PMU for processing and for funds transfer from the Special/Designated Account to the PMU Account. The PMU will compile and consolidate, on a timely basis, eligible Project expenditures for all project activities and consolidate and process, on a timely basis, withdrawal applications for all eligible Project expenditures and submit such withdrawal applications to IFAD through MoF for reimbursement or replenishment of the Special/Designated Account.

- 21. No withdrawal can be made in respect of expenditures until:
 - (i) the Society for implementation of the project is formed;
 - (ii) the PMU and the DMUs shall have been duly established and finance staff recruited
 - (iii) the GOI shall have duly opened the Special/Designated Account
 - (iv) the Project shall have duly opened the Project Accounts; and

(v) the first AWPB, including the procurement plan for the initial 18 months of Project implementation, shall have been submitted to, and approved by IFAD.

D. Audit procedures and arrangements

22. The accounts of the Project for each Fiscal Year shall be audited by independent auditors acceptable to IFAD. The audit shall be in accordance with Article 9 of the IFAD's General conditions and the IFAD's *Guidelines on Project Audits*. The ToR for the auditors is also provided in the aforesaid Guidelines. An independent firm of Chartered Accountants will be engaged for the purpose. The appointment of the auditor shall be through a fair, transparent and competitive process and within 90 days after loan effectiveness for the first year and also for each of the subsequent years of the project period. Besides the annual audit by the chartered accountant, the GoN will request the AG office at Kohima to perform a 'certification audit' of the project.

23. The auditors should not be appointed as consultants responsible for designing accounting and control systems on which they would be required to comment. Such appointments would create a conflict of interest and create a risk that auditors might not report shortcomings in the project.

24. The PMU shall prepare a TOR for selection of the auditors and send the same to IFAD for approval. The TOR should follow the IFAD Guidelines on Project Audit (which also includes a

template for project's consideration). On receipt of the approval the PMU shall conduct the selection process subject to IFAD prior review and convey to IFAD the name of the auditor appointed and the selection process adopted. The agreed time frame for appointment of the auditor in accordance with the financing agreement will be adhered to.

25. In making a proposal for appointment of a private auditor, the project should provide IFAD with relevant supporting documentation and should address the following questions:

i. Does the firm adhere to internationally accepted auditing standards? The firm's audit procedures and methods should ensure compliance with such standards.

ii. Is the firm independent of the project entity to be audited and of the people appointing the auditor?

iii. What is the legal status of the firm? This includes such aspects as partners' status and any limited liability provision in the firm's articles.

iv. Are any of the assigned audit staff employed by or closely linked to the project entity to be audited, or to any government body or public agency?

v. Can the auditor confirm that there is no conflict of interest or lack of independence implicit in accepting the appointment?

vi. Is the auditor committed to providing qualified and experienced staff that can ensure timely submission of audit reports?

26. The auditors shall adopt the Standards of Auditing acceptable to IFAD and the Government while auditing and reporting on the Project Accounts. The accounting and auditing standards adopted should be disclosed in the notes to the accounts. The audit report shall contain a clear expression of the auditor's opinion regarding the financial statements. It should include a financial statements audit, a compliance audit and should include a Management Letter. It should also include a section on the project's compliance with loan covenants, particularly those dealing with financial matters. The auditor shall review the project accounts including the financial statements and the SOEs and give an opinion on the same. In addition the audit report shall address (a) the adequacy of accounting and internal controls, including the internal audit mechanism, for monitoring expenditures and other financial transactions and ensuring safe custody of the project assets and (b) the adequacy of documentation maintained by the project for all transactions. Through the management letter, the auditor will identify deficiencies in the project accounting records, procedures, systems and internal controls and make appropriate recommendations for improvement. It will also include any significant matters that come to the auditor's attention and might have a material impact on project implementation.

27. In reviewing the project accounts and financial statements, the auditor will:

- verify that acceptable accounting standards have been consistently applied and indicate any material deviation from these standards, and the effect of such deviation on the annual financial statements;
- assess the adequacy of accounting and internal control systems (procedures and responsibilities) for monitoring expenditures and other financial transactions (commitment, review, approval, payment and accounting) and ensuring safe custody of project-financed assets, and document any instances where controls are lacking or need strengthening;
- determine whether the PMU/DMUs has maintained adequate documentation for all transactions; e.g. procurement documents, contracts, suppliers. invoices, letters of credit and evidence of payment, and ascertain that expenditures were properly authorized and in compliance with legal requirements;
- verify the numerical accuracy of statements and accounts;
- verify that disbursement requests for expenditures submitted to IFAD are eligible for financing under the loan agreement, and identify clearly any ineligible expenditures; and
- carry out a physical verification of any significant assets purchased and confirm their existence and use for project purposes.

• report on the status of implementation of recommendations issued in the previous years

28. The auditor shall discuss the findings in the form of a draft report with the project's finance and accounts department and the Project Director. The auditor shall consider and include the response of the project in the final report.

29. The audited statement of accounts along with the audit report and the Management Letter shall be furnished by the project to IFAD within six months of the end of each Fiscal Year. The auditor shall discuss the draft management letter with the PD/FAM and include the Project's replies/comments in the final version of the management letter. In any case, the project shall submit to the auditors and IFAD the reply to the management letter of the auditors within one month of receipt thereof.

30. The Project shall maintain a Log of Audit Observations made by the auditors and also a Table of Summary Status of Audit Observations and get it validated by the auditor during the subsequent audit or earlier. The specific requirements to timing of the appointment of the auditors and deadlines for submission of audit reports are found in the IFAD Guidelines on Project Audits. While, the conduct of project audit is the responsibility of the Government, it will keep IFAD informed at various stages of the audit process.

31. **Internal Audit**: A qualified CA or a firm of Chartered Accountants will be engaged as Internal Auditor (IA) of the project who will be responsible for the internal audit of the PMU, the district offices and the JRMCs. The IA shall examine the records of the project for eligibility of expenditure, supporting documents, authorizations and also review the internal controls at the PMU and district level. The IA shall prepare and submit quarterly reports along with a validated report of the previous quarter in corrective actions taken in respect of the deficiencies noted during the course of internal audit and also ensure legal compliances where required. An Audit Officer will be appointed at the PMU and tis person will be trained by the IAs and the audit officer will undertake audit of accounts of JRMCs. The ToR of the Internal Auditor is provided in Annex 6.1 to this chapter.

32. **Special/Designated Account Statements** – During loan negotiations with the Government of India the matter in respect of audit of the Special/Designated Account by the C&AG will be discussed and agreed upon.

33. If the findings of the review of the audit gives cause for concern IFAD will send as soon as possible, and in any case no later than 60 days from the receipt of the audit report, send a letter to the Government, notifying the Government of the nature of the concerns and requesting clarification or follow-up as appropriate.

34. In case of non-compliance with audit requirement, IFAD may choose to engage an independent auditor of its choice and/or suspend disbursement and close the loan.

35. **Ineligible Expenses.** If the auditors during the course of their review find ineligible expenses, these will be reported as an exception regardless of their materiality. If the ineligible expenditures are immaterial and if the project agrees on the auditor's review, IFAD recommends immediate correction, in order to avoid unnecessary qualifications. If SOEs are found to include ineligible expenditures, the borrower will be required to refund the amounts in question.

36. **Annual audit statements preparation and submission to IFAD and other entities**: The DMU shall submit monthly statements to the PMU in prescribed formats which contains the expenditure by components, by categories, comparative statement of actual and budgeted expenditure, bank reconciliation statements, trial balance etc. by the 7th of the month.

37. The JRMCs shall also send monthly progress report to the DMU which shall contain the financial progress viz. expenditure incurred by each activity and the bank statements. They shall also submit quarterly utilization certificates to the DMU duly signed by the Co-ordinator. The project shall have the accounts of the JRMCs audited by the internal auditor.

38. The PMU will submit six-monthly progress and annual progress reports to IFAD and its cofinanciers in English. These reports will use a predetermined format to be agreed at project start-up to provide essential information on the physical and financial progress of project activities and regular assessment of the project impact. Reports will be prepared at district level and consolidated at the by the PMU. All financial Statements of the operations, resources and expenditures relating to the project will be prepared by PMU for each fiscal year. These statements will be sent to IFAD within three months after the end of the fiscal year.

39. The financial statements of the project will be prepared in accordance with the Cash Basis of Accounting Method of the International Public Sector Accounting Standards (IPSAS). The financial statements of the project for each fiscal year should consist of :

- (i) statement of cash receipts and payments (by category)
- (ii) statement of cash receipts and payments (by components)
- (iii) statement of comparative budget and actual amount providing brief explanations for variances greater than 20%
- (iv) yearly and cumulative statements of sources and application of funds, which should disclose separately IFAD funds, Govt funds and beneficiaries funds;
- (v) the Balance Sheet which should disclose bank and cash balances, that agree with the statement of sources and application of funds, fixed assets and liabilities and
- (vi) Yearly and cumulative SOEs by withdrawal application and category of expenditures.
- (vii) Notes to the Financial Statements

The formats of the PFS are provided in Annex 6.2 to this chapter.

40. **Taxes**: Section 11.01 of the General Conditions stipulates that the Loan and all Loan Service Payments shall be exempt from all Taxes, and all loan service payments shall be made free and clear of taxes. It is the policy of the Fund that Loan proceeds are not to be used to pay Taxes, including (but not limited to) any taxes levied on the imports, procurement or supply of any good, civil work or services financed by the Loan but excluding taxes on the overall income. If taxes are to be absorbed by the Government, they will be recorded under the counterpart contributions. A separate record should be kept for taxes paid by the Project.

41. **Materiality**: Information is material if its omission or misstatement could influence the decisions or assessment of the users made on the basis of the financial statements. Materiality depends on the nature or size of the item or error judged in the particular circumstance of omission or misstatement. In the public sector, materiality includes compliance with authorities, legislative concern or public interest. In the context of IFAD-financed operation will include compliance with the Project Financing Agreement and in particular the requirement that IFAD funds may only be used for the purpose stated therein.

42. **Project completion report with reference to financial management:** The Project will be completed and loan closed as specified in the Finance Agreement.

- Withdrawal Applications may be continued to be submitted up to the Loan Closing date i.e. six months after the project completion date.
- Only payments made, or payments due for goods, works and services, which have been provided prior to the project completion date, qualify for disbursement. The only additional expenditures allowed are for winding up activities (salaries, audit fees, project completion report)
- No replenishment will be made after the project completion date.
- The Special/Designated Account recovery will begin early enough to ensure that no balance remains in the special/designated account at the closing date.
- The following three steps will be adhered to for loan closing: (i) final statement of accounts, (ii) preparation of final audit report, and (iii) preparation of Project Completion Report

43. Accounting software to be used in both state PMU and district PMUs: The project will maintain accounts and records in accordance with internationally accepted accounting standards and

consistently applied accounting practices adequate to reflect the operations, resources and expenditures related to the project until the Financing Closing Date, and shall retain such accounts and records for at least ten (10) years thereafter.

44. The project will maintain its accounts in accounting software 'Tally'. The books of accounts will be maintained by each district office of SoCRAN and consolidated at the PMU. The accounting will be a double entry accounting system and will use the cash basis of accounting in accordance with the International Public Sector Accounting Standards (IPSAS-Cash).

45. A uniform structure of accounts shall be prepared by the Finance and Administration Manager (FAM) at the PMU which will group the accounts by the Components and sub-components. The ledger accounts shall be based on the activities to be carried out. The grouping of each account shall be carefully done so that all expenditure under a component can be easily generated from the software. The FAM and the Accounts Officer (AO) shall also make use of the Cost Centre facility available in the software. The Categories of expenditures and the Financiers shall be used as Cost Centres. This will enable the project to generate expenditure statement by category and by financier.

46. The facility of Grouped Accounts – clubbing of the PMU and DMU accounts shall be made use of. This will help in consolidation of accounts at the PMU level. Monthly Accounts from DMUs will be consolidated at the PMU and then a consolidated monthly Trial Balance will be generated for SoCRAN as a whole.

47. Training from the software vendor should be obtained to understand the various features of the software and consequently to optimally utilize it. If required, customization may be sought from the vendor to generate reports in the formats required by IFAD. The customized Tally software can be implemented at all levels of SoCRAN.

48. The PMU/DMUs shall take periodical printouts of the books of accounts viz. Cash Book, Bank Book, Journal, Ledger, Trial Balance, Bank Reconciliation statement, expenditure by components and expenditure by categories. Regular back up of the data shall be taken and stored off site.

49. Besides the books of accounts the PMU/ DMUs shall maintain the following registers/ records (i) Register of procurements (ii) Register of fixed assets (iii) Register of advances (iv) Register of contracts (v) Contract monitoring forms (vi) Vehicle Log book (vii) Tax register (viii) Salary register (ix) Cheque issued register (x) Stock/ stationery register (xi) Tour register etc.

50. The Project shall prescribe formats and get the books of accounts and other records, required to be maintained by FIGs/ JRMCs printed and distributed to the target villages.

51. **Asset Management:** Proper record of fixed assets shall be maintained at the PMU and the DMUs which shall include the date of purchase, the specification, the unique identification number, the location and the cost. In case assets are allocated to any staff member this should be mentioned in the asset register. The fixed assets shall be physically verified at least once in a year and the evidence thereof shall be recorded in the asset register. All assets procured by the project shall be adequately insured. The asset registers should be regularly reconciled with the books of accounts.

52. The other finance related Annexes attached to this Chapter are listed below:

Annex 6.3 : Sample Annual Work Plan and Budget

Annex 6.4 : Indicative chart of accounts

Annex 6.5 : Sample ToR for accounting software

Annex 6.6 : Sample monthly budget execution report

Annex 6.7 : Financial reporting tables

Annex 6.8 : Fixed Asset Register

Annex 6.9 : Petty cash forms

Annex 6.10: Vehicle record forms

Annex 6.11	:	Sample	terms	of	reference	for	Audit
------------	---	--------	-------	----	-----------	-----	-------

Annex 6.12 : Expenditure record forms

Annex 6.13 : Sample recovery plan

Annex 6.14 : Designated account reconciliation statement

Annex 6.15 : Check-list for a withdrawal application

Annex 6.1: Terms of Reference of the Internal Auditor:

The Internal Auditor shall be a member of the Institute of Chartered Accountants of India. He/She shall be responsible for ensuring the following:

- 1) that the project accounts have been prepared in accordance with the consistently applied international accounting standards.
- 2) that all books of accounts are updated, bank accounts reconciled and books of accounts are printed on a monthly basis.
- 3) that all necessary supporting documents, records have been separately filed in respect of all project activities and that clear nexus exist between supporting documents, accounting books and records and the periodic financial reports of the DMUs and the PMU.
- 4) review the internal control systems, its effectiveness in project implementation and suggest improvements if required.
- 5) review of the monthly/ quarterly expenditure statement submitted by the districts indicating the approved budget provision and expenditure during the month, cumulative expenditure against the activity / sub activity during the period and ensure that it is in accordance with the books of accounts.
- 6) review that the breakup of expenditure between IFAD and counterpart funding is in accordance with the IFAD financing agreement.
- 7) that all funds have been used in accordance with the conditions of the relevant legal agreements and only for the purposes for which the financing was provided. Relevant legal agreement includes the financing agreement and the agreement with NGOs.
- 8) that the records of all procurement, agreement, work / purchase orders, invoices, receipts, stock registers etc. are the properly maintained, duly linked and retained. The auditor should also review contract management and whether terms for payment to contractors are being adhered to.
- 9) review statutory compliances as may be applicable such as proper deduction and filing of TDS, Income tax, PF returns and other applicable
- 10) review the efficiency and timeliness of the funds flow mechanism at the PMU and DMUs and whether there are delays and which could impact the timely implementation of project. The auditor should also identify and report the reasons for such delays and possible remedial measures.
- 11) that the SOEs are submitted in timely manner, whether releases of funds are conditional to receipt of SOEs and reports exceptions if any.
- 12) that all project funds received under the project have been used with due attention to economy, efficiency and effectiveness and only for the purposes for which the financing was provided.
- 13) that adequate records are maintained regarding the assets created and assets acquired by the project, including description, details of cost, identification and location of assets. Carry out physical verification of a sample of assets created out of the project and comment on its utilization and whether they are adequately safeguarded.
- 14) that the accounting for the advances to JRMCs and project implementing staff/units are properly recorded in the accounting books; whether systems are in place for monitoring the receipt of periodic financial reports and follow up on overdue reports are adequate. Exceptions should be identified and reported.
- 15) that the accounting records of the JRMCs are properly kept with supporting documents and authorization of the approving committee; goods procured by the JRMCs have followed a transparent procurement process and the basic tenets of economy, efficiency and social equity have been followed.

16) that the compliance report on audit observations pointed out in the reports relating to earlier audit is made and corrective actions taken on those points are furnished in the audit report of the subsequent phase.

The Internal Auditor shall visit each JRMC, district office and the PMU every quarter for conducting the audit and submit quarterly reports to the PD and also respective DPMs within 60 days of the end of the quarter.

Annex 6.2: Project Financial Statements

SAMPLE OF PROJECT AUDITED FINANCIAL STATEMENTS

Project Name.....

Implementing Agency.....

IFAD Loan/Grant Number.....

PROJECT FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 20XX

PROJECT NAME AND NUMBER FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 20XX

CONTENTS	F	PAGE
Project Information and performance	3	
Statement of project management responsibilities		4
Report of the independent auditor	5	
Statement of cash receipts and payments (by category)	6	
Statement of cash receipts and payments (by component)	7	
Statement of comparative budget and actual amount	8	
Statement of Special Account movements	9	
SOE-Withdrawal Application Statement	10	
Notes to the Financial Statements	12-	15

PROJECT NAME AND NUMBER PROJECT INFORMATION AND PERFORMANCE PROJECT NAME AND NUMBER

- Institutional Details/Information: Implementing agency, status, location, names, account numbers and address of bankers (Special and Project accounts) name and address of independent auditors
- Members of the Project Coordinating Unit: Names and roles
- **Background Information on the Project**: Source of financing: size of Loan/Grant(s), effective and closing date(s)
- Project Objectives: As per Design Completion/Appraisal Report
- **Project Costs**: By component and category of expenditures as per Financing Agreement and Design Completion/Appraisal Report
- Summary of Performance: Physical progresses as per Progress/Supervision Reports

PROJECT NAME AND NUMBER

STATEMENT OF ACCOUNTING OFFICER AND PROJECT COORDINATOR'S RESPONSIBILITIES

(INDEPENDENT AUDITOR'S LETTERHEAD)

REPORT OF THE INDEPENDENT AUDITORS

(Consolidated auditors report on the Project Financial Statements, the Special Account and the SOEs Opinion)

PROJECT NAME AND NUMBER STATEMENT OF RECEIPTS AND PAYMENTS (BY CATEGORY OF EXPENDITURES) FOR THE YEAR ENDED DECEMBER 31, 20XX

		NI (00)///		Cumulative
		Notes		20XX	20XX-1	to date
				Local	Local	
				currenc	currenc	Local
				У	У	currency
	Balance B/F		4	XXX	XXX	
	FINANCING					
	IFAD Credit ²⁸					
	Initial Deposit					XXX
	Replenishments to SA			XXX	XXX	XXX
	IFAD Direct Payments		5	XXX	XXX	XXX
	Government Funds		6	XXX	XXX	XXX
	Other Donors		7			
	Other Receipts		8			
	TOTAL FINANCING			XXX	XXX	XXX
	PROJECT EXPENDITURES: (BY CATEGORY OF					
0-	EXPENDITURES)					
Ca						
ו 1			0	vvv	vvv	vvv
י 2	RRR		9			
2	DDD		9	~~~	~~~	~~~
3	CCC			XXX	XXX	XXX
4	DDD			XXX	XXX	XXX
5	EEE			XXX	XXX	XXX
6	GGG			XXX	XXX	XXX
7	ННН			XXX	XXX	XXX
8	LLL			XXX	XXX	XXX
			-	XXX	XXX	XXX
	Government Funds					
1	ΑΑΑ			XXX	XXX	XXX
2	BBB			XXX	XXX	XXX
	TOTAL		-	XXX	XXX	XXX
	TOTAL PROJECT EXPENDITURES			XXX	xxx	xxx
	BALANCE C/F		4	ххх	ххх	ххх

²⁸ Separate analysis to be provided in case of different sources of IFAD funding (loan, component grant, supplementary grant) detailing financing , expenditures and balance for each source of funding

PROJECT NAME AND NUMBER STATEMENT OF RECEIPTS AND PAYMENTS (BY COMPONENT) FOR THE YEAR ENDED DECEMBER 31, 20XX

					Cumulative
		Notes	20XX	20XX-1	to date
			Local	Local	Local
			currency	currency	currency
	Balance B/F	4	XXX	XXX	
	FINANCING				
	IFAD Credit				
	Initial Deposit				XXX
	Replenishments to SA		XXX	XXX	XXX
	IFAD Direct Payments	5	XXX	XXX	XXX
	Government Funds	6	XXX	XXX	XXX
	Other Donors	7			
	Other Receipts	8			
	TOTAL FINANCING		XXX	XXX	XXX
	PROJECT EXPENDITURES:				
	(BY COMPONENT)				
Comp	IFAD CREDIT				
A	AAA		ХХХ	ХХХ	ХХХ
В	BBB		XXX	XXX	XXX
С	CCC		XXX	XXX	XXX
			XXX	XXX	XXX
	Government Funds				
Α	AAA		XXX	XXX	XXX
В	BBB		XXX	XXX	XXX
	TOTAL		XXX	XXX	XXX
	TOTAL PROJECT EXPENDITURES		XXX	XXX	ххх
	BALANCE C/F	4	XXX	ххх	ххх

PROJECT NAME AND NUMBER STATEMENT OF COMPARISON OF BUDGET AND ACTUAL AMOUNTS FOR THE YEAR ENDED DECEMBER 31, 20XX

		ĺ			
			20XX	20XX	
			Budget	Actual	Variance
			Local	Local	Local
		Notes	currency	currency	currency
			XXX	XXX	XXX
	FINANCING				
	IFAD Credit				
	Replenishments to SA		ХХХ	ХХХ	ХХХ
	IFAD Direct Payments		ХХХ	XXX	ХХХ
	Government Funds		XXX	XXX	XXX
	TOTAL FINANCING		XXX	XXX	XXX
	PROJECT				
	EXPENDITURES:				
	(BY CATEGORY OF				
	EXPENDITURES)				
Cat	IFAD CREDIT				
1	AAA		XXX	XXX	XXX
2	BBB		XXX	XXX	XXX
3	CCC		XXX	XXX	XXX
4	DDD		XXX	XXX	XXX
5	EEE		XXX	XXX	XXX
6	GGG		XXX	XXX	XXX
7	ннн		XXX	XXX	XXX
8	LLL		XXX	XXX	XXX
			XXX	XXX	XXX
	Government Funds				
1	AAA		XXX	XXX	XXX
2	BBB		XXX	XXX	XXX
	TOTAL		XXX	XXX	XXX
	TOTAL PROJECT EXPEND	TURES	XXX	ххх	ххх
	Surplus/Deficit for the period	od	XXX	ххх	XXX

The excess/deficit of actual expenditures over the Budget of X% was due to....

PROJECT NAME AND NUMBER STATEMENT OF SPECIAL ACCOUNT ACTIVITIES FOR THE YEAR ENDED DECEMBER 31, 20XX

Account No: _____ Bank: _____

Address:_____

				USD (or as	Local
				otherwise	Currency
				denominated)	Equiv
Opening Balance			Notes		
				XXX	XXX
Add:					
IFAD Replenishme	ents:				
Date	WA No	XXX			
Date	WA No	XXX			
		XXX		XXX	XXX
Bank Interests				XXX	XXX
Total				XXX	XXX
Deduct:					
Transfers to Oper	ating Acco	ounts:			
Date	-	ХХХ			
Date		XXX			
		XXX		XXX	XXX
Expenses					
directly paid for					
the account					
				XXX	XXX
Bank Charges				XXX	XXX
Exchange Rate Di	fference				XXX
Closing Balance a	as at 31/12	/200X		XXX	XXX
(as per Bank State	ement)				

			PROJECT	NAME AND N	UMBER		
		SOEs-	WITHDRAWA	L APPLICATI	ON STATEM	ENT	
		FOR	THE YEAR E	NDED DECE	MBER 31, 20X	X	
		by Ca	tegory of Exp	enditures in	Local Currer	ncy	
		Category	Category		In USD		Net
Note		descriptio	descriptio		Equivalen	Rejected	Reimburse
S		n	n	Total	t	from IFAD	d
	Cat No	1	2				
	WA						
	No:						
		XXX	XXX	XXX	XXX	XXX	XXX
		XXX	XXX	XXX	XXX	XXX	XXX
		XXX	XXX	XXX	XXX	XXX	XXX
		XXX	XXX	XXX	XXX	XXX	XXX
	Total						XXX
	WA P	Pending for Su	ubmission:				
	WA						
	No:	XXX	XXX	XXX	XXX	XXX	XXX
		XXX	XXX	XXX	XXX	XXX	XXX
							XXX
	ΤΟΤΑ						
	L	XXX	XXX	XXX	XXX	XXX	XXX

Withdrawal Applications are submitted for reimbursement to IFAD using the historical exchange rate of the transfers to the Operating Account

Expenditures partially or totally rejected by IFAD (if any) should be detailed here.

This statement should be reconciled with the Statement of Receipts and Payments.

PROJECT NAME AND NUMBER

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 200X

1. FINANCIAL REPORTING UNDER INTERNATIONAL PUBLIC SECTOR ACCOUNTING STANDARDS (IPSAS)

In accordance with International Public Sector Accounting Standards (IPSAS), notes to the financial statements of an entity should:

- Present any information about the basis of preparation of the financial statements and the specific accounting policies selected and applied for significant transactions and other events, and
- Provide additional information which is not presented on the face of the financial statements but is necessary for a fair presentation of the entity's cash receipts, cash payments, cash balances and other statements as statement of financial position

2 SIGNIFICANT ACCOUNTING POLICIES

The principle accounting policies adopted in the preparation of these financial statements are set out below:

A Basis of Preparation

The financial statements have been prepared in accordance with International Public Sector Accounting Standards (IPSAS) with particular emphasis on Cash Basis Financial Reporting under the Cash Basis of Accounting

B Cash Basis of Accounting

The cash basis of accounting recognizes transactions and events only when cash is received or paid by the entity.

C Foreign Currency Transactions

Foreign currency translation for the income and expenditure account items are converted using the actual historic exchange rate at the conversion from special to local account. Where part of the expenditures has to be met from the proceeds of subsequent draw downs from special to local account, this is done on First in First out (FIFO) basis. All local expenditures paid from the local accounts/currency are translated back to the USD at the actual rate used for the transfer from special to local account. Cash balances held in foreign currency are reported using the closing rate. Gains/Losses on foreign currency transactions/balances are dealt within the Statement of Special Account Activities

3 BUDGET

The budget is developed on the same accounting basis (cash basis), same classification and for the same period as the financial statements. Material variances (above XXX) have been explained as notes to the financial statements

4 CASH/ FUND BALANCES

Reconciliation		
	20XX	20XX-1
	Loc	Loc
	currency	currency
Cash Accounts	XXX	XXX
Advances	XXX	XXX
	XXX	XXX

Analyses of aging of advances to be included detailing and providing reasons for long outstanding advances

CASH DETAILS 4-a

	20XX Loc currency	20XX-1 Loc currency
A/c No Project Operating		
Account	XXX	XXX
A/c No IFAD Special Account		
(as per SA Statement)	XXX	XXX
Petty cash	XXX	XXX
	XXX	XXX

5 DIRECT PAYMENTS

These payments were made directly by IFAD from the Loan/Grant account to the specified supplier/service provider in accordance with the terms and conditions of the financing Agreement

Include here details of direct payments

WA, Date, currency and amount received, amount in local currency

6 GOVERNMENT COUNTERPART FUNDS

Details here. Cumulative contributions, yearly contributions (compared to budget). For information only Include details of tax treatment and counterpart contributions as tax exemption.

7 OTHER DONOR FUNDS

	20XX Loc currency	20XX-1 Loc currency
List of Donors	XXX	XXX
	XXX XXX XXX	XXX XXX XXX

Add details of cumulative and expected contributions

8 OTHER RECEIPTS

	20XX Loc currency	20XX-1 Loc currency
Interest Income	xxx	XXX
other income (specify)	XXX	XXX
	XXX	XXX
	XXX	XXX

9 NON-CURRENT ASSETS (for disclosure purposes only)

Financial Statement Currency

	Ca	t 1 -			Cat 3-			
	Infrast	ructure	Cat 2 V	/ehicles	Equi	pment		
	20XX	20XX-1	20XX	20XX-1	20XX	20XX-1		
Opening Balance	XXX	XXX	XXX	XXX	XXX	XXX		
Additions								
(Statement of								
Receipts and								
Payments)	XXX	XXX	XXX	XXX	XXX	XXX		
Disposals	XXX	XXX	XXX	XXX	XXX	XXX		
Closing Balance	XXX	XXX	XXX	XXX	XXX	XXX		

This schedule includes all assets acquired from the commencement of the Project. These assets are stated at cost. Existence and beneficial ownership to be verified by the auditors. Apart of the summary schedule, details schedules for yearly changes to be included.

10 YEARLY PROCUREMENTS

Include here a list of the yearly procurements including methods

11 ALLOCATION AND USE OF THE FUNDS OF THE LOAN

	Allo	ocated	Dist	oursed	Available Balance			
		Equivalent		Equivalent		Equivalent		
	Amount	USD (or	Amount	USD (or	Amount	USD (or		
Category	SDR	otherwise)	SDR	otherwise)	SDR	otherwise)		
AAA	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX		
BBB	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX		
CCC	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX		
DDD	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX		
EEE	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX		
FFF	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX		
	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX		

12 RECONCILIATION OF FUNDS DISBURSED BY IFAD AND FUNDS RECEIVED BY THE PROGRAMME

Reconciliation here

Annex 6.3 : Sample Annual Work Plan and Budget

Table 1 : Summary Annual Work Plan and Budget by component and by financier

			Govt of				
Component	IFAD Loan	IFAD Grant	Nagaland	CSS- Gol	CSS- GoN	Beneficiaries	Total
Component 1							
Sub Component							
Sub Component							
Sub Component							
Component 2							
Sub Component							
Sub Component							
Sub Component							
Component 3							
Sub Component							
Sub Component							
Sub Component							
Total							

Table 2 : Summary Annual Work Plan and Budget by category and by financier

			Govt of				
Component	IFAD Loan	IFAD Grant	Nagaland	CSS- Gol	CSS- GoN	Beneficiaries	Total
Category I							
Category II							
Category III							
Category IV							
Category V							
Category VI							
Category VII							
Total							

Table 1 : Summary Annual Work Plan and Budget by category and component

		v	<u> </u>		
Component	Comp 1	Comp 2	Comp 3	Total	
Category I					
Category II					
Category III					
Category IV					
Category V					
Category VI					
Category VII					
Total					

Table 3 : Sample Annual Work Plan and Budget

Diamond Activities	Indica	ators	Ti im	ime f plen	table nenta	for tion	ible Unit/ aff			Implen	nentation targe	ts				Bud	get		Actual			Remarks	
Planned Activities	Project Indicators	RIMS Indicators	Q 1	Q2	2 Q 3	Q 4	Respons Sta	Apprai sal (Total)	Planned (Annual)	Unit Cost	Achieved (Cumulative)	%	Achieved (Annual)	%	Appraisal (Total)	Planned (Annual)	Budget Category	Financier	Spent (Cumulative)	%	Spent (Annual)	%	
(A)	(B)	(C)		((D)		(E)	(F)	(G)	(Ga)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(0)	(P)	(Q)	(R)	(S)	
Component 1																							
Sub Component																							
Activity 1																							
Activity 2																							
Total Component 1																							
Component 2																							
Sub Component																							
Activity 1																							
Activity 2																							
Total Component 2																							
Component 3																							
Activity 1																							
Activity 2																							
Activity 3																							
Total Component 3				1										1						1			
Grand Total																							

Annex 6.4 : Indicative chart of accounts

Table No	Group- Sub Group- Ledger	Category- Cost Centres		Sourc	ce of Finan	се			
10000	Group - Better Jhum and Conservation		IFAD Loan	IFAD Grant	CSS-Gol	CSS-GoN	GoN	Beneficiaries	Convergence
10100	Sub Group -Stakeholders Consultation								
	Ledger Account								
10101	District level consultation	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
10102	Village level consultation with VCs	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
10103	FIG formation	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
10200	Sub Group -Land Use Planning								
	Ledger Account								
10201	Capacity building of NaGRSEC	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
10202	Land use maps	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
10203	Land suitability classification maps	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
10204	GPS to VLWs	Equipment & Materials	80%	10%	0%	0%	20%	0%	0%
10205	Capacity building of SAAB	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
10206	Training VC members	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
10207	Training and Support to Lead Farmers	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
10208	Honorarium to Lead Farmers	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
10300	Sub Group - Orientation training to								
	PMU and DPMU staff								
	Ledger Account								
10301	PMU staff orientation in Delhi	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
10302	DPMU staff orientation in Kohima	Training & Workshops	100%	0%	0%	0%	0%	0%	0%

India

Table No	Group- Sub Group- Ledger	Category- Cost Centres		Sourc	ce of Finan	се			
			IFAD Loan	IFAD Grant	CSS-Gol	CSS-GoN	GoN	Beneficiaries	Convergence
10400	Sub Group -Better Jhum								
	Ledger Account								
10410	a. Fallow management								
10411	Legume cover crop - annual	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
10412	Legume cover crop - perennial	Goods, Services & Inputs	90%	10%	0%	0%	0%	0%	0%
10413	Low cost bunds	Goods, Services & Inputs	0%	0%	90%	10%	0%	0%	0%
10420	b. Current Jhum improvement								
10421	Bunds, SWC	Goods, Services & Inputs	0%	0%	90%	10%	0%	0%	0%
10422	Farmer training	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
10423	Supply of quality seeds	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
10424	Supply of planting materials, orchards	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
10500	Sub Group - Village Forest Conservation								
10501	Contour trenches in CCAs	Goods, Services & Inputs	0%	0%	90%	10%	0%	0%	0%
10502	Nursery establishment	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
10503	Planting & maintenance	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
10504	Protection of water sources	Works	85%	0%	0%	0%	15%	0%	0%

Table No	Group- Sub Group- Ledger	Category- Cost Centres		Sourc	ce of Finan				
			IFAD Loan	IFAD Grant	CSS-Gol	CSS-GoN	GoN	Beneficiaries	Convergence
10600	Salaries for Circle & Village levels								
10610	1. Circle and village level staff								
10611	Contractual staff for Circle office	Salaries & Allowances	50%	0%	0%	0%	50%	0%	0%
10612	Village level workers	Salaries & Allowances	50%	0%	0%	0%	50%	0%	0%
10613	Motor cycle allowances	Salaries & Allowances	50%	0%	0%	0%	50%	0%	0%
11000	Support to settled agriculture								
11100	1. Support to existing settled agriculture								
11110	a. Training and FIG promotion for FIG								
11111	FIG promotion for TRC/ WRT	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
11112	Farmer training	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
-									
11120	b. Support for wetland agriculture								
11121	Improved soil fertility measures - WRC/TRC	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
11122	Support for wetland agriculture	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
11130	c. Support for existing orchards								
11131	FIG promotion & support	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
11132	Low cost SWC	Works	85%	0%	0%	0%	15%	0%	0%
11132	Training on upland agriculture	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
11133	Support for private nurseries and trainings	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
11134	Supply of quality planting materials	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
11140	d. Irrigation Support								
11141	Water storage and delivery system	Works	85%	0%	0%	0%	0%	15%	0%
11200	2. Support to Agrculture Research Station								
11201	Support to Agriculture Research Station	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
11300	3. Technical Assistance								
11301	Preparation of agro climatic atlas	Grant & Subsidies	0%	100%	0%	0%	0%	0%	0%

India

Table No	Group- Sub Group- Ledger	Category- Cost Centres		Sour	ce of Finan	се			
			IFAD Loan	IFAD Grant	CSS-Gol	CSS-GoN	GoN	Beneficiaries	Convergence
20000	Group - Value Chain Development								
	A: Crop Based								
20100	Sub Group - Production Support								
	Ledger Account								
20101	FIGs promotion	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
20102	CRP training	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
20103	Training of FIG members	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
20104	CRP Engagement	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
20105	Production of improved planting material by CRPs	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
20106	Supply of Planting material -Large Cardamom	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
20107	Supply of Planting material -Naga Chilli	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
20108	Supply of Planting material - Ginger	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%

Table No	Group- Sub Group- Ledger	Category- Cost Centres		Sourc	ce of Finan				
			IFAD Loan	IFAD Grant	CSS-Gol	CSS-GoN	GoN	Beneficiaries	Convergence
20200	Sub Group - Marketing Support								
20210	a. Marketing infrastructure								
20211	Aggregation centres/ commom facility centres	Works	85%	0%	0%	0%	15%	0%	0%
20212	Equipment for aggregation common facility centre	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
20213	Collection centres for storage and drying	Works	85%	0%	0%	0%	15%	0%	0%
20220	b. Marketing support								
20221	Design projects unspecified	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
20222	Participation in Trade fairs and Exhibitions	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
20223	Exposure visits	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
20224	Buyer-seller meet	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
20225	Support for setting up of Agroprocessing units	Goods, Services & Inputs	75%	0%	0%	0%	0%	25%	0%
20226	Digital delivery of extension Tablets	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
20227	Services for Digital Delivery of extension	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
20228	Organic Certiifcation Spices	Consultancies	0%	0%	90%	10%	0%	0%	0%
20230	c. Establishment of marketing section in DoH								
20231	Computer set	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
20232	Furniture	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
20233	Vehicles	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
20234	Training Staff	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
20235	Studies	Consultancies	85%	0%	0%	0%	15%	0%	0%
20236	Meetings and workshops	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
20300	Sub Group - TA for Spices cultivation								
20301	TOT for spices	Grant & Subsidies	0%	100%	0%	0%	0%	0%	0%
20302	Consultants- Marketing & Horticulture	Grant & Subsidies	0%	100%	0%	0%	0%	0%	0%
20400	Sub Group - Innovations								
	Innovation Fund (Project)	Goods, Services & Inputs	70%	100%	0%	0%	0%	30%	0%

India

Table No	Group- Sub Group- Ledger	Category- Cost Centres		Sour	ce of Finan	се			
			IFAD Loan	IFAD Grant	CSS-Gol	CSS-GoN	GoN	Beneficiaries	Convergence
	B: Livestcok Based								
21000	Sub Group - Pig Breeding								
	Ledger Account								
21100	1. Pig Breeding								
21110	a. Capacity Building								
21111	Capacity Building: Training of								
	farmers on breeding/ mgmt/ AH	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
21112	Capacity Building: Exposure visits- in state	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
21113	Capacity Building: Exposure visits- other states	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
21120	b. Pig Breeding Units								
21121	Pig Breeding Stock (6 pigs & 1 boar)	Goods, Services & Inputs	50%	0%	0%	0%	10%	50%	0%
21122	Construction of pig housing	Goods, Services & Inputs	50%	0%	0%	0%	0%	50%	0%
21130	c. Piggery Al unit								
21131	Boar semen station construction	Works	85%	0%	0%	0%	15%	0%	0%
21132	Processing lab, store and office for AI station for pigs	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
21133	AI for pigs: purchase of boars	Goods, Services & Inputs	0%	0%	90%	10%	0%	0%	0%
21134	Boar stations operating costs	Goods, Services & Inputs	0%	0%	90%	10%	0%	0%	0%
21140	d. Piglet distribution								
21141	Distribution of cross-bred piglets	Goods, Services & Inputs	50%	0%	0%	0%	0%	50%	0%

Table No	Group- Sub Group- Ledger	Category- Cost Centres		Sour					
			IFAD Loan	IFAD Grant	CSS-Gol	CSS-GoN	GoN	Beneficiaries	Convergence
21200	2. Poultry Improvement								
21210	a. Brooding Units								
21211	Brooding house 60 sq.m. & brooder equipment	Works	85%	0%	0%	0%	15%	0%	0%
21212	Day-old chicks & feed for pullet	Goods, Services & Inputs	0%	0%	90%	10%	0%	0%	0%
21220	b. Backyard Poultry								
21221	Backyard poultry unit, chicks & equipment	Goods, Services & Inputs	50%	0%	0%	0%	0%	50%	0%
21300	3. Mithun development - existing herds								
21301	Community mithun shelter/coral - materials, wood								
	& labour	Goods, Services & Inputs	50%	0%	0%	0%	0%	50%	0%
21302	Water supply to grazing areas and beneficiary								
	labour	Goods, Services & Inputs	50%	0%	0%	0%	0%	50%	0%
21303	Fencing grazing areas - barbed wire, poles								
	& labour	Goods, Services & Inputs	50%	0%	0%	0%	0%	50%	0%
21304	Mineral block demonstration	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
21310	4. Strengthening Vet Section								
21311	Diagnostic kits for CSF	Goods, Services & Inputs	0%	0%	90%	10%	0%	0%	0%
21320	5. Animal Health services								
21321	Pig vaccination	Goods, Services & Inputs	0%	0%	90%	10%	0%	0%	0%
21322	Mineral & vitamin supplements	Goods, Services & Inputs	0%	0%	90%	10%	0%	0%	0%
21323	Poultry vaccination	Goods, Services & Inputs	0%	0%	90%	10%	0%	0%	0%

Table No	Group- Sub Group- Ledger	Category- Cost Centres		Sour					
			IFAD Loan	IFAD Grant	CSS-Gol	CSS-GoN	GoN	Beneficiaries	Convergence
21330	6. Feed and Fodder demonstrations								
21331	Feed and fodder demonstration	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
21340	7a. Training VFAs								
21341	Equipment and field materials for VFA	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
21342	Training of VFA	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
21350	7b. Training CAHWs								
21351	Training of CAHWs	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
21352	Exposure visit	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
21353	Equipment for CAHW	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
21360	7c. Training Farmers								
21361	Training of farmers by VFAs and CAHWs	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
21370	8. Improvements to meat market chain								
21371	Training on hygienic meat handling	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
21372	Equipment for demonstration shops	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
21373	Slaughter slab units	Goods, Services & Inputs	0%	0%	90%	10%	0%	0%	0%
21380	9. Technical assistance	Grant & Subsidies	0%	100%	0%	0%	0%	0%	0%
21390	10. Support for livestock and fish culture	Goods, Services & Inputs	0%	0%	90%	10%	0%	0%	0%

Group- Sub Group- Ledger	Category- Cost Centres		Sour					
		IFAD Loan	IFAD Grant	CSS-Gol	CSS-GoN	GoN	Beneficiaries	Convergence
A. Salaries and allowances (DOH)								
Manager - Market Intelligence	Salaries & Allowances	90%	0%	0%	0%	10%	0%	0%
Manager - Market Policy & Research	Salaries & Allowances	90%	0%	0%	0%	10%	0%	0%
Manager - Market Linkage	Salaries & Allowances	90%	0%	0%	0%	10%	0%	0%
Marketing Assistants	Salaries & Allowances	90%	0%	0%	0%	10%	0%	0%
Travel	Operating costs	90%	0%	0%	0%	10%	0%	0%
Office operating costs	Operating costs	90%	0%	0%	0%	10%	0%	0%
Vehicle operating cost	Operating costs	90%	0%	0%	0%	10%	0%	0%
B. Salaries and allowances (Livestock)								
CAHW allowances	Salaries & Allowances	90%	0%	0%	0%	10%	0%	0%
VFA tranportation allowances	Operating costs	90%	0%	0%	0%	10%	0%	0%
C. Maintenance of Collection Centres								
Collection Centre/ Common facility centre	Operating costs	0%	0%	0%	0%	0%	100%	0%
	Group- Sub Group- Ledger A. Salaries and allowances (DOH) Manager - Market Intelligence Manager - Market Policy & Research Manager - Market Linkage Marketing Assistants Travel Office operating costs Vehicle operating cost B. Salaries and allowances (Livestock) CAHW allowances VFA tranportation allowances C. Maintenance of Collection Centres Collection Centre/ Common facility centre	Group- Sub Group- Ledger Category- Cost Centres A. Salaries and allowances (DOH) Manager - Market Intelligence Salaries & Allowances Manager - Market Policy & Research Salaries & Allowances Manager - Market Linkage Salaries & Allowances Marketing Assistants Salaries & Allowances Travel Operating costs Office operating costs Operating costs Vehicle operating cost Operating costs B. Salaries and allowances (Livestock) CAHW allowances Salaries & Allowances VFA tranportation allowances Operating costs C. Maintenance of Collection Centres Collection Centre/ Common facility centre	Group- Sub Group- Ledger Category- Cost Centres IFAD Loan IFAD Loan A. Salaries and allowances (DOH) Manager - Market Intelligence Salaries & Allowances 90% Manager - Market Policy & Research Salaries & Allowances 90% Manager - Market Linkage Salaries & Allowances 90% Marketing Assistants Salaries & Allowances 90% Marketing Assistants Salaries & Allowances 90% Marketing costs Operating costs 90% Office operating costs 00% 90% Vehicle operating cost 00perating costs 90% Vehicle operating cost 0perating costs 90% CAHW allowances Salaries & Allowances 90% VFA tranportation allowances Operating costs 90% VFA tranportation allowances Operating costs 90% Collection Centres Collection Centres 00 Collection Centre/ Common facility centre Operating costs 0%	Group- Sub Group- LedgerCategory- Cost CentresSourceIFAD LoanIFAD GrantA. Salaries and allowances (DOH)IFAD GrantManager - Market IntelligenceSalaries & Allowances90%Manager - Market Policy & ResearchSalaries & Allowances90%Manager - Market LinkageSalaries & Allowances90%Marketing AssistantsSalaries & Allowances90%Marketing AssistantsSalaries & Allowances90%Operating costs90%0%Office operating costs90%0%Vehicle operating cost00perating costs90%CAHW allowancesSalaries & Allowances90%VFA tranportation allowancesSalaries & Allowances90%C. Maintenance of Collection CentresOperating costs90%Collection Centre/ Common facility centreOperating costs90%Other and the centre of collection facility centreOperating costs90%	Group- Sub Group- LedgerCategory- Cost CentresSour	Group- Sub Group- LedgerCategory- Cost CentresSource of FinanceCSS-GolCSS-GolA. Salaries and allowances (DOH)IFAD LoanIFAD GrantCSS-GolCSS-GolManager - Market IntelligenceSalaries & Allowances90%0%0%Manager - Market Policy & ResearchSalaries & Allowances90%0%0%Manager - Market LinkageSalaries & Allowances90%0%0%Marketing AssistantsSalaries & Allowances90%0%0%Marketing AssistantsSalaries & Allowances90%0%0%Operating costs90%0%0%0%Office operating costs00%0%0%0%Vehicle operating costs00perating costs90%0%0%CAHW allowancesSalaries & Allowances90%0%0%Vehicle operating costs00perating costs90%0%0%Vehicle operating costs00perating costs90%0%0%Vehicle operating cost00perating costs90%0%0%Vehicle operating cost00perating costs90%0%0%CAHW allowancesSalaries & Allowances90%0%0%VFA tranportation allowancesOperating costs90%0%0%VFA tranportation allowancesOperating costs90%0%0%C. Maintenance of Collection CentresOperating costs0%0%0%Collection Centres00perating costs0%0% <td>Group- Sub Group- LedgerCategory- Cost CentresIFAD LoanIFAD GrantCSS-GolCSS-GolGolA. Salaries and allowances (DOH)Imager - Market IntelligenceSalaries & Allowances90%00%00%00%10%Manager - Market IntelligenceSalaries & Allowances90%00%00%00%10%Manager - Market Policy & ResearchSalaries & Allowances90%00%00%00%10%Manager - Market InkageSalaries & Allowances90%00%00%00%10%Marketing AssistantsSalaries & Allowances90%00%00%00%10%TravelOperating costs90%00%00%00%10%Office operating costsOperating costs90%00%00%10%Vehicle operating costOperating costs90%00%00%10%CAHW allowancesSalaries & Allowances90%00%00%10%CAHW allowancesSalaries & Allowances90%00%00%10%CAHW allowancesOperating costs90%00%00%10%CAHW allowancesSalaries & Allowances90%00%00%10%CAHW allowancesSalaries & Allowances90%00%00%10%CAHW allowancesSalaries & Allowances90%00%00%10%CAHW allowancesSalaries & Allowances90%00%00%10%CAHW allowancesOperating costs90%<t< td=""><td>Group- Sub Group- LedgerCategory- Cost CentresIFAD LoanIFAD GrantCSS-GolCSS-GolGolBeneficiariesA. Salaries and allowances (DOH)IFAD GrantCSS-Gol0.0%<</td></t<></td>	Group- Sub Group- LedgerCategory- Cost CentresIFAD LoanIFAD GrantCSS-GolCSS-GolGolA. Salaries and allowances (DOH)Imager - Market IntelligenceSalaries & Allowances90%00%00%00%10%Manager - Market IntelligenceSalaries & Allowances90%00%00%00%10%Manager - Market Policy & ResearchSalaries & Allowances90%00%00%00%10%Manager - Market InkageSalaries & Allowances90%00%00%00%10%Marketing AssistantsSalaries & Allowances90%00%00%00%10%TravelOperating costs90%00%00%00%10%Office operating costsOperating costs90%00%00%10%Vehicle operating costOperating costs90%00%00%10%CAHW allowancesSalaries & Allowances90%00%00%10%CAHW allowancesSalaries & Allowances90%00%00%10%CAHW allowancesOperating costs90%00%00%10%CAHW allowancesSalaries & Allowances90%00%00%10%CAHW allowancesSalaries & Allowances90%00%00%10%CAHW allowancesSalaries & Allowances90%00%00%10%CAHW allowancesSalaries & Allowances90%00%00%10%CAHW allowancesOperating costs90% <t< td=""><td>Group- Sub Group- LedgerCategory- Cost CentresIFAD LoanIFAD GrantCSS-GolCSS-GolGolBeneficiariesA. Salaries and allowances (DOH)IFAD GrantCSS-Gol0.0%<</td></t<>	Group- Sub Group- LedgerCategory- Cost CentresIFAD LoanIFAD GrantCSS-GolCSS-GolGolBeneficiariesA. Salaries and allowances (DOH)IFAD GrantCSS-Gol0.0%<

Table No	Group- Sub Group- Ledger	Category- Cost Centres		Sourc					
			IFAD Loan	IFAD Grant	CSS-Gol	CSS-GoN	GoN	Beneficiaries	Convergence
22000	Sub Group-Market Access Infrastructure								
	Ledger Account								
22100	1. Training & capacity building								
	of engineering staff of DOA								
22101	Purchase of survey equipment	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
22102	GPS for Kohima staff	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
22103	Design software	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
22104	Motor cycles	Equipment & Materials	80%	10%	0%	0%	20%	0%	0%
22105	One 4 WD field vehicle	Equipment & Materials	80%	10%	0%	0%	20%	0%	0%
22106	Training	Training & Workshops	100%	10%	0%	0%	0%	0%	0%
22107	TA for Road Design & Supervision	Consultancies	85%	10%	0%	0%	15%	0%	0%
22200	2. Climate resilient Farm link roads								
22201	Rehabilitation of earth roads	Works	0%	0%	90%	10%	0%	0%	0%
22202	Surveys, quality control	Consultancies	85%	0%	0%	0%	15%	0%	0%
22203	Gravelling of existing earth road with WBM	Works	85%	0%	0%	0%	15%	0%	0%
22204	Cross Drainage structures with protective works	Works	85%	0%	0%	0%	15%	0%	0%
22300	3. Other rural infrastructure								
22301	Construction of Channels for water harvesting	Works	0%	0%	0%	0%	0%	0%	100%
22302	Complementary access works	Works	0%	0%	0%	0%	0%	0%	100%
	A. Operating Costs								
22400	1. Market access infrastrucutre								
22401	Maintenance of earth roads	Operating costs	0%	0%	0%	0%	100%	0%	0%
22402	Maintenance of cross drainage structures	Operating costs	0%	0%	0%	0%	100%	0%	0%

Table No	Group- Sub Group- Ledger	Category- Cost Centres		Sour					
			IFAD Loan	IFAD Grant	CSS-Gol	CSS-GoN	GoN	Beneficiaries	Convergence
30000	Group -Project Management								
30100	Sub Group-Project Management Structure								
	Ledger Account								
30110	1. Vehicles PMU								
30111	Vehicles 4WD - Premium	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30112	Vehicle 4WD - Budget	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30113	Multiutility vehicle	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30114	Minibus	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30120	2. Vehicles DMU								
30121	Vehicle 4WD - Budget	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30122	Motorcycle	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30130	3. Other equipments								
30131	Video-conferencing facility - PMU and DMUs	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30140	4. Office Equipment PMU								
30141	Laptop computers	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30142	Desktop computers	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30143	Printers and scanners	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30144	Photocopy machines	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30145	Other equipments	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30146	Office furniture	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30147	Computer Peripherals	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30148	Tablets	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%

Table No	Group- Sub Group- Ledger	Category- Cost Centres		Sour					
			IFAD Loan	IFAD Grant	CSS-Gol	CSS-GoN	GoN	Beneficiaries	Convergence
30150	5. Office Equipment DMU								
30151	Laptop computers	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30152	Desktop computers	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30153	Printers and scanners	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30154	Other equipments	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30155	Office furniture	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30156	Computer Peripherals	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30160	6. Registration and other expenses for the society								
30161	Registration and other expenses for the society	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
30170	7. Annual Audit								
30171	Accounting software	Goods, Services & Inputs	85%	0%	0%	0%	15%	0%	0%
30172	Customisation of accounting software	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
30173	Audit expenses	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
30174	Internal Audit- External	Goods, Services & Inputs	80%	0%	0%	0%	20%	0%	0%
30180	8. Techincal Assistance by FAO								
30181	Techincal Assistance by FAO	Grant & Subsidies	0%	100%	0%	0%	0%	0%	0%
India

Fostering Climate Resilient Upland Farming Systems in Nagaland and Mizoram Draft Project Implementation Manual for Nagaland

Table No	Group- Sub Group- Ledger	Category- Cost Centres		Sourc					
			IFAD Loan	IFAD Grant	CSS-Gol	CSS-GoN	GoN	Beneficiaries	Convergence
30200	Sub Group - M&E and Knowledge Management								
	Ledger Account								
30210	1. Monitoring and Evaluation (M&E)								
	a. Equipments								
30211	Laptop computers	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30212	Printer and scanner	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30213	Other equipment- GPS etc.	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30220	b. M&E studies, wshops, surveys								
30221	Baseline, mid-term and impact survey	Consultancies	85%	0%	0%	0%	15%	0%	0%
30222	Sub-sector outcome surveys	Consultancies	85%	0%	0%	0%	15%	0%	0%
30223	Annual Outcome Survey	Consultancies	85%	0%	0%	0%	15%	0%	0%
30224	Case studies, climate impact assessment,	Consultancies	85%	0%	0%	0%	15%	0%	0%
	other studies								
30225	Climate risk assessment	Consultancies	85%	0%	0%	0%	15%	0%	0%
30226	Enumerators for M&E unit surveys	Consultancies	85%	0%	0%	0%	15%	0%	0%
30227	Project Completation review and workshop	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
30230	c. M&E Consulant/agency	Goods, Services & Inputs	0%	100%	0%	0%	0%	0%	0%
30240	d. MIS Development	Grant & Subsidies	0%	100%	0%	0%	0%	0%	0%

India

Fostering Climate Resilient Upland Farming Systems in Nagaland and Mizoram Draft Project Implementation Manual for Nagaland

Table No	Group- Sub Group- Ledger	Category- Cost Centres		Sour	ce of Finan	ce			
			IFAD Loan	IFAD Grant	CSS-Gol	CSS-GoN	GoN	Beneficiaries	Convergence
30300	2. Knowledge Management (KM)								
30310	a. Capacity Building and knowledge sharing								
	(ICAR)								
30311	Workshop for dissemination of results	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
30312	Micro watershed management demonstrations	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
30313	Technical backstopping	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
30314	Impact assessment of settled agriculture	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
30320	b. Capacity Building and knowledge sharing								
	(ATARI)								
30321	Supply of improved planting material	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
30322	Action research with local institutions	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
30323	Technical backstopping	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
30324	Training for Lead Farmers	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
30325	Demonstrations	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
30330	c. Staff level								
30331	Monthly meetings at district level	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
30332	Quartely meeting at state level	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
30333	Training in KM methods for sharing	Training & Workshops	100%	0%	0%	0%	0%	0%	0%

India Fostering Climate Resilient Upland Farming Systems in Nagaland and Mizoram Draft Project Implementation Manual for Nagaland

Table No	Group- Sub Group- Ledger	Category- Cost Centres		Sourc	ce of Finan	ce			
			IFAD Loan	IFAD Grant	CSS-Gol	CSS-GoN	GoN	Beneficiaries	Convergence
30340	d. Participant level								
30341	Focus groups and participatory M&E	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
30342	Cluster level meetings - half-yearly	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
30343	Documenting lessons leanrt	Consultancies	85%	0%	0%	0%	15%	0%	0%
30344	Learning route - domestic	Consultancies	85%	0%	0%	0%	15%	0%	0%
30345	Videos for farmer-to-farmer sharing: Equipment	Equipment & Materials	80%	0%	0%	0%	20%	0%	0%
30346	Videos for farmer-to-farmer sharing: Initial Training	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
30347	Videos for farmer-to-farmer sharing: Follow up								
	training	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
30348	Videos for farmer-to-farmer sharing: backstopping								
	and support	Consultancies	85%	0%	0%	0%	15%	0%	0%
30350	e. Dissemination and communication								
30351	Project start-up workshop	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
30351	Village information kit	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
30352	Posters and leaflets	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
30353	Translation of technical materials	Consultancies	85%	0%	0%	0%	15%	0%	0%
30354	Printing of technical materials	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
30355	Annual knowledge sharing event	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
30356	Attending national events	Training & Workshops	100%	0%	0%	0%	0%	0%	0%
30357	Editing and design of publications	Consultancies	85%	0%	0%	0%	15%	0%	0%
30358	Website design and operation	Consultancies	85%	0%	0%	0%	15%	0%	0%
30359	Printing of communication materials	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%
30360	Communication Videos	Goods, Services & Inputs	90%	0%	0%	0%	10%	0%	0%

India

Fostering Climate Resilient Upland Farming Systems in Nagaland and Mizoram Draft Project Implementation Manual for Nagaland

Table No	Group- Sub Group- Ledger	Category- Cost Centres	Source of Finance						
			IFAD Loan	IFAD Grant	CSS-Gol	CSS-GoN	GoN	Beneficiaries	Convergence
30370	A. Salaries and allowances (PMU)								
30371	1. Staff recruitment expenses	Salaries & Allowances	100%	0%	0%	0%	0%	0%	0%
30372	2. Audit Officer	Salaries & Allowances	100%	0%	0%	0%	0%	0%	0%
30380	3. Project Management Staff								
30381	State Project Director	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%
30382	Dy Director - Agriculture	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%
30383	Dy Director - Horticulture	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%
30384	Dy Director - Animal Husbandry	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%
30385	Executive Engineer	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%
30386	Director - SWC	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%
30387	Procurement consultant	Salaries & Allowances	90%	0%	0%	0%	100%	0%	0%
30388	ACF Forests	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%
30389	Asst Registrar of Cooperation	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%
30390	Deputy Director, Fisheries	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%
30391	Deputy Director, Sericulture	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%
30392	Deputy Director, Land Resources	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%
30393	Project Support Specialist	Salaries & Allowances	90%	0%	0%	0%	10%	0%	0%
30394	Project Assistants	Salaries & Allowances	100%	0%	0%	0%	0%	0%	0%
30395	Finance and Accounts Manager	Salaries & Allowances	90%	0%	0%	0%	10%	0%	0%
30396	Accounts Officer	Salaries & Allowances	90%	0%	0%	0%	10%	0%	0%
30397	Accounts Assistant	Salaries & Allowances	90%	0%	0%	0%	10%	0%	0%
30398	Drivers	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%
30399	Grade IV staff	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%
30400	4. Support to CSS operations	Salaries & Allowances	90%	0%	0%	0%	10%	0%	0%
30500	5. District Management Staff- DMU								
30501	District Project Manager - Joint Director Agriculture	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%
30502	Project Director-ATMA	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%
30503	Field Coordinator DD Agriculture	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%
30504	District Vet Officer	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%
30505	District Finance Manager	Salaries & Allowances	90%	0%	0%	0%	10%	0%	0%
30506	Agriculture/Horti Officers /n	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%
30507	Block, Circle Agri/AH Assistants	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%
30508	Project assistants	Salaries & Allowances	100%	0%	0%	0%	0%	0%	0%
30509	Drivers	Salaries & Allowances	0%	0%	0%	0%	100%	0%	0%

India

Fostering Climate Resilient Upland Farming Systems in Nagaland and Mizoram Draft Project Implementation Manual for Nagaland

Table No	Group- Sub Group- Ledger	Category- Cost Centres		Sourc	e of Finan	ce			
			IFAD Loan	IFAD Grant	CSS-Gol	CSS-GoN	GoN	Beneficiaries	Convergence
30600	B. Operating costs								
30610	1. Operating costs - PMU								
30611	Utilities	Operating costs	90%	0%	0%	0%	10%	0%	0%
30612	Office operating expenses	Operating costs	90%	0%	0%	0%	10%	0%	0%
30613	Fuel and vehicle maitenance	Operating costs	90%	0%	0%	0%	10%	0%	0%
30614	Travel allowances	Operating costs	90%	0%	0%	0%	10%	0%	0%
30620	2. Operating costs - DMU								
30621	Utilities	Operating costs	90%	0%	0%	0%	10%	0%	0%
30622	Office operating expenses	Operating costs	90%	0%	0%	0%	10%	0%	0%
30623	Fuel and vehicle maitenance	Operating costs	90%	0%	0%	0%	10%	0%	0%
30624	Travel allowances	Operating costs	90%	0%	0%	0%	10%	0%	0%
30630	3. M&E Staff								
	a. PMU Staff								
30631	Manager Planning and M&E - PMU	Operating costs	90%	0%	0%	0%	10%	0%	0%
30632	Deputy Manager MIS - PMU	Operating costs	90%	0%	0%	0%	10%	0%	0%
30633	Compter Assistants - PMU	Operating costs	90%	0%	0%	0%	10%	0%	0%
30634	b. Asst Manager (Planning, M&E and MIS) - DMUs	Operating costs	90%	0%	0%	0%	10%	0%	0%
30640	4. Knowledge Management Staff								
30641	Manager - KM	Operating costs	90%	0%	0%	0%	10%	0%	0%
30642	Manager, Gender & Cl	Operating costs	90%	0%	0%	0%	10%	0%	0%
30650	5. M&E Operating expenses	Operating costs	90%	0%	0%	0%	10%	0%	0%

Annex 6.5: Sample TORs for accounting software

Accounting Information System

A. Background

The Govt of Nagaland (GoN) is currently in the process of implementing an IFAD funded Project FOCUS. The project is implemented through a project management implementation unit (PMU) under the Directorate of Agriculture at Kohima and through District Management Units (DMUs) in the eight districts of Nagaland. In order to comply with IFAD's reporting requirements the LPA will need to procure an Accounting Software to be used by the PMU and the DMUs for the Project for the following purposes:

- 1) to record all financial transactions with a view to generate accounting reports from the day books, ledgers, trial balance, balance sheet, income and expenditure account and receipts and payments accounts.
- 2) collect, analyze, store, and distribute information that is useful for decision making by comparison of budget and actual expenditure.
- 3) to provide transparency and accountability of the project activities.
- 4) to provide timely reports, help detect errors and deficits during project implementation and indicate necessary corrections.
- 5) to prepare and present progress reports to the PMU/ DMUs, GoN and IFAD.

The project will be managed from the PMU located in Kohima and four DMUs situated in the four districts where the project will be implemented. The consolidation functions will be run from the PMU but accounting entries will also be executed form the DMUs offices in the four districts besides at the PMU also

B. Specifications of the Software

General features

1. The Accounting software should be configured as a modular solution and the different modules should be suitably integrated, the following are the basic modules:

- a. Chart of Account
- b. Accounting
- c. Financial Reporting
- d. Budget
- e. Cost Centres
- f. Reporting in accordance with IFAD requirements
- g. Consolidation of accounts at the PMU
- h. Withdrawal Application
- i. Contract Management, and integrating other modules if needed.
- 2. Classifying the levels of the Chart of account to enable generation of reports;
 - a. By implementing agency
 - b. by components
 - c. by categories
 - d. by financiers

e. Project financial reports including sources and uses of funds, income & expenditure, balance sheet and receipts and payments account

f. comparison of actual to budgets

3. Handling all the financial transactions of the Project according to the chart of account, that is used to:

- a. Capture the financial data under the appropriate headings
- b. Classify and group financial data for the various financial reports. The structure of the Chart of Accounts caters data to be captured by:
 - i. the Project components and sub-components
 - ii. expenditure items under each component and sub-component
 - iii. The IFAD disbursement category for the Project
 - iv. Sources of funding

- 4. All vouchers used in the system are based on double entry accounting system.
- 5. Ability to account under different bases of accounting (cash, modified accrual, Accrual)
- 6. Use of adjusting entry when needed through the Journal
- 7. Capacity to customize reports and also exporting data to excel.

Financial reporting

8. Produce the periodic Financial Reports as requested by IFAD:

a. Statement of Cash Receipts and Payments per Project components showing quarterly, yearly and cumulative balances for the quarter and cumulative;

b. Statement of Cash Receipts and Payments per Project categories showing quarterly, yearly and cumulative balances for the quarter and cumulative;

c. Statement of Project commitments, i.e., the unpaid balances under the Project's signed contracts;

- d. Generation of bank reconciliation statements
- e. Statement of fixed assets,
- f. Statement of Cash Payments using SOE.
- g. Cost Center Statements
- h. Budget vs. Actual Statement with variances

9. Consolidated report (financial report) of all projects managed under the software.

10. Recording the budget of all the activities of the project, and enable comparison of the actual performance with budgets/targets (quarterly, annual, and cumulative for the Project).

11. Enhancement on the Withdrawal Application report to include the SOE and Summary sheet

Security

12. Handling the required security according to predefined system security and privileges.

13. The program has adequate security features including password protection, not possible to delete a posted transaction, controlled access and maker-checker system

14. Includes proper backup and system maintenance procedures.

Training and support

15. Training of the finance and accounts team at the PMU and the DMUs on all features of the software.

16. Provide a complete and a user friendly manual

17. Configuration and Full installation of the software in computers, in Kohima and all the eight DMUs.

C. Delivery time table

1. The commencement of services for this assignment is expected to be no later _____

2. The main objective of the firm is to deliver a well designed software, that facilitates reflection of project needs and be designed to provide the financial information required by all interested parties (the PMU/DMUs, GoN. GoI and IFAD) and fulfil the legal and regulatory requirements of the GoN.

3. The firm is expected to deliver the system during the phase mentioned below:

Duration of Deliverables

Deliverable 1: install the present system 1 week Deliverable 2: needed modifications should be applied on the system 4 weeks Deliverable 3: Training sessions on the system 2 weeks.

Annex 6.6: Sample Monthly Budget Execution Report

Description		2017 (Amo	ount in Rs)								
		Г	Month		Year t	o date	Fu	ıll Year	C	Comm	itments
Components		Budget	Actual	Bu	dget	Actual	Budget	Actual		Not pa	aid for
Component 1											
Sub Componer	nt										
Sub Componer	nt										
Sub Componer	nt										
Component 2											
Sub Componer	nt										
Sub Componer	nt										
Sub Componer	nt										
Component 3											
Sub Componer	nt										
Sub Componer	nt										
Sub Componer	nt										
Total											
Description					20	17 (Amount in	Rs)				
		Month 1	М	onth 2		Month 3			0	Cumulat	tive YTD
Components	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budge	et	Actual
Component 1											
Sub Component											
Sub Component											
Sub Component											
Component 2											
Sub Component											
Sub Component											
Sub Component											
Component 3											
Sub Component											
Sub Component											
Sub Component											
Total											

Annex 6.7 : Financial Reporting Tables

Table 1: Statement of cash receipts and payments by category (Amount in INR)

Description	Upto Last Year	For the Month	Upto Last month	Year to date	Cumulative
Funds utilized					
Category 1					
Category 2					
Category 3					
Category 4					
Category 5					
Category 6					
Category 7					
Total uses of funds					
Closing Balance					
Category 1					
Category 2					
Category 3					
Category 4					
Category 5					
Category 6					
Category 7					
Total Closing Balance					

Table 2: Financial performance per expenditure category and financier (Amount in INR)

Category	Description	IFAD	Loan	IFAD	Grant	Govt of	Nagaland	CS	S- Gol	CSS	- GoN	Bene	ficiaries	T	otal
		For the		For the		For the		For the		For the		For the		For the	
		period	Cumulative	period	Cumulative	period	Cumulative	period	Cumulative	period	Cumulative	period	Cumulative	period	Cumulative
I															
П															
III															
IV															
V															
VI															
VII															
	Total														

Table 3: Financial performance per component and financier (Amount in INR)

Component	IFAD	Loan	IFAD	Grant	Govt of	Nagaland	CS	S- Gol	CSS	- GoN	Benet	ficiaries	Тс	otal
	For the		For the		For the		For the		For the		For the		For the	
	period	Cumulative	period	Cumulative	period	Cumulative	period	Cumulative	period	Cumulative	period	Cumulative	period	Cumulative
Component 1														
Component 2														
Component 3														
Component 4														
Total														

Table 4: Projected fund flow forecast

Description	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Fund Inflow						
IFAD Loan						
IFAD Grant						
Govt of Nagaland						
CSS -Govt of India						
CSS - Govt of Nagaland						
Beneficiaries						
Total Fund Inflow						
Fund Outflow						
Category 1						
Category 2						
Category 3						
Category 4						
Category 5						
Category 6						
Category 7						
Total Fund Outflow						
Net Fund Flow						
Opening Balance						
Fund Available						

Table 5: SOE withdrawal application statement (Amount in INR)

WA subm	itted to IFAD						
Category	Description	WA 1	WA 2	WA 3	WA 4	WA 5	Total
I	Category 1						
II	Category 2						
	Category 3						
IV	Category 4						
V	Category 5						
VI	Category 6						
VII	Category 7						
	Total						
	Amount in USD						
	Rejected by IFAD						
	Net Reimbursed						
WA pendi	ng submission to IFAI	D					
Category	Description	WA 1	WA 2	WA 3	WA 4	WA 5	Total
I	Category 1						
II	Category 2						
	Category 3						
IV	Category 4						
V	Category 5						
VI	Category 6						
VII	Category 7						
	Total						

Table 6: Signed contract listing

	<u> </u>				O a ra trac				
Reporting	Period		-		Contrac	ct information	-	-	
				Supplier/Contract			Contract Invoiced	Amount	Undisbursed
Category	Description	Contract Start	Contract End	or Name	Contract No	Contract Value	to date	disbursed	Amount
	Category 1								
II	Category 2								
	Category 3								
IV	Category 4								
V	Category 5								
VI	Category 6								
VII	Category 7								
	Total								

Table 7: Physical progress report

Description of Activities			Р	rogress and Co	st		Plan to completion			
	Project Activity by									
	component/ sub									
Category	component	Physical Pro	Physical Progress to date Cost to date			Revis	ed	Original		
						Actual as % to		Completion		Completion
		Actual	Planned	Actual	Planned	plan	Total Cost	date	Total Cost	date
	Total									

Annex 6.8 : Fixed assets register

Asset Ref	Asset	Date of	Invoice No			Date of						Transfer/		
No	Description	Purchase	and date	Cost	Supplier	Receipt	Location	User	Identification No	Verified on	Signature	Disposal	Authorized by	Signature

Total

Annex 6.9 : Petty cash forms

Petty Cash Request Form

Date		

Г

Requested by

Name

Nature of PaymentReimbursement[Advance[

	Budget/

Signature

Description	Unit Price	Quantity	Total Cost	Activity Code	Explanation

Prepared by

Approved by

Received by

Petty Cash Reconciliation Form

Date _____

Part 1 - Petty Cash Reconciliation

Petty Cash brought forward (a) Replenishments during the month (b) Total Petty Cash Balance (c = a+b) Disbursements during the month (d) Petty Cash book balance (e=c-d) Cash Count balance (f) - Part 2 below Difference (g=e-f)

Explanation for difference, if any

Part 2 - Cash Count

Denomination	Nos	Total Amount							

Counted/ Reconciled by

Reviewed by

Annex 6.10 : Vehicle record forms

Vehicle Log Annex

Assigned Driver Vehicle No._____ Date Time Mileage Trip Fuel Purchase Driver signature User Name User sign Purpose Departing Arrival Departing Arrival Destination Mileage Quantity

Vehicle History Record

Vehicle No.

Assigned Driver

Date	Repairs			Service & Maintenance			Insurance			Fitnes	s Tests
	Description	Garage	Cost	Description	Garage	Cost	Туре	Period	Cost	Checked by	Cost

Annex 6.11: Sample Terms of Reference for the Audit of Project FOCUS

The following are the terms of reference (ToR) on which **the Society (SoCRAN)** agrees to engage **audit firm** "the Auditor" to perform an Audit and to report in connection with the Agreement with the International Fund for Agricultural Development (IFAD) concerning **the project FOCUS**

1.1 Responsibilities of the Parties to the Engagement

SoCRAN refers to the entity that executes the project on behalf of the borrower (GoI) that has signed the Agreement with IFAD.

• SoCRAN is responsible for providing a Financial Statements for the services financed by the Loan/ Grant and for ensuring that these Financial Statements can be properly reconciled to the SoCRAN records and accounts in respect of these services.

• SoCRAN accepts that the ability of the Auditor to perform the procedures required by this engagement effectively depends upon SoCRAN providing full and free access to its staff and records and accounts.

• SoCRAN shall provide the auditors with all the necessary documentation to perform the assignment properly; in particular the following information shall be provided to the auditors before the beginning of the assignment:

a) Project Agreement;

- b) Annual Progress Report;
- c) Project Implementation Manual;
- d) Financial Management Manual;

e) Organizational charts along with names and titles of senior managers;

f) Names and qualifications of officers responsible for financial management, accounting and internal audit.

g) Description of information technology facilities and computer systems in use and

h) Copies of the minutes of negotiations, the project design document, the annual work programme and budget and the letter to the borrower if available.

'The Auditor' refers to the Auditor who is responsible for performing the agreed-upon procedures as specified in these ToR, and for submitting a report of factual findings to SoCRAN.

The Auditor shall provide:

• A separate opinion on Project Financial Statements (PFS)

Minimum content of the PFS:

a) Yearly and cumulative statements of sources and application of funds, which should disclose separately IFAD"s funds, other donors funds and beneficiaries funds;

b) Statement of sources and application of funds.

c) Yearly and cumulative SOEs by withdrawal application and category of expenditures; reconciliation of the SA.

d) Reconciliation between the amounts shown as received by the project and those shown as being disbursed by IFAD should be attached as an annex to the PFS. As part of that reconciliation the auditor will indicate the procedure used for disbursement (SA funds, letters of credit, special commitments, reimbursement or direct payment) and indicate whether the expenditure is fully documented or uses the Summary of Expenditures format.

e) Notes accompanying the Financial statements

f) Cumulative status of funds by category

g) A statement of comparison between the actual expenditures and the budget estimates

h) Full disclosure of cash balances and

i) Other statements or disclosures relevant to the project.e.g. financial monitoring reports, credit lines etc.

• A separate opinion on the use of the Designated Accounts/Special Accounts (DA/SA);

The auditor is also required to audit the activities of the DA/SA associated with the project including the initial advance, replenishments, interest that may accrue on the outstanding balances, and the year-end balances. The auditor must form an opinion as to the degree of compliance with IFAD procedures and the balance of the DA/SA at year end. The audit should examine: (i) the eligibility of withdrawals from the DA/SA during the period under review; (ii) the operation of the DA/SA in accordance with the relevant financing agreement; (iii) the adequacy of internal controls within the project appropriate for this disbursement mechanism; and (iv) the use of correct exchange rate(s) to convert local currency expenditures to United States dollars.

• A separate opinion on Withdrawal Application Statement / Statement of expenditures / Summary of Expenditures (SOEs); The audit will include a review of SOEs used as the basis for submitting withdrawal applications. The auditor will carry out tests and reviews as necessary and relevant to the circumstances. SOE expenditures will be carefully compared for eligibility with relevant financial agreements, and the disbursement letter, and with reference to the project appraisal report for guidance when necessary. Where ineligible expenditures are identified as having been included in withdrawal applications and reimbursed, auditors will note these separately. A schedule listing individual SOEs withdrawal applications by reference number and amount should be attached to the PFS. The total withdrawals under the SOE procedure should be part of the overall reconciliation of IFAD disbursements described above. The auditor"s opinion should deal with the adequacy of the procedures used by the project for preparing SOEs and should include a statement that amounts withdrawn from the project account on the basis of such SOEs were used for the purposes intended under the agreement.

• A separate management letter addressing the adequacy of the accounting and internal control systems of the Project, including compliance with IFAD's Procurement Guidelines and such other matters as IFAD may notify SoCRAN to include in the audit.

The auditor is requested to comment on:

a) Economy, efficiency and effectiveness in the use of project resources;

b) Achievement of planned project results;

c) Legal and financial obligations and commitments of the project and the extent of compliance or non-compliance thereof;

d) Systems and procedures such as improvements in accounting, information technology or computer systems, and operations that may be under development, on which the auditor's comments are necessary to ensure effective controls;

e) Other activities on which an auditor may consider it appropriate to report

• Auditors shall certify:

a) Whether the PFS are drawn up in conformity with international accepted accounting standards (IFRS or IPSAS)

b) Whether the PFS are accurate and are drawn up from the books of accounts maintained by the Project.

c) Whether the provisions of the Project Agreement are adhered to.

d) Whether Procurement has been undertaken by the Project in accordance with **Article VI** of the Project Agreement, IFAD's Procurement Guidelines

e) Carry out a physical verification of any significant assets purchased and confirm their existence and use for project purposes.

f) Whether the project has an effective system of financial supervision or internal audit at all levels.

g) Whether the expenditure claimed through SOEs are properly approved, classified and supported by adequate documentation.

h) The Auditor is a member of the Institute of Chartered Accountants of India or from the office of the Accountant General of the State of Nagaland.

1.2 Subject of the Engagement

The subject of this engagement is the financial statements dated [dd/mm/yyyy] in connection with the agreement for the period covering [dd/mm/yyyy to dd/mm/yyyy]. The information, both financial and non-financial, which is subject to verification by the Auditor, is all information which makes it possible to verify that the expenditures claimed by SoCRAN in Financial statements have occurred, and are accurate and eligible.

1.3 Reason for the Engagement

SoCRAN is required to submit to IFAD an Audit report produced by an external auditor.

1.4 Engagement Type and Objective

This constitutes an engagement to perform specific agreed-upon procedures following the IFAD Guidelines on Project Audits provided to the Auditors by SoCRAN. The objective of this audit is for the Auditor

- to verify that the expenditures claimed by SoCRAN in the financial statements for the activities covered by the Agreement have occurred ("reality"), are accurate ("exact") and eligible (that expenditure have been incurred in accordance with the terms and conditions of the agreement) and
- to submit to SoCRAN a report of factual findings with regard to the agreed-upon procedures performed.

1.5 Scope of Work

1.5.1 The Auditor shall undertake this engagement in accordance with these Terms of Reference and:

- in accordance with the International Standard on Audit (ISA) to perform Agreed-upon Procedures regarding Financial Information as promulgated by the ICAI;

- In compliance with the Code of Ethics for Professional Accountants issued by the ICAI. Although ISRS 4400 provides that independence is not a requirement for agreed-upon procedures engagements, IFAD requires that the auditor also complies with the independence requirements of the Code of Ethics for Professional Accountants.

- In accordance with International Standards on Auditing and in line with IFAD"s Guidelines for Project Audits.

1.5.2 The Terms and Conditions of the Agreement

The Auditor verifies that the funds provided by the Agreement were spent in accordance with the terms and conditions of the Agreement.

1.5.3 Planning, procedures, documentation and evidence

The Auditor should plan the work so that effective audit can be performed. For this purpose, he performs the procedures specified the IFAD Guidelines on Project Audits and he uses the evidence obtained from these procedures as the basis for the report of factual findings. The Auditor should document matters which are important in providing evidence to support the report of factual findings, and evidence that the work was carried out in accordance with ISA and these ToR.

1.6 Reporting

The report on this audit should describe the purpose and the agreed-upon procedures of the engagement in sufficient detail in order to enable SoCRAN and IFAD to understand the nature and extent of the procedures performed by the Auditor. Use of the financial and audit reporting is compulsory.

1.6.1 Periods covered

The reports on this audit should cover the following: a) **IFAD Loan XXX and Grant XXX** for the year _____ b) Reports covering items **a** must be delivered no later than 180 calendar days from the end of the fiscal year.

Annex X-2: Letter of Engagement of Auditor

To the Project Management (or appropriate Project Manager):

- 1. You have requested that we audit [insert names of financial statements e.g. sources and uses of funds for the year ending [dd/mm/yyyy] and balance sheet as of [dd/mm/yyyy]. We are pleased to confirm our acceptance and our understanding of this engagement by means of this letter. Our audit will be carried out in accordance with International Standards on Auditing (ISAs) or other internationally accepted standards, with the objective of our expressing an opinion on the financial statements, including the use of the statements of expenditure and special account.
- 2. In forming our opinion on the financial statements, we will perform sufficient tests and reviews to obtain reasonable assurance as to whether the information contained in the underlying accounting records and other source data are reliable and sufficient as the basis for the preparation of the financial statements. We will also determine whether the information is properly communicated in the financial statements.
- 3. Because of the nature of the tests and other inherent limitations of an audit, and the inherent limitations of any system of internal control, there is an unavoidable risk that some material misstatements may remain undiscovered. However, we expect to provide you with a separate management letter concerning any material weaknesses in internal control that come to our notice.
- 4. May we remind you that project management is responsible for the preparation of financial statements, including adequate disclosure of relevant information. This includes maintenance of adequate accounting records and internal controls, selection and application of accounting policies, and safeguarding of assets. As part of our audit process, we will request from management written confirmation of representations made to us in connection with the audit.
- 5. We should be given access to all legal documents, correspondence, and any other information associated with the project and deemed necessary by us for the purpose of our audit.
- 6. We look forward to receiving the full cooperation of your staff. We trust that they will make available to us whatever records, documentation and other information we may request in connection with our audit.
- 7. Our fees, which will be billed as the audit work progresses, are based on the time required by the staff and other resources assigned to the audit, plus direct out-of-pocket expenses. Individual hourly rates may vary according to the degree of responsibility involved and the experience and skills that staff require for the audit.
- 8. Please sign and return the attached copy of this letter as confirmation that it is in agreement with your understanding of the arrangements for our audit of the financial statements.

GUIDEL INES ON PROJECT AUDITS

Name of firm or company

(Chartered accountants, certified public accountants or other recognized professionals)

NOTE: Additional items may be included in the engagement letter in accordance with the Guidelines for Auditors contained in the IFAD Guidelines on Project Audit.

Table 1: Audit log

Financial	Audit Obse	rvations as per Audit Report	Audit Obs	ervations Settled	Audit Observations Outstanding		
Year	Numbore	Value	Numbors	Value	Numbore	Value	
	Numbers	(INR)	Numbers	(INR)	Numbers	(INR)	
Total:							

a) Summary Audit Table

b). Detailed Audit Log

Sr. No.	Financial year	Class: Serious / general	Audit Ref.	Audit observation	Total Amount per Observation (INR)	Action taken by the project /PMU (Reply of Para wise)	Present status (Auditors Validation Result)	Total amount not settled/ outstanding (INR)
		Total:						

Annex 6.12 : Expenditure record forms

Table 1 : Cumulative expenditure by component as on

	Components	IFAD Loan	IFAD Grant	GoN	CSS-GoI	CSS-GoN	Beneficiaries	Total
1								
2								
3								
	Total							

Table 2 : Budgeted expenditure and performance against AWPB

Sr No	Components	AWPB	Actual	%
1				
2				
3				
	Total			

Table 3 : Budgeted expenditure and performance against AWPB

Sr No	Financiers	AWPB	Actual	%
1	IFAD Loan			
2	IFAD Grant			
3	GoN			
4	CSS- Gol			
5	CSS- GoN			
6	Beneficiaries			
	Total			

India Fostering Climate Resilient Upland Farming Systems in Nagaland and Mizoram Draft Project Implementation Manual for Nagaland

Table 4 : Financial performance by financier (Amount in USD)

^		•	%
Financier	Approval	Disbursements	disbursed
IFAD Loan			
IFAD Grant			
GoN			
CSS- Gol			
CSS- GoN			
Beneficiaries			
Total			

 Table 5 : Financial performance by financier by component as on (Amount in USD)

	Components	IF	AD Loan		IF	AD Grant			GoN			CSS		0	thers]	Fotal	
		Approval	Actual	%	Approval	Actual	%	Approval	Actual	%	Approval	Actual	%	Approval	Actual	%	Approval	Actual	%
1																			
2																			
3																			
	Total																		

Table 6 : IFAD loan disbursement (Amount in USD)

		Original	Revised		WA		%
Code	Categories	Allocation	Allocation	Disbursements	pending	Balance	disbursed
	Total						

Annex 6.13 : Sample recovery form

	Recovery Plan										
Designa	ated Account	No		_							
IFAD Lo	oan No.			_	IFAD Loan	Amount (USI	D)				
Project	Project Completion Date				Loan Closing Date						
		Date	INR	USD	Unjustif	ied Balance	1				
	Authorized					INR	USD]			
	Allocation							4			
								-			
]			
				Ju	stification						
	WA No	Date	WA Value (INR)	Estimated WA Value (USD)	Proposed Recovery (%)	Recovery Amount (USD)	Cumulative Recovery (USD)	Cumulative Unjustified balance (USD)			
				-		-					
								<u>+</u>			
								1			
				-	-	+		<u> </u>			
								·			
								<u> </u>			
	Note: Unjustif	ied Balance	e at the time of	loan closing w	vill be promptl	y refunded to	IFAD				
	Prepared by			_	Date			-			
	Reviewed by			_	Date			-			

nated A	Acccount No	
Name		
1	Total Amount advanced by IFAD	
2	Less Amount recovered by IFAD	
3	Present Outstanding Amount (1-2)	
4	Balance of designated account as at	
5	Balance of project accounts as at Plus balance of Sub accounts Plus balance of cash on hand	
	Total Bank Balances (4+5)	
6	Amount claimed in this WA	
7	Amunt withdrawn from DA not yet claimed or WA pending submission	
8	Amount claimed but not disbursed WA No Date Amount (USD)	
		-
9	Interest Earned	_
10	Total Advance accounted for (5+6+7+8-9)	
11	Difference in balances (3-10) Explanation for difference (such as) Not eligible for disbursement Calculation errors Amount disbursed not credited	-

Annex 6.14 : Designated account reconciliation statement

Prepared by

Reviewed by

Date

Annex 15: Checklist for a Withdrawal Application

IFAD Financing No	WA No	_ Reporting period [from date/to date]	
Form 100			Yes or No
1. Sequential numbering of WA			
2. WA amount tallies with sequer	ntially numbered su	Immary sheets	
3. Categories/sub-categories cha	arged as per Sched	ule 2 of Financing Agreement	
4. % of financing applicable for e	ach category or sul	b-category	
5. Availability of funds in categori	ies and the overall	financing amount	
6. Currency of payment			
7. Completeness and accuracy of	of banking instructio	ns	
8. Complete name and address of	of correspondent ba	ank	
9. WA is signed by Authorized Re	epresentative		
Statement of Expenditure			
1. Eligibility of expenditures claim	ned		
a) Within SOE financial ceiling	g		
b) Expenditures under specifie	c Category []	eligibility	
2. Form 102 signed by designate	ed Project Accounta	nt, Project Director, Authorized Representative	
3. Form 102 supported by signed	d Form 101 (for iten	ns reported in 2. but above over the financial	
ceiling)			
Designated account - Replenis	hment Requests		
1. Amount within ceiling figure ag	greed as a reasonal	ble limit (USD or])	
2. Amount at least equal to 20%	of the agreed reaso	onable limit	
3. Exchange rate used			
4. Completeness of designated a	account banking and	d account details	
5. Enclosed designated account	Reconciliation and	Bank Statements	
Supporting Documentation (at	tached if required)	
1. Copy of contract			
2. Copy of invoice, certified by Pr	roject Director		
3. Copy of bank guarantee and p	erformance guarar	tee (for advance payment)	
4. Copy of delivery receipt			
5. Copy of evidence of payment			
6. Completed Form 101 (A or B)			
7. Completed Form 102 (A or B)			
Procurement			
1. Copy of "No objection/s" provid	ded by IFAD		
2. Copy of Contract Monitoring R	ecord/s Form/s		
Compliance with Condition/s f	or Disbursement		
1. In accordance with terms in Se	ection E. para 3 of t	the Financing Agreement	
2. In accordance with terms in Se	ection of the Le	etter to the Borrower	
Expenditure incurred/committee	ed before Project	Completion Date (PCD)	
a) contract signed before DC	7. N		
b) goods delivered before BC			
c) services completed and/or	rendered before P(חר	

Remarks:

Prepared by Finance Manager Dated: _____

Certified by Project Director Dated: _____

Chapter 7: Monitoring and Evaluation Guidelines

A. Objectives of M&E

1. The integrated M&E and knowledge management system will be developed with three main objectives:

- Steer project implementation: it should provide programme stakeholders with information and analysis required to: measure programme outputs and outcomes; assess programme effects on the livelihoods of participating farmers; assess the relevance of the programme strategy, methodologies and implementation processes; detect difficulties and successes; and support decision-making to improve programme performance.
- **support economic decisions and policy-making**: it should provide value chain stakeholders, and, in particular farmers' organisations, with the information and analysis they need to assess the return brought by innovation, to develop profitable activities and to adapt their strategies accordingly, by monitoring both quantitative (yields and production, margins, credit management...) and qualitative results (members'/clients' satisfaction). Furthermore, it should provide stakeholders and government with the information needed to make policy decisions that can positively benefit economic activities within the value chains; and
- **Share knowledge**: based on the above, the M&E/KM system should develop lessons learnt, capture good practices and successful innovation, and share knowledge under appropriate formats to support programme performance and policy dialogue. Specific areas of interest in this respect comprise inclusive business models, public-private partnerships for farmers' access to services, and innovative financial instruments.

B. Strategic Principles

2. The system will be: (i) open and easily accessible, i.e. its use will not be restricted to programme or government agencies' staff, but also provide information and learning for value chain stakeholders; (ii) participatory, i.e. associate programme stakeholders, and specifically, producers' organisations in the definition of indicators, data collection, analysis and dissemination of results; (iii) growing, thus small initially and develop progressively as needs and capacities develop; (iv) focused on analysis and learning in support of decision-making and policy dialogue, and not merely on data production; (v) inclusive so that women, THE LANDLESS and marginalised groups participate in the system; and (vii) support accountability towards programme stakeholders.

3. The M&E and MIS systems established at the PMU level will provide a venue for discussing programme achievements and innovations, identifying successes and problems as well as good practices, discussing possible solutions including non-project based solutions and identify policy issues. They will also contribute to the preparation of Annual Work Plans and Budgets (AWPB).

C. M&E System²⁹

4. **Framework and implementation plans.** The M&E system will be setup and managed by the PMU and efforts would be made to link with all ongoing systems that are being used by the government. These systems should capture both monitoring inputs and outputs and will have to be developed to meet IFAD's requirements. These will include reporting forms starting from VC levels and output indicators disaggregated by gender.

5. **Indicators** Output and outcome indicators will be developed with the help of stakeholders. These will be coherent and SMART (specific, measurable, achievable, relevant, time-bound), easy to collect gender and ethnic groups-disaggregated. They will include relevant Result Impact Management System (RIMS) indicators, required by IFAD at corporate level. The consultant will prepare an M&E and KM strategy (including a detailed plan for the first year) and an M&E and KM manual. S/he will also provide orientations to design a management information system (MIS) to be

²⁹ A typical M&E System is presented in Annex 7.1

set up by a service provider/consultant and accessible to programme stakeholders. The Targeting and Gender Specialists will be consulted to ensure that the system adequately monitors inclusion, poverty, gender and other aspects. Main elements of the system should be as follows.

6. <u>Baseline and Completion surveys</u> A baseline study measuring the status of the main indicators (including RIMS indicators) will be carried out by the government with the support of FAO immediately the final design mission. A completion survey – which is the repetition of the baseline survey – will be carried out at the end of the programme in order to measure the final outcomes and impacts and will support the preparation of the Programme Completion Report (PCR).

7. <u>Programme planning</u>. The M&E/KM cycle will start with the preparation of the programme Annual Work Plan and Budget (AWPB), which will be a key instrument for implementation and operational control. It will cover detailed annual planning of activities and implementation responsibilities, physical results targeted, outputs expected, budget and procurement plan. Its preparation will build on a self-assessment of business partnerships' achievements and on farmers' groups' implementation of their annual plans. Such plans prepared at each village that are validated and aggregated at district levels DPMUs will be consolidated at national level by the PMU. The global AWPB will be collated by the Planning Officer, M&E Officer and Finance Officer (for budgeting) under the supervision of the Programme Director, and it will be submitted to the Project Steering Committee for approval.

8. <u>Data collection</u> Data will be collected using adequately designed forms (to be proposed by the consultant) and organised along three levels:

- (i) at village level, information will relate to farmers and their organisations, household nutrition and production/income evolution, and it will be provided by farmers' and women groups and channelled to the M&E system by district teams

 to avoid multiple counting of beneficiaries, activities will be recorded by household, building on the system set up by the project;
- (ii) *at value chain level,* information will be provided on the achievements of business partnerships, financial instruments, value chain development and policy research, and it will be managed by the respective district M&E Officers;
- (iii) at programme level, information will encompass overall programme performance and it will be the responsibility of the M&E Officer. All stakeholders will have an active and important role in identifying and reporting data, either formally or informally. The M&E Officer will make sure that women are adequately represented in these process and that they are allowed to voice specific concerns.

9. <u>Analysis:</u> Data from different sources will be consolidated and analysed so as to provide information on the performance of the various components, identify problems, identify possible solutions and track good practices to share through the knowledge management system. Information will also be shared with and discussed by the project stakeholders with a view to assessing the overall progress in implementation and discussing measures to improve performance.

10. **Management Information System (MIS):** A Management Information System will be set up to facilitate the flow of data. The MIS will track *financial and technical data* on programme outputs and outcomes, lessons learnt, good practices, and other important sector information to analyse performance of the programme, including information regarding price and export statistics. The MIS will process information and present it along visual formats such as dashboards and charts. The MIS will be set up by a service provider, which will also provide training to relevant staff. Regular updates will incorporate new information requirements arising during programme implementation.

11. **Reporting:** Brief quarterly reports will be prepared by district teams, mainly consisting of the record of activities, outputs and financial transactions. They will be channelled to PMU, where these will be consolidated prior to sending them to PSC. Consolidated biannual and annual reports will be more comprehensive, cover both technical and financial information, and include an analysis as

above. Annual reports will cover outcomes (based on annual outcome surveys below), lessons learnt, innovations and good practices, and knowledge gaps identified.

12. **M&E capacity development:** Capacity building for the M&E staff at all level is required. The short-term *M&E/KM consultants* will design a capacity building plan as part of the services to support PMU and the programme staff. An M&E training curriculum will be developed on the basis of capacity assessment. Training programmes will be delivered to the Project Managers at the district levels on the strategic issues of M&E, especially on how M&E data could be used for result-based management. With regard to the M&E officers, training courses will focus on both concepts and practical skills to manage the M&E system, especially data collection, data analysis and reporting.

13. **Webpage on IFAD Asia:** The M&E system will provide information on outputs, outcomes, impacts, lessons learnt, good practices, and other key sector information to analyse performance of the programme, including information regarding price and export statistics. In addition, this information will also be available through IFAD, Asia, which makes available to the public key information about the programme, its achievements, good practices, policy studies and other key documents. The webpage will be maintained by PMU Knowledge Management Officer.

D. Inception, Reviews and Surveys

14. **Inception:** An inception workshop will be organised with programme stakeholders and implementing partners to: (i) ensure that all partners understand and agree on the scope and implementing modalities of the programme; (ii) introduce key processes, tools, strategies and reporting needs; and (iii) act as a networking event to build relationships for future knowledge sharing.

15. **Supervision:** The programme will be supervised directly by IFAD. Annual supervision missions, followed initially by short follow-up missions at every quarter, will be organised jointly with the government and other stakeholders, in close collaboration with target districts and the participating farmers. Supervisions will be conducted not as a general inspection or evaluation, but rather as an opportunity to assess achievements and lessons jointly, to review innovations, and to reflect on improvement measures. These supervision missions will therefore be an integral part of the KM cycle, with mission members playing a supportive role. To ensure continuity in this process, missions will be carried out by a core team of resource persons returning regularly, joined by specialists to address specific needs of a given year. Key areas of expertise to be reflected in the mission include agronomy/conservation agriculture, value chain business development, marketing, financial management, etc.

16. **Mid-term review:** A joint mid-term review will be organised by government and IFAD at the end of the third year of the project, in close collaboration with the above-mentioned agencies and stakeholders. The MTR will: (i) assess programme achievements and interim impact, the efficiency and effectiveness of the project management, and the continued validity of FOCUS design; (ii) identify key lessons learnt and good practices; and (iii) provide recommendations for the reminder period of the project. However specific TOR for the mission will be mutually discussed and agreed to between IFAD, Gol and the State Government.

17. **Annual Outcome Surveys:** Annual Outcome Surveys will be carried out annually to measure changes at beneficiary level, compared to the baseline study. They will be undertaken by the PMU and DPMUs. Survey data and analysis in the form of a report will be shared with IFAD and GOI and the State Government. Template Questionnaires to be canvassed during these AOSs can be downloaded from IFAD website.

E. Knowledge Management System

18. In the first year the Project will prepare a project level KM strategy in line with the IFAD India and headquarters policy on KM. The KM strategy will set out a plan to build a robust KM system for the project. This system will enable the project to generate, capture, share and disseminate relevant information and knowledge to various stakeholders in a timely manner. The project website will be

used as a knowledge sharing tool, and will be linked to the IFAD Asia website. The KM team will extensively document and share knowledge generated in the project. The quarterly review meetings will be used as potential knowledge sharing venues for capturing lessons learned and best practices leading to development of related knowledge products. Key information from M&E studies, reviews and exposure visits, lessons and best practices will be disseminated through knowledge products such as newsletters, project briefs, technical manuals, working papers and case studies.

- The project will nurture a culture of learning and sharing across partner agencies and across local groups.
- Reporting lines and channels of communication need to be established for each level of staff.
- The TORs of all professional staff will have KM as a cross cutting deliverable.

FOCUS KM Strategy

- The KM Manager will develop a KM strategy based on the IFAD and Asia Pacific KM strategy in consultation with the subject matter specialists.
- The strategy will also include a needs assessment of the main stakeholders of the project namely the different project functionaries (field, district level, state level etc), the community people (FIGs, other community organisations and institutions in the project), the government stakeholders, IFAD and other donors, NGOs etc.
- The KM Needs Assessment Matrix (below) used in all IFAD projects outline the knowledge need and the possible ways to capture and disseminate it.
- The Needs Assessment will be done in collaboration with the other subject matter specialists and management. It will look at each component and sub component to make a comprehensive plan.

nowledge rea	/ho need this formation/kno ledge	/ho will ovide this formation	hat nowledge is seded	ow will this nowledge get enerated	ow will this nowledge get ocumented	ow will this nowledge be nared	aining needs different vel	onstraints	ossible olutions
Kn Are	WF info wle	pro VI	A v v	gei Ho	д т ф	kne Shä	at o lev	ပိ	Po

- The project will also develop a plan of action as part of the strategy in order to plan for the entire period of the project looking at the different knowledge need stages of each stakeholder
- The plan should have simple deliverables spread out over the period.
- The strategy and plan should also include simple incentives for those who pursue KM as part of their work as KM is very individual oriented. These incentives will build a culture of knowledge sharing among the staff. It can be recognition and awards given to these individuals and can be given on an annual basis at the annual review meeting of the project.

Quarterly Review Meetings

- Through centrally held quarterly reviews of district wise progress, the implementation progress will be assessed by the senior management and the district management.
- These reviews will function as knowledge sharing events within the project. It will be documented and disseminated across all the districts and archived for further use.
- These events will not only assess physical and financial progress but also cross cutting issues like gender, M&E and KM.
- The project will use different knowledge sharing tools (www.kstoolkit.org) peer assist, world café, open space etc- in these events.

• Reports will be generated of these meetings and disseminated and archived.

Internal Review Missions

- There will be internal review missions held by the PMU every bi annum.
- The mission team will compose of the DPMU and RNGOs staff and a consultant or advisor.
- The implementation teams will interchange their regions to assess other districts than their own. The mission will not be more than a week long and will cover all operational areas. This mini JRM done internally will foster a more knowledge sharing culture and will enable a higher efficiency of project implementation.
- A report will be published on the findings of this mission and will be disseminated to all DPMUs and shared with the IFAD supervision missions.

Joint Review Missions

• IFAD conducts yearly (and sometime bi annum) mission to each project to assess the implementation progress of the project and to address constrains projects are facing. The project staffs also participate in such missions. All reports generated by any mission should be first translated and distributed among the project staff.

Linking KM to the M&E system

- Relevant information should be extracted from the M&E database and validated and synthesized.
- Actual results should be then compared with previously defined objectives, lessons should be drawn from successes and failures and best practices and innovation processed into success stories, case studies, thematic technical papers and policy briefs.

Studies, Documentation and Knowledge Products

- Special studies will be undertaken within the project cycle to understand the impact of project interventions on women and the poor.
- Learning notes on project implementation (good practices and lessons) in all sectors will be developed with the village communities.
- The project could publish a bi annum newsletter based on good practices and human interest stories that will be disseminated to all important stakeholders.
- For the communities, they will develop contextual specific IEC materials that are required by the non literate communities on good practices for livelihoods enhancement, health and nutrition as per the interventions. It must be taken into consideration that the IEC materials must be gender sensitive and must promote gender justice messages alongside.
- Besides this, the project will also produce pamphlets, brochures, calendars, CDs, manuals, posters, videos which are effective ways/ methods of communications, especially at the community level
- Documenting of indigenous knowledge systems on agriculture, livestock management, health and medicine, nutrition, soil development and climate change will be an important part of the knowledge products that the project will take out. This will be systematically carried out every year of the project as one of its main publications.
- The project will also consolidate project achievements in tribal empowerment (social, economic, financial, political, environmental and knowledge) outlining the indicators of empowerment under each of these categories to be used for policy dialogue.

• All knowledge products will be gender sensitive and will require the over sight of the Community Institutions and Gender Manager.

Policy Dialogue

- The project will conduct conferences and workshops on issues related to gender justice and empowerment of tribal.
- The conferences will be based on the knowledge gained by implementation of the project.
- All important studies carried out under the project can have a dissemination workshop and invite prominent decision makers to influence tribal policy.
- The project will also promote networks of groups like FIGs through knowledge sharing events.

Website Development

- A website will be developed which will have facilities for online uploading of monitoring data from the districts.
- It will also contain GIS maps of the villages and the land and soil management work that the project has undertaken. A section on reports and good practices and lessons learned will be included in the website.

IFAD Asia website

- The KM Manager will be the site host for the project page of the IFAD, Asia website and will
 update on a weekly basis, all activities and events of the project. This will be an indicator of
 performance for this position.
- All KM focal points at the district level will be linked to this website so that they can post their updates on a regular basis.

Trainings and Workshops

- The project will carry out at least one training each year for the KM staff on (orientation, documentation, knowledge sharing) and organise thematic workshops to build the capacity of the project staff and enhance knowledge sharing in the project.
- The topics for the training can include good practices in goat rearing and other small livestock, how to monitor work effectively, how to plan your work, how to conduct meetings, how to do gender analysis for livelihoods etc.
- Involving community organisation in thematic workshops will be a way to ensure cross learning of good practices.

Transfer of knowledge

- In order to ensure that the knowledge gained through such external workshops, it will be made compulsory for every staff to write a report of the workshop and disseminate the same.
- In order to systematise the transfer of knowledge to the new staff, the project will ensure that the out-going staff record the history of all activities and list all pending actions to be done. This will form part of the archive of the project management systems.

F. Monitoring & Evaluation (M&E) in FOCUS

19. The main purpose of setting up an M&E system in any IFAD-funded project is to provide comprehensive, frequent, periodic and reliable data and information for sound result-based management and decision-making by the project management. The M&E system is designed to inform project management of whether implementation is going as planned and what corrective actions are needed in planning, target setting, budget allocation, etc. M&E system will general relevant knowledge based on analysis and disseminates lessons learned in a targeted and strategic manner to comprehend achievements in development objectives of the project. The M&E system is expected to perform and achieve four essential objectives: (a) to monitor and manage project progress; (b) asses project outcomes and impact; (c) capture and disseminate lessons learned and good practices; and (d) build local/community capacities for participatory M&E. However, the M&E system would operate in four interlinked domains:

a) Setting up the M&E system by identifying information needs to guide the project strategy, ensure effective operations and meet external reporting requirements (of IFAD and Government) – *prime responsibility* of the Manager Planning and M&E in the PMU supported by the Deputy Manager MIS and Manager KM, CI, Gender and IP, with inputs from the TA team (FAO). It will also be very useful to get inputs from IFAD at this stage. If needed an M&E expert can be employed as a short term consultant.

b) *Implementing the M&E system* - gathering and managing information/data – information will need to be collected from the eight DMU, the district offices of partner line agencies, and from the 600 project villages. The DMU M&E focal persons (Field Coordinators) will be supported by DMU Assistant Managers Planning, M&E and MIS in each district. Their prime responsibility will be the monitoring of the progress of physical implementation against project targets and the AWP&B, along with collecting some key outcome data from each village - especially concerning changes in land use. Information on project outcomes and the results of processes will be collected via Annual Outcome Surveys (AOS) commissioned by the PMU M&E units and implemented via contracted enumerators and a data analyst. Baseline survey at start up and Impact evaluation surveys at completion will be contracted to an external agency.

c) Involving project stakeholders in critical reflections - once information has been collected it would be analyzed and discussed by project stakeholders (via monthly/quarterly/half-yearly/annual meetings)– prime responsibility of the Manager Planning and M&E, who will interact with project implementing partners including partner line agencies for a smooth information flow and results generation. This will include preparation of monthly/quarterly/half-yearly/annual physical and financial progress reports against AWP&B targets.

d) *Communicating results of M&E* to all stakeholders including policy makers, project participants, Government and IFAD. The key combined M&E results will include Annual Progress Report, Mid-Term Review Report and Project Completion Report³⁰. As part of good practice M&E such report will include details of project implementation and adequate information about what has been achieved and worked well. However, in the end, what makes the difference is how people interact, how ideas are shared and developed, and by doing so, how people are motivated and supported to learn and contribute to benefit all by meaningfully investing in rural people.

20. M&E framework. FOCUS will set up its M&E system following IFAD's M&E guidelines³¹. The basic M&E framework to support in development of M&E system is the systematic collection, analysis and reporting of information/data at three different levels of project implementation results: (i) outputs (from inputs and activities); (ii) outcomes; and (iii) impact, encompasses result-chain approach. A key element of the M&E framework is the M&E matrix - an expanded version of the logframe which identifies exactly when information will need to be collected and the methods of collection. The overall M&E framework will also include other M&E tasks annually or during the course of project implementation. These include conducting / reporting Annual RIMS, Annual Outcome Surveys, and

³⁰For each of these reports, IFAD's appropriate guidelines would be provided and IFAD will support the project in understanding and applying these guidelines.

³¹See Managing for Impacts in Rural Development – A Guide for Project M&E, IFAD.

Baseline & Completion Impact Assessments. The project will also carry out a Mid-Term Review and draft a Project Completion Report following IFAD guidelines.

21. Output monitoring will measure the progress of activities and achievement of outputs against annual targets in the annual work plan & budget (AWP&B) for each project component. AWP&B outlines the inputs and activities to be undertaken and data on outputs would be collected or measured for each indicator at the end of each month/quarter/year. This can be linked to the financial expenditure on the concerned activities, and data will be stored and report via a computerised Management Information System (MIS). The type of output data to be collected and monitored will be carefully dovetailed with the project logical framework indicators. The computerised MIS will also record village profiles for each village where the project is working, which will be drawn up before work starts to collect basic human, economic and natural resource information against which progress can be measured. The Participatory Land Use Plan (PLUP) will form part of this benchmark information and the MIS will record the implementation of the PLUP. Physical and financial progress data and reports for each component/sub-component in each village will be recorded in the computerised MIS. Data would be collected by partner line agencies, the Village Committee, the Agricultural Field Assistants, Veterinary Field Assistants and community service providers such as CAHWs. Where required data will be disaggregated by gender, age and social groups, particularly related to training and access to services. Output monitoring data are provided in Annex 7.4.

22. Although output monitoring would appear to be a straightforward process, the experience of a number of IFAD projects in India and elsewhere have highlighted the need to pay adequate attention to the details of how data is collected (formats used, frequency of data collection, etc.) and reported. Overlapping components can mean households participate in more than one activity with the risk of double counting when calculating the number of households reached by project services. These problems can be overcome by training of staff responsible for progress reporting to use a common reporting format and carefully defining how participating households will be counted. The PMU M&E Unit will take the lead in harmonizing the different formats for data collection and reporting, and it at all possible a list of all households in each village with be maintained in the MIS - referenced by village geocode numbers and the head of household's national identify card (Aadhar card) number.

23. **Outcome monitoring** measures the immediate changes coming about as a result of project interventions. A few outcome indicators are shown in the project logical framework, but others will need to be added to create a results chain of evidence of change linking project outputs to the objective and goal. However, it is difficult to collect information from all households on indicators such as improved soil moisture, adoption of improved methods or increases in sales of commercial crops, the project will conduct Annual Outcome Surveys (AOS) as per IFAD's guidelines³². An AOS involves interviewing a sample of 400 to 800 farmers/households with a short questionnaire. Outcome surveys may also be carried out on a thematic basis in FOCUS in order to cover a specific area of project intervention, such as a specific value chain (e.g. spices) or sub-sector (e.g. mithun). Thematic Outcome Surveys (TOS) are needed where the number of households involved in the value chain or sub-sector is too few to generate a reliable sample in an AOS³³. Further outcome indicators in the logframe are changes in the period of *jhum* cultivation, the area of *jhum* cultivation and the length of the *jhum* cycle, along with area of community conservation forest. These indicators will be collected annually from each VC with the LPUP providing a baseline against which to measure changes.

24. Related to outcome monitoring is **process monitoring**, which involves monitoring the processes leading to outputs and outcomes. Examples of specific areas where progress monitoring will be useful in FOCUS may include adoption and effectiveness of PLUP, functioning of farmers' organisations and community service provision. Information on these may be gathered via Participatory M&E or PME (see section on PME below), as well as from the records of VCs and FOs.

³² See Designing and Implementing ANNUAL OUTCOME SURVEYS -- a guide for practitioners –IFAD, 2016

³³For example, if only 3,000 households are involved in dairy value chains, this is only 5% of the total of 62,000 participating households. An AOS may only cover 600 sample project households, of which around 30 (5%) would be involved on milk production, which is rather few to provide a reliable sample. Moreover a thematic survey can be more focused and so obtain more detailed information on the particular value chain interventions and resulting outcomes.
An annual rating of VCs in terms of their implementation of PLUP and related activities is included as a logframe indicator at the outcome level. In addition, the project can undertake specific studies related to social inclusion, natural resource governance, traditional knowledge, etc.

25. **Impact evaluation** is the process which will assess the contribution of project activities in achieving the overall goal of the project. The main tool for impact evaluation will be baseline and endof-project surveys of project households. These surveys will be coordinated by the PMU M&E unit and FAO will engage an external agency, with specific expertise in such assessments. The indicator data to be collected by these surveys include those shown at objective and goal levels in the project logframe, as well as on outcomes and outputs in order to show evidence of a results chain from project activities, through outputs and outcomes to objectives and goals. This helps relate changes in impact indicators to participation in project activities and delivery of project outputs, and also to other logframe.

26. Information on two of the indicators at objective level in the project logframe are not suitable for data collection via a sample household survey. The first of these is an indicator for the vegetation in *jhum* fallow land. This would be measured in terms of the density of plants and diversity of plant species (for diversity the Shannon index could be used). This work would need to be contracted to an agency with expertise in biology and upland ecosystems with surveys of sample sites being carried out at baseline, mid-term and completion.

27. The second indicator is the increase in farm income and income for farm households per day that they work. Although this question could be included in a household survey (or data collected in the survey on farm inputs and outputs), experience shows that this is unlikely to yield useful data. Farm households are rarely able to report input and output data for individual crops with any degree of accuracy. This is made even more difficult for projects in upland area where households are rarely able to report on crop areas (land areas are not measured or known) and volumes of inputs and outputs. It is therefore proposed that this data be collected by a small team of agricultural economists using a range of tools such as focus group discussions and case studies. The validity of key information from these sources will be confirmed using data from AOS and other surveys. Such key information could include the mix of crops grown, input use and overall production levels.

28. Participatory Monitoring and Evaluation (PME): This tool will be used particularly for outcome monitoring. At project level, one of the strategies could be to organise an annual workshop in which the participating *jhum* and settled agriculture farmers, livestock producers, women, progressive farmers, representatives from FOs, private sector representatives, partner line agencies, and banks, etc., would be given the opportunity for sharing their views about the project and identify mechanisms for improvement. In PME, the primary stakeholders - the project target communities - are active participants in all stages of project cycle, not just sources of information. PME will also focus on building the capacity of the local communities to analyse, reflect and take decisions and actions. PME attempts to provide opportunities for joint learning of various stakeholders at various levels of the project cycle. PME facilitates greater stakeholder commitment and ownership on the project activities, in turn empowering them to take corrective actions to help themselves. In the field implementation and community level, participatory M&E is a kind of social process; it generally involves intense negotiations between different target communities having different needs, expectations and worldviews. In a way PME is also a kind of grassroots political process which addresses issues of equity, power and social transformation. Above all, PME could be a highly flexible process, continuously evolving and adapting to the programme specific circumstances and needs. PME is but the building block for successful M&E system in all IFAD projects and the project staffs will be oriented and sensitized on the need for sharing of project information and knowledge on regular basis with all stakeholders including the project target communities with open mind and transparent attitudes.

29. **RIMS indicators**. The Results and Impact Management System (RIMS)³⁴ of IFAD generates annual report tables on a number of first and second level results indicators that correspond to the

³⁴RIMS First and Second Level Results Handbook, IFAD, April 2014. This is now under revision

output and outcome indicators (of the project logframe). IFAD has produced a standard list of these indicators, but only some of these will apply to an individual project. Prior to mid-term review, the project will report on only the *first level results*, but after the mid-term report it will report on *second level indicators*. IFAD's RIMS Handbook (now being up-dated) provides clear guidelines on whole range of conducting, measuring and reporting RIMS results. The selection of first level indicators and second level indicators will be done on the basis of specific project characteristics or relevance to FOCUS, which the project would develop and discussed during project start-up workshop. All indicators would be reported on sex-disaggregated basis and to the extent relevant differentiation of results by gender, age and other social groups would be made. New RIMS core indicators are provided as Annex 7.5.

30. **Mid-Term Review (MTR).** A mid-term review would be conducted at the end of project year thee (PY 3), to assess the progress, achievements, constraints and emerging impact and likely sustainability of project activities and make recommendation and necessary adjustments for the remaining project period. The MTR would be carried out jointly by FOCUS and IFAD, and will also assess the role of the implementing agencies, community institutions, the private sector, banks, etc.

31. **Project Completion Review and Report**. At the end of the project, the PMU will draw up a Project Completion Report (PCR) based on IFAD's guidelines³⁵ for project completion. IFAD will provide support to the project in this work. IFAD will carry out a PCR Validation on the basis of the project PCR at least 3 months before the loan closing. IFAD's Independent Office of Evaluation (IOE) may also undertake a formal Evaluation of the project well after the closure of the project (which is usually known as Project Performance Assessment or PPA).

32. **Annual Outcome Survey (AOS).** The AOS is a short and quick household survey that is undertaken annually by project staff. This aims to provide regular or timely information about results that can be used to take corrective action during project implementation. In particular, the AOS is intended to set out to identify positive and negative changes taking place at the household level, provide early evidence of project success or failure, and also assess targeting efficiency. These changes are measured relative to non-project households and normally an AOS covers a small sample of 200 to 400 households selected randomly in project areas (project beneficiaries) and 200 to 400 households selected randomly in project areas (non-beneficiaries, to be used as a comparison group). However it may be difficult in this project to find villages where project interventions are not being implemented if the JICA-funded project with the Forestry Department covers most non-FOCUS villages with a similar set of interventions. This means that an AOS for FOCUS will not have a control group, and it may be worthwhile expanding the project sample to say 600 households to enable comparisons to be made between different project groups or household categories.

33. **Special thematic/diagnostic studies.** The project may carry out, or commission, a number of relevant thematic special studies. The project will allocate budget in its AWP&B and some of the thematic studies could include, for example, health and nutrition among the tribal population; social inclusion and exclusion; access to, and management of, common property resources; forest/ NTFP based livelihoods; and migration dynamics. All the studies must be carried out through gender lens.

G. Gender and vulnerable groups in M&E

34. Integrating gender dimension in M&E and reporting on gender through sex-disaggregated data is imperative in all IFAD projects. Integrating gender into M&E system helps to measure the extent to which a project has addressed the different needs of women and men, and has made an impact on their lives and overall social and economic well-being. It also facilitates to improve project performance during implementation, allows for mid-term course correction, and makes it possible to derive lessons for future projects. Project reports will clearly identify the extent to which the project has reached women and men the degree to which they have benefited from project activities and outputs. This involves gender disaggregation of data on project activities and outputs to see if women

³⁵ Guidelines for Project Completion Review, IFAD, October 2015. This includes stakeholder workshops to gather feeedback on results and lessons learned

have fully participated in group membership, group leadership, training, livelihoods activities, credit activities and enterprise support. Further, gender disaggregation is needed to see if women have benefited in terms of outcomes - such as increasing production - or impacts - increased income and assets. As some indicators are better measured on a household basis, these need to be disaggregated by gender of the household head. Special studies may also be undertaken on measures to reduce women's drudgery and on other issues regarding women's welfare and empowerment (for example access to health services, and household decision making). Some ideas of gender-sensitive monitoring indicators³⁶ in FOCUS could be developed using the followings (Table 1):

Particulars	Questionnaire / issues to identify gender-sensitive indicators
Gender division of labour	 What is the gender division of labour or work burden at the household level? In other words, who is more responsible for working in the household, women or men? When the project got started, have men started sharing household work with women, or do women now have to work more?
Gender differences in access and control over resources (e.g. income, employment, land, social services)	 Who controls income in the household? Do the man and woman equally contribute in decision making on expenditure relating to household income? Who participated in the project training more, female or male? What have been the outcomes of training in applying the knowledge to household economics? In whose name is the land under the household control? Do both man and woman equally contribute in deciding the types of crops to be grown in the household land? What different kinds of social services do the man and woman receive or enjoy? What influences do these services have into the woman's health and ability to access information?
Gender differences in information and knowledge	 Are there gender differences in accessing the same information (about amount of information and how to access)? Are there any differences in economic opportunities between man and woman due to different amount of information accessed?
Decision making patterns in the household and community	 Who in the household has the decision power? (Compare with the contribution of man and woman in the total household income; whether person contributing the most in total income has the decision power). The participation of female and male in activities of community (the voice and respectfulness opinions in community activities).
Women and men's attitude and self- confidence	 The difference between female and male about self-confidence in all different project and community activities (on participation and responsibility).
Gender differences in vulnerability and coping strategy	 Differences in dealing problems and in adjusting to external shock.

Table-1: Exam	ples of ae	nder-sensitive	indicators for M&E
	p.00 0. go		

35. **Vulnerable groups in M&E**. The vulnerable categories are women headed households (WHH), households having person with disability (PwD) and households where members have migrated away. In line with IFAD's targeting strategy and Policy on Engagement with Indigenous and Tribal People, the M&E system will capture the following indicators:

- No. of traditional /indigenous crop varieties recovered and conserved.
- Area under traditional /indigenous crop varieties and changes over the project period.
- No. of traditional soil and water conservation technologies replicated.
- No. of traditional settled agriculture technologies replicated.

H. Implementation Responsibilities of M&E

³⁶ Modified from M&E Manual Guide for IFAD funded Projects in Vietnam.

36. **M&E Staff**: The project will recruit staff experienced in M&E for the PMU and DMUs. As already mentioned, the M&E staff would be trained appropriately by the project and IFAD. In the first year of the project, the M&E staff will focus on establishing a functional M&E system for the project. This would include reviewing the results framework and indictors with the project management and IFAD to ensure that they are relevant, refining the M&E plan and M&E matrix, assessing staff training needs on M&E, organising M&E training at all level (PMU, DMU and village), coordinating and conducting the baseline survey, designing the various reporting formats, developing databases, setting up the MIS, and training of the VCs and village level staff on some elements of data to be monitored, etc. From the second year, the M&E staff will amongst others focus on timely conduct of AOS, annual RIMS Report, etc. (see also under step by step implementation arrangements).

37. The PMU Planning and M&E Manager will be responsible for coordinating project planning such as consolidation of the AWP&B. This person will also oversee the preparation and submission of project reports (such as Annual/Half Yearly Progress Report, RIMS and AOS) - with support from the Manager KM. IP, Gender and IP. M&E staff would also support the PD during IFAD supervision, implementation support, MTR and PCR missions, and will organise all data and information relating to the project for reference by the IFAD missions.

38. **Technical support agency for M&E.** The project may obtain the services of a technical agency via the proposed FAO TA. This technical agency would build the capacity of the project M&E staff and provide specialised advice and backstopping. Capacity building in M&E for project staff will be undertaken through structured orientation training programme, refresher training, and information sharing.

39. Key M&E tasks and implementation arrangements during project implementation cycle. The overall key M&E tasks and implementation steps during various cycles of project implementation are summarised in Table 2 below:

Key stages of	Key M&E tasks ³⁷
project cycle	
Project initiation (loan effectiveness) to project start- up workshop (usually PY 1)	 Recruitment of all M&E staff Review the project design/detail project report in relation to M&E with key stakeholders; Review the PIM in relation to the section on M&E and KM in particular; Develop a detailed M&E plan and system including appreciation of project M&E culture and practices that would be emerging taking into consideration the various project results chain; Review / develop various M&E formats (data collection and reporting formats); Undertake and complete the baseline surveys (outsource/procure an agency); Develop project MIS (outsource the task / procure an agency); Prepare the KM strategy and action plan; integrate M&E and KM. Prepare the knowledge management strategy and link it up with
Main implementation period	 Put in place necessary conditions and capacities for M&E to be implemented. Ensure all data and information needs for management and key stakeholders are regularly met; Coordinate information gathering and analysis, as also data storage and data management; Facilitate and support regular review meetings and processes with all implementers and stakeholders; Prepare for and facilitate the project reviews/ review meetings (monthly/ quarterly/ half-yearly/yearly or annual); Coordinate/prepare for supervision missions; implementation support missions, etc.; prepare the action taken report on recommendations of IFAD's missions. Organise meeting of IFAD mission and government during supervision missions, etc. Conduct focused studies on emerging questions including documentation of good practices and missed opportunities (those not working well; suggest alternatives); Disseminate / communicate project results with various stakeholders;

Table-2: Summary of key M&E tasks for FOCUS

³⁷Should be read along with the overall KM tasks to have link between M&E and KM

Key stages of	Key M&E tasks ³⁷
project cycle	
	 norms and requirements including documentation of success case studies, half- yearly/annual progress report, Annual Outcome Survey, Annual RIMS Report, etc. Prepare the draft Exit Strategy cum Post Project Sustainability. Consolidate the various types of supervision mission and implementation support mission feedback.
Mid-term	 Collate information for the mid-term review (MTR); Coordinate for conduct of the MTR; Facilitate internal review processes to prepare the external review processes.
	 Adjust the M&E system as required. Revise the draft exit strategy and post-project sustainability. Organise project workshop to review, share and disseminate changes proposed at MTR with all project staffs and partners.
Phasing-out and completion	 Assess what the implementers and communities can do to sustain project interventions, impacts and M&E/KM activities could be sustained after closing down; implement these specific ideas; revise and update the project exit strategy and post- project sustainability strategy or action plan. Undertake end-line surveys / impact studies (outsource/procure an agency) Organise workshops to review the key elements of project exit and post-project sustainability strategy. Organise workshops and field studies with key stakeholders to assess project impacts; identify lessons learned for next phase of the project and/or other projects to be designed in future.
	 Prepare the Project Completion Report (PCR) as per IFAD's guidelines. Facilitate and coordinate IFAD's PCR validation mission. Organise closure workshop to share and disseminate lessons learned with all key stakeholders.

40. **Annual M&E Activities Calendar.** The key M&E activities and reporting requirements to be performed by the project by date/month are illustrated below. This does not include the higher level project coordination meeting such as Project Steering Committee (PSC) meeting.

Key activities	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Annual Progress Performance Review												
AWP&B preparation and submission												
Annual Progress Report												
Half-yearly Progress Report												
Annual RIMS Report submission												
Annual Outcome Survey Report submission												
Annual Audit Report submission												
Quarterly Results Report Preparation (Outputs)												
Quarterly Review Meetings at PMU												
Focus Groups and Key Informant Interviews (Theme or Output based)												
Monthly physical & financial data collection/ MIS entry												
Village PME meetings												

41. **Management Information System (MIS)**. The project will establish an MIS system in the first year of project implementation. The MIS would generate, monthly, quarterly and annual progress reports on physical and financial progress and on project outputs and outcomes - and may have a GIS interface so that key data can be shown on maps. The MIS may, if feasible, be developed include information on individual households and so track their participation in different project activities. However experience shows that it would be wise to be cautious in developing a very comprehensive MIS system. Attempting to gather and record a large amount of detailed information can result in data overload, with no time to check to accuracy and validity of data entered, and no time to properly analyse and interpret the information in the MIS.

42. The Manager Planning and M&E staff would work with the PMU Deputy Manager MIS. Via the TA component, suitable software/computing company would be contracted to develop the MIS software (or adapt an existing package) and then train staff and provide continuing support. The FAO TA will provide assistance in the process of drawing up a system specification and will be responsible for its procurement. FAO will also engage an agency to set up computerised MIS. It is likely that the system will need to be modified in the light of practical experience and emerging needs. In each district there will be an Assistant Manager Planning, M&E and MIS who will be responsible for operation of the MIS in the DMU. However much data will be actually entered by other people (such as the staff of partner line agencies and DMU Agricultural Officers. If tablet computers are used down to the village level, then VCs, AFA, VFA and CAHW may all enter data. A major part of the job for MIS staff at the district level will be helping these people enter accurate and complete data, and checking on data quality (this work may need additional staff in the DMUs). Once the system is operation the FAO shall employ a specialist to monitor the performance of the system who shall take a lead in adapting and refining the system so that it works better and meets the needs of project management. To do this will require close contact with the team in the software supplier. The TA will also pilot the use of tablet computers for field data collection and monitoring. This pilot must take place before the system is rolled out across the project.

I. Reporting and Communicating Project Results

43. As part of the MIS, the PMU will develop common reporting formats to be used by all the project entities. All data would be gender disaggregated and the analytical reports are to be used for taking timely corrective actions and to learn from implementation experiences to further improve project management effectiveness and efficiency. As required, monthly, quarterly and annual reports may be produced at different levels within the Project. For IFAD corporate reporting the following are needed: Half-yearly progress Report (only against the AWP&B), Annual Progress Report, RIMS Annual Reports and AOS.

44. <u>Monthly Progress Reports (MPR)</u> will be prepared from the project MIS developed to generate information at the village levels for reporting to the DMU and onward to the PMU. Information in the report will contain component/sub-component wise physical and financial progress against annual targets. This report will form the basis for monthly progress reviews at all levels and subsequently feed to the quarterly progress report.

45. <u>Quarterly Progress Reports</u> (QPR) will have physical and financial progress with information on challenges encountered in implementation and corrective actions and solutions to address constraints as well as communities response to project initiated activities. QPR would also be useful for consolidating RIMS Annual Report each year to be carried out for a calendar year (1st January to 31st December - although the RIMS reporting period is now flexible).

46. <u>Half yearly and Annual Progress Reports (HR/APR)</u> will be prepared from information compiled by the PMU on component/sub-component wise physical and financial progress, and loan category wise financial progress. The information will be generated via the project MIS and could contain summarised information and data from villages and findings from PME and annual outcome surveys, showing progress towards development objectives, usefulness of training, benefits from component/sub-component interventions, gender issues and knowledge management. The reports could be dovetailed with case studies of successful interventions. The PMU will prepare the halfyearly progress report by the end of October (primarily progress against the AWP&B) and a more detailed annual progress report by April end to mid-May every year and send to IFAD India Country Office and other stakeholders.

47. <u>RIMS Annual Report.</u> The key RIMS indicators corresponding to the project outputs and outcomes by components are included in the project's Logical Framework and will be reported annually by the end of January every year. In the first year the project information on RIMS first level indicators (list of indicators included in RIMS Handbook) associated with outputs would be reported. After mid-term review the report will include 2nd level indicators.

48. <u>Annual Outcome Survey (AOS) Report</u>: Each year the project will undertake AOS and report to IFAD. The first AOS will be done in the second year of project implementation after completing a full first year of project implementation. The AOS would be for a calendar year of January to December. Each year the project will submit the AOS report by February.

49. <u>Mid-Term Review Report</u> (MTR): IFAD in cooperation with the GoN and FOCUS would undertake a mid-term review by the fourth year of the project lifecycle (or as would be specified in financing agreement) to review project achievements and implementation constraints including issues relating to loan administration and financial management. Any corrective measure would be addressed at MTR. A mutually agreed action plan will be prepared based on the MTR findings.

50. <u>Project Completion Report (PCR)</u>: As the project reaches completion point, the PMU would prepare a draft Project Completion Report based on IFAD's Guidelines for Project Completion. IFAD and the Government will then carry out a Project Completion Review and validation based on the information in the Project Completion Report and other data. This review is usually done during the intervening period of project completion date and loan closing date.

51. <u>Case studies on project innovations and success stories</u>³⁸: The project will undertake case studies of project innovations and success stories on regular basis and report them through Annual Progress Report and in the India Country Newsletters. The project will also report them and communicate through its IFAD Asia webpage managed by IFAD and on the project's own webpage.

J. Learning and Knowledge Management (KM)

52. **KM Staffing**: In line with IFAD's policy, learning and knowledge management would be key element in FOCUS with integrated approach in which M&E will feed to generating learning for the project and from the project. While the KM functions in the project would be cross-cutting and would be responsibility of every sector head or manager, the project will have KM officer or KM focal person in PMU. Knowledge services would be important element in FOCUS management systems. The KM Officer / KM focal person and all relevant staff would be trained in KM. The M&E and KM units of the project at PMU will closely function as M&E will provide the building blocks for KM in the project.

53. **Knowledge Management in FOCUS.** The project will prepare a Knowledge Management Strategy building on IFAD's Knowledge Management Strategy in the first year of project implementation. This will be the responsibility of the Manager KM. CI, Gender and IP. Staff responsible for KM activities at the district level would undergo training on KM.

54. The project **learning system** would comprise of various activities relating to M&E and KM functions. Some of these would include monthly, quarterly and annual review meetings; capturing information on progress, lessons and finding solutions for implementation constraints. KM and lesson learning would be used as a tool for internal learning by project stakeholders such as staff of various implementing agencies, participating villagers and farmers, both women and men. This will involve a series of regular meetings at village/cluster, block (where useful), district and state levels. At these meetings, progress of project activities will be reviewed and learning from success and reasons for failure identified. Participatory tools such as "most significant change", "story telling" and "participatory monitoring and evaluation" (PME) may be used at these meetings.

³⁸IFAD's Communication Division has brought out a guideline for preparing case studies in the field. This will be provided at the time of start-up workshop.

55. The project will be encouraged to learn from KM culture and practices of experiences of other IFAD projects in India. A tested approach in sharing knowledge are "Learning Routes" - a continuous process of in-the-field training that seeks to broaden and diversify the markets of rural technical services, placing special value on the best experiences and knowledge of institutions, associations, communities and rural families. Each Route is organized thematically around experiences, case studies and best practices on innovative rural and local development. The project will have the opportunity of accessing the learning routes experiences from other IFAD projects in the country and outside.

56. Enhancing Use of Knowledge from M&E. In all IFAD-funded projects, each monitoring and evaluation activity has a purpose. The significance of M&E in projects are critical; when done and used correctly, M&E contributes to strengthening the basis for managing results, foster learning and generate knowledge for all the stakeholders including IFAD, Government and Communities. Thus, knowledge gained from M&E is at the core of IFAD-funded projects. IFAD and government will use and apply learning from M&E to improve the overall performance and quality of results of ongoing and future projects and strategies. M&E is now oriented to generating knowledge and learning. Projects are now designed with emphasis not only on the inputs, outputs and processes but on development results as outcome. FOCUS would use its M&E data and information for improved learning, enhancing accountability of the project for learning, use the knowledge and learning from M&E for project planning, implementation and improved monitoring, and document innovations and success stories so as to contribute in the overall local, national and global knowledge pool in development particularly in the areas of rural development and poverty eradication in the era of climate change.

57. **Knowledge Products, Dissemination and Communication.** FOCUS will generate various knowledge products such as publications, documented case stories, photo documentation, videos, charts, manuals, posters, etc. However, for meaningful learning and knowledge sharing, knowledge products should be of quality with clearly identified audience and purpose. The characteristics of good knowledge products³⁹ have the following elements:

- Based on an assessment of needs and demand for the product among targeted users to ensure relevance, effectiveness, usefulness and value of the knowledge product.
- Designed for a specific audience, taking into consideration functional needs and technical levels.
- Relevant for decision-making needs.
- Knowledge products brought out timely.
- Written in clear and easily understandable language.
- Data is presented in a clear and coherent manner; all data and information being from project M&E without any bias, both successful and failure cases.
- Knowledge products developed through participatory process and validated through quality assurance processes with relevant stakeholders or peer reviewed appropriately.
- The knowledge products should be easily accessible to the target audience through most effective and efficient means, and timely.
 - Consistency in presentation of products to enhance visibility and learning.

58. Practical tips for developing knowledge products from project M&E and dissemination of the products could include the following steps:

- Identify the target audiences and their information needs.
- Collect and keep at hand the contact information of all key stakeholders.
- Identify and determine the types of knowledge products to be developed (keep in mind the availability of project resources for this purpose as also the capacity of the project to develop the knowledge products, directly or through outsourced).
- Select and determine types of knowledge products that meet the target audience's information needs.
- Identify language requirements per product and audience.
- Determine most likely efficient forms and dissemination methods for each knowledge product.

³⁹ Adopted from the "Handbook on Planning, Monitoring and Evaluating for Development Results", UNDP, 2009

 Monitor feedback and measure results of dissemination efforts as also quality of knowledge products.

59. **Knowledge Sharing and Learning Culture.** The project will endeavour to capture and disseminate lessons learned, successful case studies and document good practices. The project will adopt various knowledge sharing methods and tools including designing and facilitating knowledge events such as meetings and workshops. FOCUS will adopt some of the best practices in knowledge sharing and learning culture of IFAD funded projects in India around the followings:

- Building strong network by conducting periodic workshops/seminars/conferences on key thematic issues relevant to the project.
- Conduct monthly/quarterly/half-yearly/yearly review meetings of key stakeholders.
- Developing skills and competencies of project staffs to improve human resources in the areas of knowledge management.
- Tailoring knowledge management activities closely to the needs of project staff and stakeholders.
- Developing and actively using project website, newsletter, etc. and contributing in the IFAD Asia website.
- Adoption of specific knowledge sharing methodologies and tools⁴⁰ with capacity building components, such as: Tools treasure hunt, Video storytelling, Speed sharing, Chat show, Jumpstart storytelling, World Café, Peer Assist, etc.

Linking with Research Institutions for knowledge and learning.

60. The project will be working on both *jhum* improvement and settled agriculture. In order to generate concurrent impact data and to demonstrate the effectiveness of these approaches, the project will engage with a Specialist Organisation which has expertise in upland farming systems as well as good knowledge of the region. This exercise will also generate knowledge that may be useful for informing the policies and practices of other states in the NER. The project has allocated USD 260,000 to generate knowledge on the evolution and sustainability of upland farming systems and their capacity to respond to climate change. The ICAR Regional Centre in Barapani with specialisation in Research and the Regional ATARI which co-ordinates the work of all KVKs in the NER have been identified by the project as the most suitable agency to be engaged for this purpose. Both these institutions come under the Deputy Director General (Extension), ICAR, Gol. It is, therefore, proposed that the GoN will sign an agreement with ICAR Regional Centre, Barapani and the ATARI as follows:

- a) Regional Centre of ICAR which has a sub-centre in Medziaphema will be responsible for: (i) demonstration of settled agriculture models on a micro-watershed basis in about 50 ha per district; (ii) technical backstopping for project activities in the field related to *jhum* and settled agriculture; (iii) evaluating impact of project's settled agriculture activities; (iv) knowledge sharing by way of regional workshops to disseminate the results impact assessment studies; and (v) knowledge sharing by way of regional workshops to disseminate the results of action research conducted by KVKs under the supervision of ATARIS.
- b) Agriculture Technology Application Research Institute (ATARI) through the KVKs in all the district will be responsible for (i) action research on settled agriculture on *jhum* land in various microclimates of Nagaland in collaboration with local research agencies; (ii) supply of quality planting materials; (iii) development of improved varieties of seeds (paddy) using local seeds; (iv) technical backstopping and training of village level workers; and (v) establishment of demonstrations of pig breeding units, stall fed goat units and backyard poultry hatchery units.

⁴⁰ Details are available at "Introducing Knowledge Sharing Methods and Tools: A Facilitator's Guide" by Allison Hewlitt and Lucie Lamoureux. IDRC-IFAD, 2010

Annex 7.1: A Model Design of M &E System

Overall framework: The M&E system will consist of two data domains: one is the MIS and the other consists of externally [to the MIS] collected data as in Figure 1 below.





<u>Management Information System</u> (MIS) reflects mainly the input and output indicators (and some outcome indicators, when possible) and should be best used to monitor physical progress of the Programme against its AWBP. This will include the relevant project reports.

<u>Externally collected data</u> is the type of data that is generated externally to the reporting system (i.e. MIS). In general, the externally collected data is mainly about outcomes and impacts of the Programme. This includes baseline and endline surveys, Annual Outcome Surveys (AoS), photo story book, Most Significant Changes, and analytical studies. In addition, some types of externally collected data could be available from the sources that are not related to the Programme's arrangements. For instance, Expenditure and Consumption Surveys, Agriculture Census, Village Market Survey, State Governments' Reports could be useful resources to inform the impacts of the programme.

Types of information

There are three types of indicators in the M&E system, which reflect the three levels of monitoring – according to IFAD's standardized M&E approach: (i) first level of monitoring mainly concerns with input and output indicators; (ii) the second level tracks information on outcomes; and (iii) the third level of monitoring is about impacts of the Programme.

In the first level of monitoring, the output indicators provide information on whether the Programme is implemented as reflected in the AWBP. Regarding the second level of monitoring, the outcome indicators will inform on whether the Programme has move forward the achievement of its objectives under different components/subcomponents. With respect to the third level of monitoring, the impact indicators will inform how the Programme has contributed to improve the living standards of the beneficiaries.



Project Logframe and M&E indicators

The M&E system is expected to provide information to inform the indicators specified in the Project's Logframe. The following tables are produced from the Project's current logframe. These will serve as the background for data collection of the M&E system.

Disaggregating information

It is important to inform how the project reaches the poor, different ethnic groups, and women; and hence the M&E data will then be tracked by poverty status, ethnicity, and gender of the beneficiaries. Accordingly, when appropriate and possible, the M&E indicators will be disaggregated by poverty status or income quintiles (to provide a better measure for poverty status), ethnic groups, and gender as below:



Uses of information

For planning and implementation of FOCUS	For assessment of outcomes and impacts of FOCUS
<u>Major uses:</u> Actual progress against planned objectives and milestones	<u>Major uses:</u> Systematic and objective assessment of the Programme, its design, implementation, and results
<u>Major information needed:</u> MIS: activities, outputs (and some key outcome indicators)	<u>Major information needed:</u> Externally collected data: outcomes, impacts (and some key output indicators)
<u>When to use:</u> Monthly, quarterly, yearly, mid-term, end- term, and ' <i>ad hoc'</i> basis [i.e. when requested]	<u>When to use:</u> Yearly, mid-term, end-term
Key stakeholders: State Govt, PMU, districts, Village councils & IFAD	Key stakeholders: Governments, IFAD and other stakeholders

M&E institutional arrangements

The M&E system is structured into the THREE levels: from the state, district, and village levels. There are full-time M&E officer at the PMU. At the district level, there are M&E staff who are also in charge of planning. At the village level, VC members, in particular Village Level Worker where available, and village head will contribute to data collection process under the guidance and supervision from the district M&E staff. Instead, the district M&E staff will provide guidance for the village level workers to collect data for MIS. When data is collected by independent/external parties (i.e. for externally collected data), village level worker will support this data collection progress.

Data collection arrangements

Impact indicators:	Data collection arrangements:
Increase in household incomes	AoS, impact assessment survey
Increases in the ownership of household assets	AoS, impact assessment survey
Households with improved food security	AoS, impact assessment survey
% increase in soil carbon	Results of soil survey
• HH reporting equitable work distribution between gender	AoS, impact assessment survey

Notes: other participatory data collection tools, including Photo Story Book, Most Significant Changes, and analytical studies could also provide additional information for these impacts indicators.

Ou	tcome indicators: Refer respective Logframe	Da	ta collection arrangements:
•	Component 1 – Jhum improvement & conservation	•	AoS, MIS, RIMS, other surveys
•	Component 2- Market access and value chain	•	AoS, MIS, RIMS, other surveys

Notes: In addition to the above arrangements, other participatory data collection tools, including Photo Story Book, Most Significant Changes, and analytical studies could also provide additional information for these outcomes indicators.

<u> </u>	tput indicators: refer respective logframe	Data collection arrangements:
•	Component A – Jhum improvement & conservation	MIS, AoS
•	Component B- Market access and value chain	MIS, AoS

Notes: All of the output indicators will be collected though MIS; some are also collected though the series of AoS to provide further insights (or verify the information available from the reporting forms).

Type of information	When?	Who to collect?	Who to report?
Reporting forms: – MIS District forms – MIS PMU forms	 Monthly Quarterly/Annual 	 District M&E staff (with support from and VLWs) PMU M&E Officer 	 PMU M&E Officer PD, MD & PSC
RIMS surveys	Start and end of FOCUS	Consultants with support from project staff	PMU M&E Officer,
Annual Outcome Surveys	Yearly	Project staff with technical support from consultants	PMU M&E Officer,

Photo story book	As it happens	Project staff with appropriate training	PMU M&E Officer & PD, MD
Most Significant Changes	Yearly	Project staff with technical support from consultants	PMU M&E Officer, PD, MD, PSC
Analytical studies	When relevant	Consultants with support from project staff	PMU M&E Officer, PD, MD

M&E reporting forms (MIS Forms)

MIS is a computer-based system and all the forms are needed to be computerized. The MIS team is expected to provide MIS training package for FOCUS staff – as well as staff from the districts. Brief description of the MIS forms is provided below: (all these forms are to be designed and developed and test-checked by MIS/M&E Consultants or Manager with external inputs)

<u>Form F1: Project Data Form:</u> This form consists of basic information on FOCUS, including objectives, target locations, funding sources, components, main activities, coordination office. This F1 is filled only once at PMU level and updated when there are changes in the above.

<u>Form F2 Annual Plan Data Form:</u> This F2 form reports the annual plan of FOCUS. Activities in the AWBP will be reflected by activities. It is required that this form is completed once a year upon the approval of the AWBP (at PMU level).

Form F3: Progress Data Report Form: This F3 form is the most important form for FOCUS's MIS. This Form will be completed quarterly for any single activities from the district to PMU level. This form *tracks information on the number of beneficiaries under each activity*. This information, when possible and relevant, is disaggregated to gender groups and income quintiles of the beneficiaries.

<u>Form F4: Final Report Data Form:</u> This F4 Form is simple form that requires information on how the assessment of progress towards planned objectives. This needs to be filled only once at PMU level upon the completion of the Programme. This is a useful tool for the preparation of the project completion review report

Tools for Externally collected M&E data

RIMS Surveys

This section will not describe the details of the RIMS Surveys as Details on RIMS Surveys are provided in IFAD's (2005) "RIMS: Practical Guidance for Impact Surveys", which is available on the IFAD website. There is a new RIMS template (See Annex-xx).

RIMS Surveys include a Baseline Survey and its repetition at the end of the Project – the Endline Survey. These surveys are essential to inform the impact evaluation of FOCUS. While the Baseline Survey establishes a 'baseline' for the set of evaluation indicators at the onset of FOCUS, the Endline Survey track these indicators at the end of the Project. By comparing between these indicators over time, it allows an assessment of what outcomes and impacts FOCUS has brought in.

IFAD's "RIMS: Practical Guidance for Impact Surveys" provide a comprehensive guidance for RIMS Surveys for IFAD-supported projects. For each programme, the RIMS Surveys should be

designed using this guidance as the background. As FOCUS represents specific features and thus the RIMS Surveys should be developed to reflect its design and characteristics.

M&E Indicators collected

Though the RIMS surveys, information on impact and outcome indicators will be collected. In particular:

Impacts indicators:

- Poverty rate
- Increase in income and in the ownership of household assets

• Households with improved food security (having enough food for 10 months per year) *Outcome indicators:*

- Increase in farm outputs, in particular spices and livestock
- Rate of households adopting conservation technology practices
- Rate of households adopting models for improved poultry production or pig husbandry
- Rate of households with improved access to markets
- Rate of target villages that benefit marketing, storage, processing groups/facilities
- Increase in income of the value-chain beneficiaries

RIMS Baseline Survey

RIMS Baseline Survey of FOCUS will be conducted in 2018. The Survey will be based on a questionnaire that was substantially extended from the standardized version in IFAD's (2005) "RIMS: Practical Guidance for Impact Surveys" to collect extra information that is relevant to the context of FOCUS.

The Baseline Survey will establish an impact evaluation framework by selecting controlled villages – which are as similar to the treated villages as possible but are not covered in FOCUS project area. In addition, the Baseline also established the initial values for a number of impact indicators and informed basic characteristics of the beneficiaries at the onset of FOCUS.

RIMS Endline Survey

As required by the impact evaluation framework, the Endline Survey should be a repetition of the Baseline Survey in order to inform the impacts of FOCUS. IFAD's "RIMS: Practical Guidance for Impact Surveys" draws attention to some potential problems that might incurred from repeating of the Endline Survey on the same sample of the Baseline Survey. For FOCUS, it is however suggested that the two Surveys should be conducted on the same sample in order to better inform the final impacts of FOCUS.

It is however anticipated that some new features of the Endline Survey could be introduced. *First,* additional questions on relevant issues could be added to the questionnaire to capture potential modifications of the Project design [which could be likely at MTR] or some special issues that the baseline questionnaire was not expected or designed to capture. *Second,* it could be expected a panel attrition rate of less than 10 percent between the baseline and the endline as households might move to over villages or become untraceable, due to some reasons, after six years of the Project cycle. Hence, some replacement might be needed but this should not introduce bias to impact evaluation results.

To ensure the best quality of the Endline Survey, it will be implemented with input from M&E Expert and/or external consultants. It is however expected that the M&E staff capacity will be significantly enhanced during the Project cycle. Therefore, FOCUS M&E staff should contribute greatly to this survey.

How the results are used in the M&E system?

The RIMS surveys mainly collect information to calculate outcome and impact indicators. RIMS Reports are one of the key documents of the M&E system. Results from the RIMS Baseline Survey need to be communicated at the top management levels of FOCUS at the start; while those from the RIMS Endline Survey is an integral part of the Project Completion Report (PCR) at the end.

Annual Outcome Surveys⁴¹

<u>Purpose:</u> RIMS Surveys are primarily intended to inform the Project impacts at completion and thus does not provide the type of information that would allow the Project management team to take timely and corrective actions. Annual outcome surveys are thus put in place to provide a channel for measurement of (intermediate) outcomes during project implementation. In particular, the AoS is proposed to:

- measure more regularly the positive or negative changes/outcomes taking place at the household level
- provide early evidence of project success or failure
- provide timely performance information so that corrective actions may be taken if required
- assess targeting efficiency

<u>M&E indicators collected:</u> The series of AOS will provide information in order to obtain the following outcome indicators:

Outcome indicators:

- Increase in agricultural output
- Rate of households adopting conservation technology practices
- Rate of households adopting models for improved poultry production or pig husbandry
- Rate of households with improvement in accessibility of village road
- Rate of target villages that benefit marketing, storage, processing groups/facilities
- Increase in income of the value chain beneficiaries who receive marketing support

In addition, AoS will also provide information on some impacts indicators, including:

- Increase in income and in the ownership of household assets
- Households with improved food security (having enough food for 10 months per year)

<u>When to implement?</u>: The AOS are to be implemented from the end of first year of operation. Ideally, these should be implemented three months before the annual supervision missions to provide inputs for these missions.

<u>Who to implement?</u>: PMU M&E officer under technical advice from TA M&E Expert is responsible for this AoS series. Under the guidance and supervision of PMU M&E officer, DPMU M&E Officers are responsible to conduct the surveys in their provinces. The AOSs are to be implemented by the project staff from the state to district and village levels.

For the first execution of the survey, there should be modest technical support from consultants in terms of survey design (sampling, questionnaire, and training for enumerators), data processing and analysis. Such technical support is important to 'contextualize' the IFAD guideline to annual outcome surveys into FOCUS context for the first survey. The subsequent surveys are then to be implemented by the programme staff themselves.

⁴¹ The details on Annual Outcome Survey are provided in IFAD's Technical Guideline No 2: "Conducting an Annual Outcome Survey

<u>How to implement?</u>: Details of the methodology are provided in the IFAD's Technical Guideline No 2: "Conducting an Annual Outcome Survey". The major steps in implementation are summarized in the chart below:



<u>How the results are used in the M&E system?</u>: As the AOS series mainly collect information to calculate intermediate outcome indicators, the result of this series is largely for the second level of monitoring. AOS Reports are one of the key documents of the M&E system and the results need to be communicated at the top management levels of FOCUS every year before the planning cycle. This is to make sure that the results from the AOS in the previous years would be reflected in the AWBP of the consecutive year.

Most Significant Changes (MSC) [What purposes this approach is for? When it should be carried out? How it should be implemented?]

<u>Purpose:</u> There are important outcomes and impacts of FOCUS that are not easy to quantify such as empowerment of ethnic groups, women, and the poor – which are mainly qualitative in nature. The **Most Significant Changes** is best used to track stories, both positive and negative, of changes on these matters.

<u>What changes are tracked?</u>: The theme of the MSC approach is the type of changes that need to be tracked. This is called the 'domain of change'. PMU's M&E system <u>could track changes</u> in the following domains:

- Livelihoods: What are most notable changes in conservation technology practices, models of improved poultry production or pig husbandry? What are most important changes when joining farmers' groups?
- **Participation:** how the most disadvantaged participate in planning, selecting investment priorities, implementing activities, monitoring and feedback?
- **Gender equality**: how female's voices are reflecting in consultation and implementation of FOCUS? How the Programme change female's welfare position?
- **Functioning of FIGs**: FOCUS places an emphasis on the establishment of farmer's associations in its implementation arrangement. These institutional arrangements are expected to be a 'driver of change' and hence it would be interested to track what are most significant changes produced from this arrangement. This would feed to policy dialogue in a wider context and institutional reforms if any.

<u>When to implement?</u>: Type of changes should be identified at the start of FOCUS (according to the 'domains of changes') and tracking the change should then start and continue during the course of the Programme.

<u>Who to implement?</u>: Some technical assistance will be provided to DPMU M&E Officer and district M&E staff on the implementation of this approach. Given such assistance, M&E staff at DPMU will be in charge of tracking the most significant changes in their districts. Under supervision and support from M&E staff at DPMU, village staff and village heads will visit the groups of beneficiaries to track for the most significant changes over time. It is noted that this is a participatory M&E tool and thus the consultation with the beneficiaries need to be participatory.

<u>How to implement?</u> Upon the delivery of the technical assistance for PMU M&E Officer and district M&E staff, the implementation process of this approach is described below.

Step 1: Identify the groups of beneficiaries in the change domains	
Step 2: Kick-off meeting with the groups to explain the procedure and establish the baseline of the domain	
Step 3: Revisit 1: group members sharing their stories and rank the most significant changes after year 1	

222

DPMU M&E staff instructs village worker to establish one group per domain per village

Village worker, with support from DPMU M&E staff organizes visits to groups, explain the procedure, and facilitate the discussion to establish the baseline of the domain

Village worker re-visit the groups, refresh the baseline of the domain, facilitate story sharing among members and the ranking of changes, and document the stories ranked as most significant

Repeat the revisit after every year

Village worker re-visit the groups, summarise the results from previous visits, facilitate the sharing among members on their perceived changes and the ranking of the stories, and document the most significant changes ranked

<u>How the results are used in the M&E system?</u>: The baseline of the domain and the most significant changes ranked by groups at every revisit are documented by village worker in a standardized format provided by DPMU M&E staff. These are aggregated at district level to have District Reports and these will then be used as part of the yearly M&E report for monitoring the progress, evaluating intermediate outcomes, and planning for the coming year. At the end of the Project, a Most Significant Changes Report will be compiled by the PMU M&E Officer [possibly with some technical assistance input] to be an annex part of the Project Completion Report.

Photo Story Book

[What purposes this approach is for? When it should be carried out? How it should be implemented?]

<u>Purpose:</u> This Photo Story Book provides a visual and easy-to-understand the activities of the Programme [types of activities, processes of implementation, types of resultant impacts etc.]. This provides a simple and powerful way to capture selected activities before, during, and after implementation.

<u>What activities to tracked?</u>: In principles, every activity of the Programme could be tracked using photo. But it would be more useful if activities that bringing observable changes are captured in the Photo Story Book. In FOCUS M&E Photo Story Book, the following activities should be the core:

- Infrastructure: village roads, micro-irrigation schemes, soil and water resources schemes are good example of such activities.
- Application of integrated farming system: crops, agriculture practices with climate risk management strategies.
- Development of FIGs, value chain clusters and processing groups.
- Provision of technical support to FIGs.
- Value-chains developed and working
- Livestock support facilities and beneficiaries response, etc

<u>When to implement?</u>: For each activity identified, photos should be taken before, during, and after the implementation of the activity.

<u>Who to implement?</u>: Guidance from the PMU M&E Officer in collaboration with TA M&E Expert will be made available. M&E staff at DPMU will be in charge of tracking the Photo Book Story in their districts. Under supervision and support from M&E staff at DPMU, village level worker or CRP will take photos of the identified activities at key stages [see below].

<u>How to implement?</u>: Upon the guidance from the PMU M&E Officer in collaboration with TA M&E Expert is available, the Photo Story Book is implemented though the following steps:



<u>How the results are used in the M&E?</u>: The Photo Story Book at the district level will be a collection of the photo stories on the implementation processes of the selected activities at villages. Districts will compile the Photo Story Book at the end of every year and send to PMU M&E Officer for consolidating the district books to a Photo Story Book of the State.

The Books, both at district and state level, will then serve as an input for communication strategy [especially for experience sharing] and as additional evidence on how the programme activities were implemented and monitored.

At the end of the Project, a project-wide Photo Story Book will be compiled by the PMU M&E Officer to be an annex part of the Project Completion Report.

Analytical studies [What purposes this approach is for? When it should be carried out? How it should be implemented?]

<u>Purpose:</u> Analytical studies refer to small surveys to provide insights on some *qualitative* aspects of the Project outcomes and impacts that the other data collection tools (including RIMS surveys, AOS, reporting forms etc.) cannot inform.

<u>What theme to be surveyed:</u> Given the nature of this data collection tools, whether or not these surveys are implemented depends on whether it is necessary to seek for answers to the themes that are important to the Project's progress but are not informed by the other data collection tools. Therefore, the thematic light surveys should be decided during the course of the project implementation. Given the design of FOCUS, the following themes could be potential areas for analytical studies:

- Participation and empowerment of FIGs;
- Gender equality;
- Obstacles in scaling up the supported livelihood models such as piggery and poultry;
- Scaling up value chain models to other villages and crops;
- Private traders in promoting market linkages;

<u>When to implement?</u>: There is no particular time that could be pre-decided for these thematic analytical studies. However, the best time to consider these studies is after the annual Supervision Missions – when the theme could be identified in the Aide Memoire.

PMU M&E Officer with the support from TA M&E Expert is responsible for proposing the themes for analytical studies to the PMU Coordinator and PD for making decision.

<u>Who to implement?</u>: Given the nature of the thematic surveys, PMU, consultants will be in charge of these surveys with the support from PMU M&E Officer, TA M&E Expert, DPMU M&E Officer, and other grass-roots workers.

How to implement?: The procedure of the analytical studies is taken place in the following steps:





<u>How the results are used in the M&E?</u>: The Analytical Study Report is a part of the M&E System. Findings on the themes (and recommendations) will be reported to PD and other stakeholders. PD will place the findings of the report to PSC.

M&E data management [How data available from the M&E should be stored? Who should have access? What reports should be available?]

Types of M&E data and reports

In terms of data, there will be the following data:

- RIMS Surveys (Baseline and Endline)
- Annual Outcome Surveys
- Most Significant Changes
- Photo Story Book
- Analytical Studies
- AWBP
- MIS

In terms of reports, the M&E needs to store the following types of reports

- Project Design Documents
- Aide Memoire, including Annexes, of the supervision missions (and other missions)
- RIMS Progress Reports
- Project Completion Reports
- Other reports

Storing M&E data

In functioning M&E system, it is important to make sure that the above data and reports are properly stored and made available. At times, M&E data and reports are stored in personal USB drivers and/or in office computers in no systematic manner. Upon a request for M&E data or an M&E report (such as RIMS survey report), anecdotal observation suggests that the M&E staff usually have to look into their personal folders and in many cases, the availability of data is confirmed but unable to be located. Hence, it is equally important to make sure that the M&E data and reports are well managed.

In this context, application of the **MIS** system will significantly improve how the MIS data is stored. As the system is computer-based, all the MIS data as required will be input and stored in the system. Technical configuration of the **MIS** ensures that this MIS data will be stored safely. However, storing M&E data is not only about the MIS (which is mainly managed by **MIS**), there are externally collected data and many reports that needs to be stored in a systematic way. Annex 7.3 of this PIM provides a reference for FOCUS M&E staff at various levels to store these data and reports. This should be considered as suggestive option.

Reporting Templates

There is a need for providing a template for RIMS Progress Report that M&E staff at the PMU and DPMU levels need to produce annually. However, this development is constrained at this stage due to the current level of progress in the development of the **MIS** system. It is expected that once the data is provided to the system according to the Forms, the data user could send data queries in order to generate the M&E reporting results in some standard formats. This function will be helpful for FOCUS M&E staff to develop the M&E reports.

M&E Capacity Building plan

<u>General assessment of M&E staff capacity [How capable the current M&E staff? and what needed to provide sufficient capacity?]</u>

M&E requires logical thinking and ability to work with figures. According to observational evidence, the capacity at this level is very weak and would need special attention in the capacity building plan for FOCUS. Summary of Capacity Building focuses is given in the table below.

Type of training / Module	Description	Main target
1.Introduction of M&E system	 Introduction of M&E design Special features of the system Overall description of how system function 	 All M&E & senior personnel
2.Making the M&E system work for result-based management	 M&E in the field of project management What data and processes needed for result-based management and how the M&E could be an useful foundation for that approach 	 PMU & DPMU M&E Officers
3.Data collection: reporting forms	 Collecting data from the beneficiaries Completing the reporting forms 	 PMU M&E Officer DPMU M&E Officers Other grass-roots staff
4. collection: surveys and other tools	 Supervising and supporting RIMS surveys Supervising and supporting annual assessment surveys Making Photo Story book Implementing Most Significant Changes 	 PMU M&E Officer DPMU M&E Officers CRPs Village level workers
5. skills in report writing	 How to utilize the M&E data to compile quality reports How to present important M&E results for senior management level 	 PMU M&E Officer DPMU M&E Officers

M&E capacity building plan

The M&E capacity building plan specifies the time and duration for training the M&E personnel during the course of the Programme. Some training will be offered once; some will be repeated after a defined period of time.

<u>Types of training courses:</u> There will be three types of training courses organized for the M&E personnel during the life cycle of FNML as below:

Course/ module	Description	Main target	When
Course 1: M&E for senior management	 Module 1 Module 2 Module 5 	 PMU staff PMU M&E Officer DPMU M& E Officers 	Once [start of FOCUS]
Course 2: Operationalizing the M&E system	 Module 1 Module 3 Module 4 Module 5 Module 6 	 PMU M&E Officer M&E Officers (at DPMUs) M&E staff (at DPMU) 	Once [start of FOCUS] Repeated after two years
Course 3: M&E data collection and reporting	 Module 4 Module 5 Module 6 	 M&E Officers (at DPMU) 	Repeated every year from year 2 [except the year with course 2]

Note: details of these training modules are provided in Annex 7.2.

Training plan

Assuming that the M&E capacity building could start from the year 2013, the M&E capacity plan could be projected below:

	2018-19			2019-20			2020-21				2021-22					
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Course 1																
Course 2																
Course 3																

Content of the M&E training modules

[What the training modules are about? How the training modules should be delivered?]

Details of the M&E training modules are provided in Annex 7.2 of this PIM.

Annex 7.2: M&E Training modules

Module 1: Introduction of M&E system

Module	1	Introduction of M&E system					
Objectiv	/e	Participants are expected to understand:					
		 Update knowledge on IFAD M&E guidelines 					
		 Design of the M&E system 					
		 Overall view of how the M&E system function in the management system of the Programme 					
Time		2.5 hours					
THILE		2.0 10010					
Time	Methodology	Content/Agenda					
45'	Lecture	 Introduction of the Module 					
	Class discussion	 Class discussion on why M&E is necessary for project management? 					
	Q&A	 Q&A to test the understanding of the participants on basic principles of IFAD 					
		M&E guidelines					
		 Discussion on M&E practices in the participants' experiences [with IFAD or 					
		previous projects]					
45'	Lecture	 Instructor asks the participants to read the M&E Framework for FOCUS 					
	Class discussion	 Class discussion on how SSSJ M&E system different from the participants' 					
	Q&A	experiences in the previous projects Ω					
		FOCUS M&F system					
30'	Multiple choice test	 Multiple choice test to evaluate how the participants understand the content of 					
		the module					
		 Conclusions of the module 					
Equipm	ents:	Materials:					
– Proje	ector	 Copies of M&E Framework 					
 Lapto 	qc	 Copies of the instructor presentation slides 					
		 Colour card and highlight pens for class discussions 					
		- Copies of multiple choice test					
Module 2	: Making the M&E syste	m work for result-based management					
Madula	•	Malling the MOE sector work for mostly based as a sector sector.					
Niodule	2	Making the M&E system work for result-based management					
Objectiv	/e	Participants are expected to understand:					
		 Advantages of the result-based management compared to other project management approaches 					
		 What types of M&E data are available for the result-based management 					
Time		2.5 hours					
Time	Methodology	Content/Agenda					
45'	Lecture	 Introduction on project management approaches 					
	Close discussion	Close discussion on program of different monogement entropy					

Class discussion	 Introduction on project management approaches Class discussion on pros and cons of different management approach Instructor concludes on advantages of the result-based management approach Class discussion on how to implement the result-based management approach 				
45' Lecture Class discussion Q&A	 Class discussion on what data needed for the result-based management Instructor presents on how M&E data should be used for the result-based management Q&A section for the participants to discuss with the instructor on how to use M&E data for the result-based management 				
30' Multiple choice test	 Multiple choice test to evaluate how the participants understand the content of the module Conclusions of the module 				
Equipments:	Materials:				
– Projector	 Copies of the instructor presentation slides 				
– Laptop	 Colour card and highlight pens for class discussions 				

Copies of multiple choice test

Module	4	Data collection: MIS Reporting forms				
Objecti	ve	 Participants are expected to acquire: A good understanding M&E system and the roles/functions of MIS reporting forms in the system A good understanding on all the MIS reporting forms Anticipation of potential difficulties in data collection for the MIS reporting forms and possible solutions 				
Time		2.5 hours				
Time	Methodology	Content/Agenda				
30	Q&A	 Instructor's presentation on the roles/functions of MIS reporting forms in the M&E system Q&A for the participants to discuss with the instructors on these reporting forms 				
2h Reading Group discussion and presentation		 Instructors assigns the participants into groups; each group will read a number of MIS reporting forms When reading the forms, each group is requested to anticipate potential difficulties that may occur when filling-in the forms and their proposed solutions Group presentations 				
Equipm	ents:	Materials:				
– Projector – Laptop		 Copies of the instructor presentation slides Copies of reporting forms A0 paper, highlight pens, flipchart for group discussion and presentation 				
Module 4	: Data collection: surve	ys and other tools				
Module	5	Data collection: surveys and other tools				
Objecti	ve	 Participants are expected to understand: Significance of externally-collected data in the M&E system Design and implementation of the RIMS surveys How to conduct a Photo Story Book? How to conduct a Most Significant Change exercise? 				
Time		6 hours				
Time	Mathadalagy	Contont/Arondo				
30'	Lecture Q&A	 Instructor's presentation on the roles/functions of externally-collected data in the M&E system Q&A for the participants to discuss with the instructors on the above 				
1h	Reading Group discussion and presentation	 Introduction of the RIMS surveys Group discussion on (i) how data available from the RIMS surveys is used for the M&E system? (ii) How the project staff could contribute to that RIMS surveys? Group presentations 				
1h	Reading	 Introduction of Annual Outcome Survey 				
	Group discussion and presentation	 Group discussion on (i) how data available from this survey series is used for the M&E system? (ii) how the project staff could contribute to that these surveys? Group presentations 				
1.5h	Lecture Practice exercise	 Introduction of Photo Story Book Procedures to conduct a Photo Story Book Basic photography using handy digital camera Making photos to tell stories 				
1.5h	Lecture Role play	 Introduction of the Most Significant Changes approach Procedure of conducting the Most Significant Changes approach Role play on the Most Significant Changes in M&E practices 				
30'	Lecture Q&A	 How to manage the externally-collected data and put that into the M&E system? How to use the externally-collected data for M&E reports 				

Module 3: Data collection: MIS Reporting forms

Equipments:	Materials:
 Projector 	 Copies of the instructor presentation slides
– Laptop	 A0 paper, highlight pens, flipchart for group discussion/presentation and role play
	 A set of digital camera (1 camera per 2 participants)

-- - - - -

Module 5: Reporting skills

Module	6	Reporting skills					
Objective		 Participants will be able to: Acquire basic data analysis skill Extract M&E data from Microsoft Excel to write reports Presenting the report in a meaningful manner Making presentation slides from reports 					
Time		6 hours					
Time	Methodology	Content/Agenda					
1.5h	Practice exercise Group discussion and presentation Lecture	 Instructor asks the participant to analyze the data sample provided to make meaningful interpretation Group discussion on how the data samples should be interpreted and group's observation on what is required with analyzing data Group presentations Instructor's presentation on "do and don't" in data analysis 					
1.5h	Practice exercise Group discussion and presentation	 Instructor provides the participants with hypothetical M&E data in Excel format and asking groups to exact the data to write report Team work by groups to complete the exercise 					
1.5h	Practice exercise Group discussion and presentation Lecture	 Instructor provides samples of bad reports Group discussion on (i) why these are bad reports? and (ii) how to improve the reports to take advantages of the data available? Group presentations Instructor's presentation on "do and don't" in presenting reports 					
1.5h	Practice exercise Group discussion and presentation Lecture	 Based on the revised reports in the above exercise, the instructor ask the participants to make presentation slides to present these reports Team work by groups to make presentation slides Group presentations Instructor's presentation on "do and don't" in making slides from the reports 					
Equipments:		Materials:					
 Proje Lapto partio 	ector op (for instructors and cipants)	 Copies of the instructor presentation slides A0 paper, highlight pens, flipchart for group discussion/presentation and role play 					

Annex 7.3: How to store M&E data

In addition to the MIS data, which is stored and managed by the **MIS** system, there are externally collected data and many reports that need to be stored in a systematic way. This Annex provides a reference for the FOCUS M&E staff at various levels to store these data and reports. This should be considered as suggestive option. To best organize the data, reports, and daily M&E work, the mother directory should be structured as follows: (Model)

>FOCUS M&E Data	to store M&E data
>FOCUS M&E Management	to store any files/documents/data for daily work
>FOCUS M&E Reports	to store M&E reports

FOCUS M&E Data MODEL

For M&E data, as storage of M&E data, the folder should be organized as below:

>FOCUS M&E Data	
>Analytical Studies	to store files related to Analytical Studies
>AOS	to store files related to AoS
>AWPB	to store files related to AWBP
>Most Significant Changes	to store files related to Most Significant Changes
> Photo Story Book	to store files related to Photo Story Book
>MIS Forms	to store files related to MIS forms
>RIMS Surveys	to store files related to RIMS Surveys

Note that the folder '**MIS** forms' is proposed to keep scanned versions of the completed **MIS** forms (if necessary), the forms that the district M&E staff use to collect information with support from VCs.

Below is an example of how the above sub-folders should be organized: MODEL

FOCUS M&E Management

For FOCUS M&E Management, below is the working directory for NPCO M&E Officer to keep files/data for daily work and other routine management. This folder should be organized in a way that best match the working style of the M&E Officer, for example,

> FOCUS M&E Management

- > PMU
- > District Kohima
- > District
- > District
- > District
- > District
- > District
- > District
- > District

FOCUS M&E Reports

For FOCUS M&E Reports, this serves as storage of the reports and should be structured as follows:

- > FOCUS M&E Reports
 - > Aide Memoire
 - > Other Reports
 - > Project Design Documents
 - > Project Completion Reports
 - > RIMS Progress Reports

For sub-folders, the following structure is recommended:

> FOCUS M&E Reports

- > Aide Memoire (AM)
 > AM 2018/19
 > AM 2019/20
 > AM 2020/21
 > AM 2021/22
 > AM 2022/23
 > AM 2023/24
- > Other Reports
- > Project Completion Reports
- > Project Design Documents
- > RIMS Progress Reports
 - >RIMS Report at Start-up
 >RIMS Report at MTR
 >RIMS Report at Endline

	Description	Unit	Project	AWP&B	Annual	AWP&B	Annual	AWP&B	Annual
			Target	Target	Achivt	Target	Achivt	Target	Achivt
A.	Better Jhum and								
Cons	ervation								
1.1	Village level	VC	650						
1.2	Number of FIGs	#	650						
13	l and use mans	district	8						
1.0	prepared	uistrict							
1.4	Training of VC members:	VC	650						
		Male							
		Female							
1.5	I raining of lead farmers:	persons	650						
		Male							
1.6	Follow monogoment	Female	16.050						
1.0	with legume crops	na	16,230						
1.7	Current <i>jhum</i> improvement	ha	11,700						
1.8	Number of farmers trained in <i>jhum</i> and fallow:	Persons	182,000						
		Male							
		Female							
1.9	Construction of low cost SWC works	ha	28,000						
1.10	Planting materials	households	91,000						
1.11	Area under Community forest	ha	13,000						
1.12	Water sources	sites	1950						
	protected								
1.13	No. of traditional crops recovered and conserved	No.							
1.14	Area under traditional crop varieties	ha							
1.15	No. of traditional SWC technologies replicated	No.							
B Su	pport to settled								
agric	ulture								
2.1	Number of FIGs organised	FIG	650						
2.2	Number of farmers	Persons	78,000						
		Male							
		Female							
2.3	Support to WRC/TRC	ha	9750						

Annex 7.4: Monitoring Indicators for Nagaland State

	Description	Unit	Project	AWP&B	Annual	AWP&B	Annual	AWP&B	Annual
0.1			Target	Target	Achivt	Target	Achivt	Target	Achivt
2.4	Support to upland farmers	ha	9750						
2.3	SWC Bunding	ha	9750						
2.4	Seeds & seedlings provided	households							
2.5	No. of traditional settled agriculture technologies replicated	No.							
2.6									
2.7									-
2.8									-
2.9									
C. Va	lue-chain								
devel		FIC	400						
3.1	crops	FIG	400						
3.2	CRPs engaged	persons	100						
		Male							
		Female							
		Youth							
3.3	Training of FIG members:	persons	8,000						
		Male							
		Female							
3.4	Planting materials to CRPs	CRP	100						
3.5	Supply of planting materials to farmers	ha	8,000						
3.6	Aggregation/ common facility centres	#	50						
3.7	Drying yards, centre	#	30						
	Agro-processing units	#	15						
3.8	Pig-breeding units set up	#	148						
3.9	Distribution of cross- bred piglets	households	30,000						
3.10	Feed & fodder demonstrations	village	650						
3.11	Villages covered under mithun	villages	50						
3.12	Vaccinations of								
	-Pigs	Pigs	950,000						
	-Poultry birds	birds							
	-Cattle	Cattle							
3.13	Training of VFAs:	persons	74						
		Male							
		Female							
3.14	CAHW training:	Persons	1300						
		Male							
		Female							
3.15	Livestock farmers training:	persons	91,000						

India	
Fostering Climate Resilient Upland Farming Systems in Nagaland and Mizorar	n
Draft Project Implementation Manual for Nagaland	

	Description	Unit	Project	AWP&B	Annual	AWP&B	Annual	AWP&B	Annual
			Target	Target	Achivt	Target	Achivt	Target	Achivt
		Male							
		Female							
3.16	Improvement of meat-market chain	village	650						
3.17	No. of Innovation subprojects approved	No.	50						
3.18	No. of persons benefitted from innovation sub- projects	persons							
		Male							
		Female							
		Youth							
d. Ma	irket access								
infras	structure								
4.1	Rehabilitation of earth road	km	200						
4.2	CDS in existing roads	structure	600						
4.3	Road maintenance	Km/year	500						
5.0	Project outreach:								
5.1	Number of hh covered	households	125,000						
5.2	Number of persons covered, total	Persons							
		Male							
		Female							
5.3	Number of youth covered, total	persons							
		Male							
		Female							

Annex 7.5: New RIMS Core Indicators: FOCUS (Target groups are Indigenous People)

Output indicators				Outcome indicators			
Areas of thematic focus	Target	No	Title	Legend	No	Title	Legend
Outreach: To increase		1.1	Number of persons receiving project	Male			
the income households			services	Female			
and enhance their		1.a	Number of households reached;	Youth			
resilience to climate				IP 1/			
change in hill areas of		1.b	Total number of hh members	С			
Mizoram and Nagaland							
SO 1:increase poor rura	al people's	productiv	e practices				<u>.</u>
Access to natural		1.1.1	Number of persons whose ownership or	Male	1.2.1	Percentage of persons or households	Male
resources			user rights over natural resources have	Female		reporting improved access to land,	Female
			been registered in national cadasters and	Youth		forests, water or water bodies for	Youth
			/ or geographic information management			production purposes	
			systems				
Access to agricultural		1.1.2	Number of ha of farmland under water	ha	1.2.2	Number of households reporting reduced	Male
technologies and			related infrastructure constructed and			water shortages vis-à-vis production	Female
production services			rehabilitated			needs	Youth
		1.1.3	Number of rural producers accessing	Male		Number of households reporting adoption	Male
			production inputs and /or technological	Female	1.2.3	of improved inputs, technologies or	Female
			packages	Youth		practices	Youth
		1.1.4	Number of people trained in production	Male	1.2.4	Number of households reporting an	Male
			practices and /or technologies	Female		increase in production	Female
				Youth			Youth
Inclusive financial		1.1.5	Number of persons in rural areas	Male	1.2.5	Number of households reporting using	Male
services			accessing financial services (savings,	Female		rural financial services	Female
			credit, insurance, remittances, etc)	Youth			Youth
		1.1.6	Number of financial service providers		1.2.6	Number of partner financial services	
			supported in delivering outreach			providers with portfolio risk >30 days	
			strategies, financial products and services			below 5%	
			to rural areas				
		1.1.7	Number of persons in rural areas trained	Male	1.2.7	Number of financial service providers with	
			in financial literacy and /or use financial	Female		operational self-sufficiency above 100%	
			products and services	Youth			
Nutrition		1.1.8	Number persons or households provided	Male	1.2.8	Number of women reporting improved	Youth
			with targeted support to improve their	Female		quality of their diets	Female

India Fostering Climate Resilient Upland Farming Systems in Nagaland and Mizoram Draft Project Implementation Manual for Nagaland

Output indicators			ndicators		Outcor	ne indicators	
Areas of thematic focus	Target	No	Title	Legend	No	Title	Legend
			nutrition	Youth			
SO 2: Increase poor rural people's benefits from market participation							
Diversified rural enterprises and employment opportunities		2.1.1	Number of rural enterprises accessing business development services	Male Female Youth C	2.2.1	Number of New jobs created	
		2.1.2	Number of persons trained in income generating activities or business management	Male Female Youth C	2.2.2	Number of supported rural enterprises reporting an increase in profits	
Rural producers organisation		2.1.3	Number of rural producers organisation supported	С	2.2.3	Number of rural producers organisation engaged in formal partnership, agreements or contract with public or private entities	
SO 3: Strengthen the e	nvironmen	tal sustain	ability and climate resilience of poor peop	ole's econor	nic activi	ties	
Environmental sustainability and climate change		3.1.1	Number of groups supported to sustainably manage natural resources and climate related risks		3.2.1	Number of greenhouse gas emissions avoided and or sequestered	
		3.1.2	Number of people provided with climate information services	Male Female Youth	3.2.2	Number of persons or households reporting adoption of environmentally sustainable and climate resilient technologies and practices	Male Female Youth
		3.1.3	Number of persons accessing technologies that sequester carbon or reduce greenhouse gas emissions	Male Female Youth	3.2.3	Number of households reporting a significant reduction in the time spent for collecting water or fuel	Male Female Youth
Policy							
Policy, cross-cutting		Policy 1	Number of policy relevant knowledge products completed		Policy 3	Number of existing or new laws, regulations, policies or strategies proposed to policy-makers for approval, ratification or amendment	
		Policy 2	Number of functioning multi-stakeholder platforms supported				

1/ IP Indigenous peoples

Chapter 8: Guidelines for preparing Annual Work Plan and Budget

A. Introduction

1. The purpose of this chapter is to provide a standard for the presentation of an Annual Work Plan and Budget document.

2. While preparing the AWPB, the project will keep in mind the planning process as outlined in Chapter 7 (M&E) and will refer these documents: (a) overall project cost tables; (b) logical framework; (c) Financing Agreement; (d) Letter to the Borrower; and (e) the Financial Management and Procurement sections of this PIM. The outline of the AWP&B tables is generally derived from the format of the detailed project cost tables for components and sub-components in the Detailed Design Document (Costab tables) – these are also in Annex 3.2 of Chapter 3 of this PIM. In principle, annual programming and budgeting concepts used should be identical to those in the Costab tables, however actual cost items, volumes of work and unit costs may vary in the light of changing circumstances and project priorities.

3. An Annual Work Plan and Budget (AWPB) document consists of two parts: Part A & Part B. **Part A** is a narrative section, briefly discussing previous implementation experiences, providing the justification of the proposed AWBP and highlighting objectives and required resources. It also indicates how the Project activities reflect government, IFAD and co-financier priorities. **Part B** consists of a set of Tables which present the detailed budget for the forthcoming fiscal year as well as indicators for previous period and cumulative achievements. The outlines for Part A (Narrative) as per IFAD's guidelines and Part B are presented as Annex 8.1. A short guide for the preparation of Tables for Part-B is included.

4. The information contained in PART A and PART B should be considered as a mandatory minimum, reflecting all basic information needed for the proper management of the Project and providing the required information to decision makers and supervisors in the Government, IFAD, and at possible Co-financiers. It is emphasized that the document should remain concise while at the same time providing all essential information.

B. Model outline of AWPB

5. **PART A: Narrative – See Annex 8.1** (read the explanations carefully to complete the Narrative).

6. **PART B:** Following IFAD's Template, a modified Template has been prepared for FOCUS in discussion with PMU (as given in **Annex 8.1**). The outline of AWPB Tables consists of three parts: (a) detailed annual budget with indicators for achievements so far and cumulative achievements; (b) Summary Table; and (c) Summary Budget Table by category (as per Financing Agreement). The outline of the AWPB tables has been derived from the format of the Costab detailed tables along with Financing Agreement. In principle, annual programming and budgeting concepts used should be identical to those in the Costab tables. The following explanation may be kept in mind while preparing the AWPB. AWPB for 2018-19 is provided in Annex 8.2.

Column Heading	Explanation
Account code	Each activity has a unique 5 digit account code and this number is easy to track
	Expenditures. First two digits denotes sub-component.
Activity	Type of activity proposed under the Project and as per costab but new and
	additional activities can be inserted and with new Account Code for tracking
	Expenditure.
Unit	This is expressed in physical units such as numbers, persons, months, ha, etc
Total Units	Total physical unit as proposed under Appraisal Report
Appraisal Targets	Targets as per design, usually reflected in the Logframe.
RIMS indicators	Indicators that will be chosen for Annual RIMS reporting.
Total Amount	Total amount in 000 INR as proposed in Appraisal Report
Unit cost	Unit cost in INR as obtained at the time of Appraisal. These unit costs are indicative
	and should be revised if need arises.
AWP&B unit	Number of units proposed under AWP&B. This column is yellow-shaded.

Amount AWPB	Amount in 000 INR for the particular activity. No need to calculate if unit costs and number of units are input. If no activity is planned, input "0"
Quarterly planned Expenditure	Total AWPB expenditure is distributed to four quarters. No need to input any value.
Costab accounts	EA, DA & PA are Expenditure accounts, Disbursement accounts and Procurement Accounts respectively as provided for in costab. No need to change these columns. If required these columns can be hidden at the time of printing.
Financing plan columns	These are automatically produced based on the costab financing rules. Changes if required may be made after loan amendment if indicated to do so.
Achievement columns	Both physical and financial amount should be manually input based on the results of the previous year.

7. **Summary Table:** The summary table aggregates all financial values by component from the individual AWPB tables.

8. **Summary Table by Category**: This is calculated and presented as per Financing Agreement (Schedule 2).
Annex 8.1 – Model outline of AWPB

Part A: Narrative Template

COUNTRY: India

NAME OF PROJECT: FOCUS

ANNUAL WORK PLAN AND BUDGET: PART-A

PERIOD from April 2018 to March 2019

Font sizes

Text 10 Arial; Tables within Text, Arial 9

Spacing 1.1

Table of Contents (Modify, if required)

Fiscal Year

Currency Exchange Rates, historical trends

Weights and measures

Abbreviations and acronyms

Project Area Map

Executive Summary

I. CONCEPT OF AWP&B

- II. CONTEXT
- III. ACHIEVEMENTS
- IV. SUMMARY PRESENTATION AWPB
- V. DESCRIPTION OF AWPB BY COMPONENTS
- VI. AWP&B COSTS AND FINANCING PLAN
- VII. STRATEGIC FRAMEWORK
- VIII. PROJECT MANAGEMENT
- IX. ANNEXURES: AWP&B TABLES

I. CONCEPTS (Maximum 2 paragraphs)

Previous period: In this Section, some of the basic planning parameters should be defined and explained. Preparation of AWPB begins, usually between October and November⁴². To put the proposed AWPB in perspective, results obtained in the previous year should be highlighted.

Currency: The AWPB should use INR as the unit for costs and values. The current exchange rate at the time of writing the AWPB should be indicated and compared with the rate(s) used in Costab tables. Its evolution since the previous AWPB has to be analysed and the effect of devaluations or appreciations on required external financing should be stated.

Prices: The current 12-months inflation or deflation rate for goods and services similar to project inputs should be stated and compared to the rate used in Costab tables for local inflation and the impact on project cost and financing analysed.

⁴² In countries where the fiscal year runs from March to April such as in India

II. CONTEXT (Maximum 2 paragraphs)

This Section provides briefly the most important developments in the previous period in the project implementation environment and the expected evolution for the planning period. The following elements may be discussed.

- **Government policies:** Indicate any change or new policies and their effect on project implementation;
- **Institutional framework:** Discuss any constraints, changes in the organization and/or staffing in the Implementing Agencies and the project management units. Evaluate the impact on implementation capacities.
- Any other major determining factor of the implementation environment

III. ACHIEVEMENTS (Maximum 2 pages)

The Section presents the main achievements, issues and constraints of the previous period, including the main recommendations of supervision missions, as well as an appreciation of the impact of the project on the poverty and gender situation. Discussions should include:

Physical results Highlight the implementation strategy and describe the main physical results obtained so far, indicate positive results as well as implementation problems and the reasons for them, and the latter's impact on next year's plan and implementation. Refer to detailed and summary AWPB tables.

Financial results Analyse the level of expenditures of the year to date for the main components, compare with the previous budget and indicate any reasons for higher or lower expenditures than expected. Indicate whether these issues will have an impact on the plan for the next year; refer to the detailed and summary AWPB tables.

Supervision issues: Highlight the main recommendations of the previous supervision mission and the manner they are being implemented, discuss any other supervision issue.

Poverty situation Provide a qualitative appreciation of the implementation to date on the poverty situation in the project villages and households. Use some information from the Baseline survey and any other available indicators to underline the statements. Also review any new Government and/or donor initiatives.

Gender Discuss the role of women in project planning and implementation and the project impact on their situation, results and constraints. Analyse both the economic and the social aspects (income generation, agriculture, credit, literacy, education, health, etc...)

IV. SUMMARY PRESENTATION AWPB (maximum one page)

In this Section, present the main characteristics of the Annual Work Plan and Budget, in terms of programming and implementation strategy, physical and financial objectives and expected outputs and impact. Indicate if there are any major changes compared to last year's AWP&B.

V. DETAILED PRESENTATION OF AWPB (maximum 4 pages)

In this Section, a detailed discussion of the programming and implementation strategy of each component of the JTELP is presented as well as a discussion of the expected results and how the implementation modalities eventually differ from the previous year(s)' practices. For each component, present the following:

• **Objectives and targets**. Indicate the component objective and physical targets for the AWPB period and compare with the whole project duration, discuss any trends;

- **Implementation strategy:** Indicate how the activities of the component will be programmed and implemented, discuss participatory approaches and any institutional problems and their required solutions;
- **Results:** Indicate the expected results in terms of quantitative indicators and in terms of qualitative aspects. Indicate the expected number of beneficiaries (women, men) and households. Compare with the overall target of the project and with last year's results;
- **Changes:** Discuss and justify any changes compared to the initial design and previous experiences, in targets, implementation strategy or expected results. Indicate reasons.

VI. COSTS AND FINANCING (maximum one page)

In this Section discuss issues relating to costs and financing of AWP&B.

- **Unit Costs:** Any major changes in unit costs due to inflation/deflation and to changes in design compared to previous years and to the Appraisal Report should be discussed and the manner how these changes will be tacked and by whom should be indicated.
- **Financing:** Issues relating to the flow of funds, the timeliness of funds availability, of approval and disbursement procedures for all financiers will be highlighted, and ways to improve or overcome constraints indicated.

VII. STRATEGIC FRAMEWORK (maximum 2 or 3 paragraphs)

This Section deals with how the AWPB objectives and expected results and impact correspond to Government and IFAD objectives. It will be based on concrete experiences and examples and avoid non-committal broad statements. Issues to be included are:

- **Government objectives:** State which project activities contribute to Government's rural development and/or poverty alleviation objectives and indicate the project's incidence in the project area.
- IFAD Strategic framework: Discuss if and how AWPB results and impact contribute to:
 - empowerment and strengthening of beneficiary organisations, including gender and participation aspects;
 - o access to productive natural resources and technology;
 - Access to financial services and markets.
- **Co-financier**: If the project is co-financed, indicate the expected impact of the AWPB on the Co-financier's objectives and strategy.

VIII. PROJECT MANAGEMENT (maximum 3 or 4 paragraphs)

This Section deals with the PMU status, staff positions, staff vacancies, key issues in staff deployment and ways to handle them. Highlight staff training and orientation and exposure visits. Provide a list of current staff as against original plan.

IX. ANNEXURES (AWPB TABLES)

The outline of AWPB Tables consists of two parts: a) the annual budget and b) indicators for achievements so far and cumulative achievements. The latter are required to put the annual budget in perspective and to help justify it. The outline of the AWP&B tables has been derived from the format of the Costab detailed tables. In principle, annual programming and budgeting concepts used should be identical to those in the Costab tables.

With a view to assisting the PMU, a standalone Excel template has been designed for FOCUS. It is very simple to use. The template tables are explained below:

Column Heading	Explanation
Account code	Each activity has a unique 5 digit account code and this number is easy to
	track expenditures. First two digits denotes sub-component
Activity	Type of activity proposed under the project and as per costab but new and
	additional activities can be inserted and with new Account Code for
	tracking expenditures.
Unit	This is expressed in physical units such as numbers, persons, months etc
Total Units	Total physical unit as proposed under Appraisal Report
Total Amount	Total amount in 000 INR as proposed in Appraisal Report
Unit cost	Unit cost in INR as obtained at the time of Appraisal. These unit costs are
	indicative and should be revised if need arises.
AWP&B unit	Number of physical units proposed under AWP&B. This column is yellow-
	shaded. By simply inputting values to this column, AWPB will be ready.
Amount AWPB	Amount in 000 INR for the particular activity. No need to calculate if unit
	costs and number of units are input. If no activity is planned, input should
Quartarly planned	De U
	any value
Costab accounts	Expenditure accounts. Disbursement accounts and Procurement Accounts
	respectively as provided for in costab. No need to change these columns
	If required these columns can be hidden at the time of printing
Financing plan columns	These are automatically produced based on the costab financing rules
	Changes if required may be made after Loan Negotiation
Achievement columns	Both physical and financial amount should be manually input based on the
	results of the previous year.

The summary table is generated automatically and there is no need to input any values to any excel cells. But date of preparation or submission should be indicated and also the period and duration of the AWP&B.

Each project component has separate a table and unique number corresponding to table numbers used in Cost Tables. [For example, Table 1.1, 1.2, 1.3 etc]

All currency input values are in INR. Unit costs are in INR and summary costs in 000 INR.

Summary table: The summary table aggregates all financial values by component from the individual AWPB tables. The outline has been so designed that the individual rows in the summary table is linked to the different "Total" bottom lines of in each individual AWBP table. In this manner, corrections and adjustments in the data in the individual tables are automatically re-calculated in the summary table.

Part B: Model AWPB tables for Nagaland 2018-19

Excel Template is reproduced in Word. Original Excel File can be had from ICO, New Delhi

Notes:

- 1 Input values in highlighted (yellow) area under Column G, "qty [quantity]" only
- 2 To modify unit costs, input values in column F "Unit Cost"
- 3 Avoid changing formulae, font size.
- 4 Columns EA, DA & PA are hidden
- 5 Use A 4 landscape for printing
- 6 Financing plans are based on "costab financing rules; do not change them"

Note: targets and achievements are shown here on a quarterly basis (Q1, Q2 etc.). This may be convenient for project management, but IFAD does not require the AWPB to be prepared on a quarterly basis, and annual total figures may be used.

Annex 8.2 : MODEL ANNUAL WORK PLAN & BUDGET 2018-19-NAGALAND

				: FOCUS NA	GALAND	019						
				SUMMAR	RY	515						
AWP&B Original date: AWP&B Revised date:	[] []											
Acct	Amount in (I	NR 000)	Quarterly	v planned exp	enditure (00) INR)		AWP	&B Financir	ng Plan (000	INR)	
Code # COMPONENT Subccomponents	<u>Appraisal</u> Total	AWPB Total	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>GOM</u>	<u>IFAD</u> LOAN	<u>CSS</u>	<u>CSS</u> (Govt 10%)	CONVER	<u>BENE</u>
IMPROVED JHUM:												
Better jhum & conservation	1,680,133	444,350	111,950	110,800	110,800	110,800	55,812	321,538	60,300	6,700	0	
Settled agriculture	449,951	75,000	18,750	18,750	18,750	18,750	0	74,500	0	0	0	50
subtotal Improved Jhum	<u>2,130,084</u>	<u>519,350</u>	<u>130,700</u>	<u>129,550</u>	<u>129,550</u>	<u>129,550</u>	<u>55,812</u>	<u>396,038</u>	<u>60,300</u>	<u>6,700</u>	<u>0</u>	<u>50</u>
MARKET ACCESS & VALUE CHAIN												
Value-chain development	412,521	34,742	8,685	8,685	8,685	8,685	1,127	18,250	6,440	716	0	8,21
Market-access infrastructure	1,697,102	52,400	12,500	14,900	12,500	12,500	309	2,091	0	0	50,000	
subtotal Value chain & market access	<u>2,109,623</u>	<u>87,142</u>	<u>21,185</u>	<u>23,585</u>	<u>21,185</u>	<u>21,185</u>	<u>1,436</u>	<u>20,341</u>	<u>6,440</u>	<u>716</u>	<u>50,000</u>	<u>8,21</u>
PROJECT MANAGEMENT:												
Project Management Unit	1,062,764	174,980	68,189	35,264	35,264	36,264	95,591	79,389	0	0	0	
subtotal Project Management	<u>1,062,764</u>	<u>174,980</u>	<u>68,189</u>	<u>35,264</u>	<u>35,264</u>	<u>36,264</u>	<u>95,591</u>	<u>79,389</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>(</u>
Total	<u>5,302,471</u>	<u>781,472</u>	<u>220,074</u>	<u>188,399</u>	<u>185,999</u>	<u>186,999</u>	<u>152,839</u>	<u>495,768</u>	<u>66,740</u>	<u>7,416</u>	<u>50,000</u>	<u>8,710</u>
Notes Figures rounded to thousands												
Above Table generated automatically												

INDIA: FOCUS NAGALAND	
AWPB: April 2018 to March 2019	
Component: 1	JHUM IMPRO
Subcomponent:1.1	Better Jhum ar

JHUM IMPROVEMENT Better Jhum and Conservation

A/C			Арр	raisal	Unit Cost	AWF	P&B	Quarterly	planned ex	penditure (C	000 INR)		F	inancing Pl	an (000 INR)		
Code #	Activity	<u>Unit</u>	Total <u>Qty</u>	Amount (000 INR)	INR	Qty	<u>Amount</u> (000 INR)	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>GOM</u>	<u>IFAD</u>	<u>CSS</u> (90%)	<u>CSS</u> (Govt 10%)	<u>CONVER</u>	<u>BEN</u>
	A. Better jhum & conservation		-														
	Distric level consultation	district	8	824.10	100,000.00	8	800.00	200.00	200.00	200.00	200.00	0.00	800.00	0.00	0.00	0.00	0.00
	Village level consultation with VCs	VCs	650	6,695.80	10,000.00	650	6,500.00	1,625.00	1,625.00	1,625.00	1,625.00	0.00	6,500.00	0.00	0.00	0.00	0.00
	FIG formation	village	650	20,535.86	30,000.00	300	9,000.00	2,250.00	2,250.00	2,250.00	2,250.00	0.00	9,000.00	0.00	0.00	0.00	0.00
	Landuse planning																
	Capacity building of NaGRSEC	LS	2	1,051.48	500,000	1	500.00	125.00	125.00	125.00	125.00	0.00	500.00	0.00	0.00	0.00	0.00
	Land use maps /d	LS	8	5,768.69	700,000	8	5,600.00	1,400.00	1,400.00	1,400.00	1,400.00	0.00	5,600.00	0.00	0.00	0.00	0.00
	Land suitability classification maps /e	village	650	13,401.17	20,000	650	13,000.00	3,250.00	3,250.00	3,250.00	3,250.00	1,950.00	11,050.00	0.00	0.00	0.00	0.00
	GPS to VLWs /f	each	650	20,194.50	30,000	650	19,500.00	4,875.00	4,875.00	4,875.00	4,875.00	0.00	19,500.00	0.00	0.00	0.00	0.00
	Training of VC members	VCs	650	6,845.29	10,000	300	3,000.00	750.00	750.00	750.00	750.00	0.00	3,000.00	0.00	0.00	0.00	0.00
	Training and support to lead farmers	lead farmer	544	41,877.41	30,000	650	19,500.00	4,875.00	4,875.00	4,875.00	4,875.00	0.00	19,500.00	0.00	0.00	0.00	0.00
	Honourarium to lead farmers /h	lead farmer	23,450	25,119.06	1,000	7,800	7,800.00	1,950.00	1,950.00	1,950.00	1,950.00	0.00	7,800.00	0.00	0.00	0.00	0.00
	Orientation training to PMU & DPMU staff															0.00	0.00
	PMU staff orientation in Delhi	pers_days	100	386.00	100.00	7,500	750.00	750.00				0.00	750.00	0.00	0.00	0.00	0.00
	DPMU staff orientation in Aizwal	pers_days	200	206.00	200.00	2,000	400.00	400.00				0.00	400.00	0.00	0.00	0.00	0.00
	Better Jhum practices															0.00	0.00
	Fallow management															0.00	0.00
	Legume cover crops, annual	ha	13,000	21,833.86	1,500	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Legume cover crops, perennial	ha	13,000	21,833.86	1,500	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Low cost bunds	ha	16,250	36,342.73	2,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Current jhum improvement															0.00	0.00
	Bunds, SWC	ha	11,700	61,607.57	5,000	5,400	27,000.00	6,750.00	6,750.00	6,750.00	6,750.00	0.00	0.00	24,300.00	2,700.00	0.00	0.00
	Farmer training	sessions	91,000	191,369.02	2,000	45,500	91,000.00	22,750.00	22,750.00	22,750.00	22,750.00	0.00	91,000.00	0.00	0.00	0.00	0.00
	Supply of quality seeds	households	182,000	307,105.92	1,500	45,500	68,250.00	17,062.50	17,062.50	17,062.50	17,062.50	0.00	68,250.00	0.00	0.00	0.00	0.00
	Supply of planting materials to orchards	households	91,000	142,990.88	1,500.00	45,500	68,250.00	17,062.50	17,062.50	17,062.50	17,062.50	0.00	68,250.00	0.00	0.00	0.00	0.00
	Community conservation forests															0.00	0.00
	Contour structures in CCA	ha	13.000	139.990.07	10.000.00	4.000	40.000.00	10.000.00	10.000.00	10.000.00	10.000.00	0.00	0.00	36.000.00	4.000.00	0.00	0.00
	Nurserv establishment	ha	325	17.608.10	50.000.00	50	2.500.00	625.00	625.00	625.00	625.00	0.00	2,500.00	0.00	0.00	0.00	0.00
	Planting & maintenance	ha	13.000	73.239.05	5.000.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Protection of water resources	sites	1.950	117.442.81	50.000.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	B. Recurrent costs		.,	,												0.00	0.00
	Salaries for Circle & village level staff															0.00	0.00
	Contractual staff for circle offices	pers month	2.664	61.355.56	20.000.00	444	8.880.00	2.220.00	2.220.00	2.220.00	2.220.00	8.880.00	0.00	0.00	0.00	0.00	0.00
	Village level workers	pers month	17,640	304,704.98	15,000,00	2,940	44,100,00	11.025.00	11.025.00	11.025.00	11.025.00	44,100,00	0.00	0.00	0,00	0,00	0.00
	Motor cycle allowances	per month	17,640	40.627.33	3,000,00	2,940	8.820.00	2,205,00	2,205,00	2,205,00	2,205,00	882.00	7,938,00	0.00	0,00	0,00	0,00
		P Mit	,510		2,222.00	2,010	-,	_,0	_,0	_,	_,		.,	2100	2.00	2.00	2.00
	Total			<u>1,680,132.98</u>			444,350.00	<u>111,950.00</u>	<u>110,800.00</u>	<u>110,800.00</u>	110,800.00	55,812.00	321,538.00	60,300.00	<u>6,700.00</u>	<u>0.00</u>	0.00

	INDIA: FOCUS NAGALAND AWPB: April 2018 to March 2019 Component:1 Subcomponent:1.2	JHUM IMP Settled Agr	ROVEMEN	т													
A/C			Iddy	raisal	Unit Cost	AWF	P&B	Quarterly	planned exi	oenditure (0	00 INR)		F	inancing P	lan (000 INR))	
Code #	Activity	<u>Unit</u>	Total <u>Qty</u>	Amount (000 INR)	INR	Qty	Amount (000 INR)	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	GOM	IFAD	<u>CSS</u> (90%)	<u>CSS</u> (Govt 10%)	CONVER	BEN
	Support to settled agriculture Training and FIG promotion to TRC																
	FIG promotion to TRC, WLR	FIG	650	20,535.86	30,000	300	9,000.00	2,250.00	2,250.00	2,250.00	2,250.00	0.00	9,000.00	0.00	0.00	0.00	0.00
	Farmer training	sessions	39,000	83,730.21	2,000	13,000	26,000.00	6,500.00	6,500.00	6,500.00	6,500.00	0.00	26,000.00	0.00	0.00	0.00	0.00
	Support for wetland agriculture																
	Improved soil ferttility measures	ha	9,750	16,387.37	1,500	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Support for wetland agriculture	ha	9,750	27,339.71	2,500	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Support for upland agriculture																
	FIG promotion & support	FIG	650	20,535.86	30,000	300	9,000.00	2,250.00	2,250.00	2,250.00	2,250.00	0.00	9,000.00	0.00	0.00	0.00	0.00
	Low cost SWC works	ha	9,750	23,423.05	2,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Training upland farmers	sessions	39,000	83,730.21	2,000	13,000	26,000.00	6,500.00	6,500.00	6,500.00	6,500.00	0.00	26,000.00	0.00	0.00	0.00	0.00
	Support for private nurseries	nursery	100	10,514.78	100,000	50	5,000.00	1,250.00	1,250.00	1,250.00	1,250.00	0.00	4,500.00	0.00	0.00	0.00	500.00
	Supply of quality planting materials	households	39,000	87,211.52	2,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Support for irrigation																
	Water storage & delivery systems	system	650	76,542.28	100,000	0	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
	<u>Total</u>			449,950.84			75,000.00	18,750.00	18,750.00	18,750.00	18,750.00	<u>0.00</u>	74,500.00	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	500.00

INDIA: FOCUS NAGALAND AWPB: April 2018 to March 2019 Component:2 Subcomponent:2.1

MARKET ACCESS INFRASTRUCTURE & VALUE CHAIN Value chain development

A/C			Appra	aisal	Unit Cost	AWP	&B	Quarterly	planned exp	enditure (0	00 INR)		F	inancing P	lan (000 INR))	
Code #	Activity	Unit	Total	Amount	INR	Qty	Amount	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	GOM	IFAD	CSS	CSS	CONVER	BEN
			<u>Qty</u>	(000 INR)			(000 INR)							(90%)	(Govt 10%)		
	A. CROP-BASED																
	Production support																
	FIG promotion	FIG	400	192.49	30,000	50	1,500.00	375.00	375.00	375.00	375.00	0.00	1,500.00	0.00	0.00	0.00	0.00
	CRP training	CRP	100	7.73	5,000	50	250.00	62.50	62.50	62.50	62.50	0.00	250.00	0.00	0.00	0.00	0.00
	FIG members training	FIG	8000	320.53	2,500	1,000	2,500.00	625.00	625.00	625.00	625.00	0.00	2,500.00	0.00	0.00	0.00	0.00
	CRP engagement	CRP	3000	47.74	1,000	600	600.00	150.00	150.00	150.00	150.00	0.00	600.00	0.00	0.00	0.00	0.00
	Production of improved panting materials	CRP	100	108.24	70,000	50	3,500.00	875.00	875.00	875.00	875.00	350.00	3,150.00	0.00	0.00	0.00	0.00
	Supply planting materiasl: Large cardamom	ha	2,400	383.44	12,000	200	2,400.00	600.00	600.00	600.00	600.00	240.00	2,160.00	0.00	0.00	0.00	0.00
	Supply planting materiasl: Naga chilli	ha	1000	23.97	1,500	200	300.00	75.00	75.00	75.00	75.00	30.00	270.00	0.00	0.00	0.00	0.00
	Supply of planting materials: Ginger	ha	1000	119.84	7,500	200	1,500.00	375.00	375.00	375.00	375.00	150.00	1,350.00	0.00	0.00	0.00	0.00
	Marketing support																
	Market infrastructure																
	Aggregation centres	centre	50	53,901.00	1,500,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Equipment for aggregation centres	set	50	3,343.00	100,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Collection or storage centres	centre	30	35933.92	1,000,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Marketing support																
	Design project, unspecified	each	2	3,285.00	1,500,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Participation in trade fairs & exhibitions	LS	5	2,912.00	500,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Exposure visits	persons	20	1,142.00	50,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Buyer-seller meet	LS	5	5,630.00	1,000,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Agro-processing units	LS	15	34870.05	2,000,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tablets for extension services	cluster	200	2578.20	12,000	50	600.00	150.00	150.00	150.00	150.00	120.00	480.00	0.00	0.00	0.00	0.00
	Services for extension delivery	LS	2	954.00	450,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Organic certification for spices	LS	1,200	17,112.00	12,000	0	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00
	Establishment of marketing unit																
	Computer set	set	5	259.00	50,000	5	250.00	62.50	62.50	62.50	62.50	50.00	200.00	0.00	0.00	0.00	0.00
	Furniture set	set	5	207.00	40,000	5	200.00	50.00	50.00	50.00	50.00	40.00	160.00	0.00	0.00	0.00	0.00
	Vehicles	each	1	880.00	850,000	1	850.00	212.50	212.50	212.50	212.50	170.00	680.00	0.00	0.00	0.00	0.00
	Staff training	persons	15	336.00	20,000	5	100.00	25.00	25.00	25.00	25.00		100.00	0.00	0.00	0.00	0.00
	Studies	study	10	233.00	20,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Workshops on marketing	workshop	7	389.00	50,000	1	50.00	12.50	12.50	12.50	12.50		50.00	0.00	0.00	0.00	0.00
	Innovations																
	Use of Innovation fund:	subproject	50	150,000.00	0	0	0.00	0.00	0.00	0.00	0.00		0.00				0.00
	(i)				0	0	0.00	0.00	0.00	0.00	0.00		0.00				0.00
	(ii)				0	0	0.00	0.00	0.00	0.00	0.00		0.00				0.00
	(iii)				0	0	0.00	0.00	0.00	0.00	0.00		0.00				0.00
	(iv)				0	0	0.00	0.00	0.00	0.00	0.00		0.00				0.00

Contd...

INDIA: FOCUS NAGALAND AWPB: April 2018 to March 2019 Component:2 Subcomponent:2.1

MARKET ACCESS INFRASTRUCTURE & VALUE CHAIN Value chain development

A/C			Appra	aisal	Unit Cost	AWP	&B	Quarterly	planned exp	enditure (0	00 INR)		F	inancing Pl	an (000 INR		
Code #	Activity	<u>Unit</u>	Total	Amount	INR	Qty	Amount	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	GOM	IFAD	CSS	CSS (CSS)	CONVER	BEN
			Qty	(000 INR)			(000 INR)							(90%)	(Govt 10%)		
	LIVESTOCK-BASED																
	Pigs breeding training																
	Training of pig farmers	farmers	148	1,128.00	7,100	37	262.70	65.68	65.68	65.68	65.68		262.70				
	Exposure visits, within state	farmers	148	874.00	5,500	37	203.50	50.88	50.88	50.88	50.88		203.50				
	Exposure visits, outside state	farmers	148	2,383.00	15,000	37	555.00	138.75	138.75	138.75	138.75		555.00				
	Pigs breeding unit																
	Pig-breeding stocks	stocks	148	5,560.00	35,000	37	1,295.00	323.75	323.75	323.75	323.75		647.50				647.50
	Construction of pigsty	each	148	17,088.00	100,000	37	3,700.00	925.00	925.00	925.00	925.00		1,850.00				1,850.00
	Piggery Al units																
	Semen station construction	station	8	2,721.00	300,000	4	1,200.00	300.00	300.00	300.00	300.00	180.00	1,020.00				
	Lab facilities	LS	8	19,924.00	2,366,670	4	9,466.68	2366.67	2366.67	2366.67	2366.67	946.67	8,520.01				
	Purchase of boars	boars	40	1,051.00	25,000	20	500.00	125.00	125.00	125.00	125.00			450.00	50.00		
	Semen station operating costs	LS	44	83,761.00	1,650,000	4	6,600.00	1650.00	1650.00	1650.00	1650.00			5,940.00	660.00		
	Distribution of cross-bred piglets																
	# of piglets distribued	piglets	30,000	171,261.00	5,000	0	0.00	0.00	0.00	0.00	0.00		0.00				0.00
	Poultry improvement																
	Breeding units, houses	unit				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	Supply of DOCs	chicks				0	0.00	0.00	0.00	0.00	0.00			0.00	0.00		
	supply of backyard poultry units	Unit				0	0.00	0.00	0.00	0.00	0.00		0.00				0.00
	Mithun development, existing herds																
	Mithun shelters, community level	village	50	21,643.00	400,000	10	4,000.00	1000.00	1000.00	1000.00	1000.00		2,000.00				2,000.00
	Water supply facilities	trough	200	25,971.00	120,000	40	4,800.00	1200.00	1200.00	1200.00	1200.00		2,400.00				2,400.00
	Fencing of grazing areas	km	250	14,203.00	52,500	50	2,625.00	656.25	656.25	656.25	656.25		1,312.50				1,312.50
	Mineral blocks demonstration	village	50	2,705.00	50,000	10	500.00	125.00	125.00	125.00	125.00		500.00				
	Strengthening vet services																
	Diagnostic kits for PPR	kits	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	Diagnostic kits for CSF	kits	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00			0.00	0.00		
	Vaccination																
	# of pigs for vaccination	pigs	950,000	46,633.00	42	1,312	55.10	13.78	13.78	13.78	13.78			49.59	5.51		
	Mineral & vitamin supplemnets to pigs	village	1,508	8,265.00	5,000	136	680.00	170.00	170.00	170.00	170.00			612.00	68.00		
	# of poultry birds for vaccination	000 birds	5,900	6.821.00	1.000	500	500.00	125.00	125.00	125.00	125.00			450.00	50.00		
	# of Cattle & mithun for vaccination	animal	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00			0.00	0.00		
	# of Goats & sheep for vaccination	animal	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00			0,00	0.00		
	# of feed & fodder demons	demos	650	30,708.00	45.000	350	15,750.00	3937.50	3937.50	3937.50	3937.50	1.575.00	14,175,00	2.00	2100		
		4000	300	00,100.00	.0,000	000		0001.00	00000	0001.00	0001.00	1,010.00	,				

Contd...

INDIA: FOCUS NAGALAND AWPB: April 2018 to March 2019 Component:2 Subcomponent:2.1

MARKET ACCESS INFRASTRUCTURE & VALUE CHAIN Value chain development

A/C			Appra	Appraisal Ur Total <u>Amount</u>		AWP	&B	Quarterly	planned exp	penditure (0	00 INR)		F	inancing Pl	an (000 INR)	
Code #	Activity	<u>Unit</u>	Total	Amount	INR	Qty	Amount	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	GOM	IFAD	CSS	CSS	CONVER	BEN
			Qty	(000 INR)			(000 INR)							(90%)	(Govt 10%)		
	Training & capacity building																
	Equipment for VFAs	set	74	1,527.00	20,000	74	1,480.00	370.00	370.00	370.00	370.00	296.00	1,184.00				
	Training of VFAs	VFAs	148	1,153.00	7,100	74	525.40	131.35	131.35	131.35	131.35		525.40				
	Exposure visits for VFAs	VFAs	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00		0.00				
	Training of CAHWs	persons	1,300	9,891.00	7,100	350	2,485.00	621.25	621.25	621.25	621.25		2,485.00				
	Exposure visits for CAHWs	persons	650	5,330.00	15,000	0	0.00	0.00	0.00	0.00	0.00		0.00				
	Equipment for CAHWs	set	650	2,732.00	4,000	350	1,400.00	350.00	350.00	350.00	350.00	280.00	1,120.00				
	Farmers training by VFA & CAHWs	persons	90,000	42,934.00	440	30,000	13,200.00	3300.00	3300.00	3300.00	3300.00		13,200.00				
	Improvement of meat market chain																
	Training on hygenic meat-handling	youth	650	4,845.00	7,100	350	2,485.00	621.25	621.25	621.25	621.25		2,485.00				
	Equipment for demo-shops	youth	650	6,848.00	10,000	350	3,500.00	875.00	875.00	875.00	875.00	700.00	2,800.00				
	Slaughter slab unit	youth-unit	650	144,900.00	200,000	0	0.00	0.00	0.00	0.00	0.00			0.00	0.00		
	Support for other livestock activities	LS	6	13,700.00	200,000	1	200.00	50.00	50.00	50.00	50.00			180.00	20.00		
	RECURRENT COSTS																
	Salaries to Marketing unit in AMB																
	Manager-Market inteligence	pers_month	66	4,606.00	60,000	6	360.00	90.00	90.00	90.00	90.00	36.00	324.00				
	Manager-Market policy & research	pers_month	66	4,606.00	60,000	6	360.00	90.00	90.00	90.00	90.00	36.00	324.00				
	Manager-Market linkages	pers_month	66	4,606.00	60,000	6	360.00	90.00	90.00	90.00	90.00	36.00	324.00				
	Marketing assistants	pers_month	132	5,374.00	35,000	12	420.00	105.00	105.00	105.00	105.00	42.00	378.00				
	Travel	month	330	1,904.00	5,000	30	150.00	37.50	37.50	37.50	37.50	15.00	135.00				
	Office operating costs	year	6	411.00	60,000	1	60.00	15.00	15.00	15.00	15.00	6.00	54.00				
	Vehicle operating costs	year	5.5	761.00	120,000	1	60.00	15.00	15.00	15.00	15.00	6.00	54.00				
	Salaries for Livestock section																
	CAHW allowances	pers_year	1,300	16,342.00	12,000	650	7,800.00	1950.00	1950.00	1950.00	1950.00	780.00	7,020.00				
	VFA salaries by GOM	pers_month	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	VFA salaries by IFAD & GOM	pers_month	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	VFA transportation allowances	VFA_year	444	12,271.00	24,000	74	1,776.00	444.00	444.00	444.00	444.00	177.60	1,598.40				
	AHW travel alloances	pers_year				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	AHW salaries & alloances	AHM_year				0	0.00	0.00	0.00	0.00	0.00						
	AHM transportation allowances	AHM_month				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	Maitenance of Aggregation centres	year	90	568.00	6,250	0	0.00	0.00	0.00	0.00	0.00						0.00
	Total			412,521.00			<u>34,741.78</u>	8,685.45	8,685.45	8,685.45	8,685.45	1,126.67	<u>18,250.01</u>	<u>6,439.59</u>	715.51	<u>0.00</u>	8,210.00

	INDIA: FOCUS NAGALAND																
	AWPB: April 2018 to March 2019																
	Component:2	MARKET A	CCESS INF	RASTRUC	FURE & VAL	UE CHAIN											
	Subcomponent:2.2	Market acce	ess infrast	ructure													
A/C			Appr	aisal	Unit Cost	AWF	&B	Quarterly	planned exp	penditure (0	00 INR)		F	inancing Pl	an (000 INR)		
Code #	Activity	Unit	Total	Amount	INR	Qty	Amount	<u>Q1</u>	Q2	Q3	Q4	GOM	IFAD	CSS	CSS	CONVER	BEN
			<u>Qty</u>	(000 INR)			(000 INR)							(90%)	(Govt 10%)		
	INVESTMENT COST																
	Training and capacity building																
	of Engineering staff of DOA																
	Purchase of survey equipment	set	1	621.00	600,000	1	600.00		600.00			60.00	540.00				
	GPS for Kohima staff	set	3	93.00	30,000	3	90.00		90.00			9.00	81.00				
	Design software	set	1	722.00	700,000	1	700.00		700.00			70.00	630.00				
	Motor cycles	each	0	0.00	0	0	0.00		0.00			0.00	0.00				
	4 WD field vehicle	each	1	890.00	850,000	1	850.00		850.00			170.00	680.00				
	Training	persons	4	168.00	40,000	4	160.00		160.00				160.00				
	TA for road survey & design	pers_month	0	0.00	0	0	0.00			0.00	0.00	0.00	0.00				
	TA for road construction supervision	pers_month	0	0.00	300,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	Construction of farm link roads																
	Rehabilitation of existing roads	km	200	444,267.00	2,191,000	0	0.00	0.00	0.00	0.00	0.00			0.00	0.00		
	Survey & quality control	LS	300	1,610.00	5,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	Cross-drainage structures	each CDS	600	343,316.00	477,575	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	Construction under convergence																
	Channels for water harvesting	LS	1100	388,554.00	350,000	0	0.00	0.00	0.00	0.00	0.00					0.00	
	complementary access works	LS	1	504,615.00	500,000,000	0.1	50,000.00	12,500.00	12,500.00	12,500.00	12,500.00					50,000.00	
	RECURRENT COST																
	Maintenance of existing earth roads	km	500	5,046.00	10,000	0	0.00	0.00	0.00	0.00	0.00	0.00					
	Maintenance of CDS	CDS	1800	7,200.00	4,000	0	0.00	0.00	0.00	0.00	0.00	0.00					
	Total			1,697,102.00			52,400.00	<u>12,500.00</u>	<u>14,900.00</u>	<u>12,500.00</u>	<u>12,500.00</u>	309.00	<u>2,091.00</u>	0.00	0.00	50,000.00	0.00

INDIA: FOCUS NAGALAND AWPB: April 2018 to March 2019 Component: 3 PRO. Subcomponent:3.1 Proje

PROJECT MANAGEMENT
Project manageemnt and M&E and KM

A/C			Appr	aisal	Unit Cost	AWF	P&B	Quarterly	planned exp	enditure (00	0 INR)		Fi	inancing F	Plan (000 INR)	
Code #	Activity	<u>Unit</u>	Total <u>Qty</u>	Amount (000 INR)	<u>INR</u>	Qty	<u>Amount</u> (000 INR)	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>GOM</u>	<u>IFAD</u>	<u>CSS</u> (90%)	<u>CSS</u> (Govt 10%)	<u>CONVER</u>	<u>BEN</u>
	Project Management Unit																
	Vehicles, PMU																
	Vehicles 4WD - Premium	each	2	3457.41	1,700,000	2	3,400.00	3,400.00	0.00	0.00	0.00	680.00	2,720.00				
	Vehicle 4WD - Budget	each	11	9507.88	850,000	11	9,350.00	9,350.00	0.00	0.00	0.00	1,870.00	7,480.00				
	Multi-utility vehicle	each	1	1864.11	1,800,000	1	1,800.00	1,800.00	0.00	0.00	0.00	360.00	1,440.00				
	Minibus	each	1	828.49	800,000	1	800.00	800.00	0.00	0.00	0.00	160.00	640.00				
	Vehicles, DPMU																
	Vehicle 4WD - Budget	each	8	6914.82	850,000	8	6,800.00	6,800.00	0.00	0.00	0.00	1,360.00	5,440.00				
	Motor cycles	each	40	6101.31	75,000	40	3,000.00	3,000.00	0.00	0.00	0.00	600.00	2,400.00				
	Office equipment, PMU																
	Video-conferencing facility - PMU and DMUs	set	1	1,243.00	1,200,000	1	1,200.00	1,200.00	0.00	0.00	0.00	240.00	960.00				
	Laptop computers	each	14	652.44	45,000	14	630.00	630.00	0.00	0.00	0.00	126.00	504.00				
	Desktop computers	each	4	144.99	35,000	4	140.00	140.00	0.00	0.00	0.00	28.00	112.00				
	Printers and scanners	set	6	62.14	10,000	6	60.00	60.00	0.00	0.00	0.00	12.00	48.00				
	Photocopy machines	each	1	155.34	150,000	1	150.00	150.00	0.00	0.00	0.00	30.00	120.00				
	Other equipments	set	1	517.81	500,000	1	500.00	500.00	0.00	0.00	0.00	100.00	400.00				
	Office furniture	set	2	1054.73	500,000	1	500.00	500.00	0.00	0.00	0.00	100.00	400.00				
	Computer Peripherals /b	set	1	207.12	200,000	1	200.00	200.00	0.00	0.00	0.00	40.00	160.00				
	Tablets	each	60	745.64	12,000	60	720.00	720.00	0.00	0.00	0.00	144.00	576.00				
	Office equipment, DPMU																
	Laptop computers	each	32	1491.29	45,000	12	540.00	540.00	0.00	0.00	0.00	108.00	432.00				
	Desktop computers	each	8	289.97	35,000	4	140.00	140.00	0.00	0.00	0.00	28.00	112.00				
	Printers and scanners	set	8	82.85	10,000	4	40.00	40.00	0.00	0.00	0.00	8.00	32.00				
	Other equipments	set	8	828.49	100,000	4	400.00	400.00	0.00	0.00	0.00	80.00	320.00				
	Office furniture	set	8	1656.98	200,000	4	800.00	800.00	0.00	0.00	0.00	160.00	640.00				
	Computer Peripherals /c	set	8	828.49	100,000	4	400.00	400.00	0.00	0.00	0.00	80.00	320.00				
	Registration & other expenses																
	Registration	LS	1	250.00	250,000	1	250.00	250.00				25.00	225.00				
	Accounting software	LS	54	1232.97	20,000	9	180.00	180.00	0.00	0.00	0.00	27.00	153.00				
	Customisation of accounting software	LS	1	618.95	600,000	1	600.00	600.00	0.00	0.00	0.00	60.00	540.00				
	Audit expenses	year	6	2744.23	400,000	1	400.00	100.00	100.00	100.00	100.00	40.00	360.00				
	Internal Audit- External /d	LS	54	12333.53	200,000	9	1,800.00	450.00	450.00	450.00	450.00	360.00	1,440.00				
	Technical Assistance by FAO	LS															

Contd...

INDIA: FOCUS NAGALAND AWPB: April 2018 to March 2019 Component: 3 Subcomponent:3.1

PROJECT MANAGEMENT Project manageemnt and M&E and KM

A/C			Appr	aisal	Unit Cost	AW	P&B	Quarterly	planned exp	enditure (00	00 INR)		Fi	nancing I	Plan (000 INR)		
Code #	Activity	<u>Unit</u>	Total	Amount	INR	Qty	Amount	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	Q4	GOM	<u>IFAD</u>	CSS	CSS	CONVER	BEN
			Qty	(000 INR)			(000 INR)							(90%)	(Govt 10%)		
	Monitoring & Evaluation		-														
	Equipment																
	Laptop computers	each	2	93.00	45,000	2	90.00	90.00	0.00	0.00	0.00	18.00	72.00				
	Printer and scanner	set	1	36.00	35,000	1	35.00	35.00	0.00	0.00	0.00	7.00	28.00				
	Other equipment- GPS etc.	LS	1	211.00	200,000	1	200.00	200.00	0.00	0.00	0.00	40.00	160.00				
	Studies, workshops, surveys																
	Baseline, mid-term and impact survey	study	3	0.00	0	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	Sub-sector outcome surveys	survey	4	4,209.00	1,000,000	2	2,000.00	500.00	500.00	500.00	500.00	300.00	1,700.00				
	Annual Outcome Survey	survey	6	3,426.00	1,000,000	1	1,000.00				1,000.00	150.00	850.00				
	Case studies, Climate impact																
	assessment study, other studies	LS	10	17,462.00	1,500,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	Climate Risk Assessment	LS	5	2,910.00	500,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	Enumerators for M&E unit surveys	LS	6	10,278.00	187,500	8	1,500.00	375.00	375.00	375.00	375.00	225.00	1,275.00				
	Project Completation review	LS	1	1,595.00	2,500,000	0	0.00	0.00	0.00	0.00	0.00		0.00				
	Capacity building, knowledge																
	management sharing: ICAR																
	Workshop for dissemination of results	LS	3	1,092.00	300,000	0	0.00	0.00	0.00	0.00	0.00		0.00				
	Micro watershed management demo	district	24	10,734.00	400,000	0	0.00	0.00	0.00	0.00	0.00		0.00				
	Technical backstopping	LS	32	1,827.00	50,000	0	0.00	0.00	0.00	0.00	0.00		0.00				
	Impact assessment of settled agriculture	LS	3	2,075.00	600,000	1	600.00	150.00	150.00	150.00	150.00		600.00				
	Capacity building, knowledge																
	management sharing: ATARI																
	Supply of improved planting material	village	272	3,054.00	10,000	0	0.00	0.00	0.00	0.00	0.00		0.00				
	Action research with local institutions	district	24	5,367.00	200,000	0	0.00	0.00	0.00	0.00	0.00		0.00				
	Technical backstopping	district	32	731.00	20,000	0	0.00	0.00	0.00	0.00	0.00		0.00				
	Training for Lead Farmers	person	272	458.00	1,500	0	0.00	0.00	0.00	0.00	0.00		0.00				
	Demonstrations	demo	48	2,628.00	50,000	0	0.00	0.00	0.00	0.00	0.00		0.00				
	Staff level capacity knowledge sharing																
	Monthly meetings at district level	meeting	528	4,873.00	8,000	24	192.00	48.00	48.00	48.00	48.00		192.00				
	Quartely meeting at state level	meeting	22	508.00	20,000	2	40.00	10.00	10.00	10.00	10.00		40.00				
	Training in KM methods for sharing	batch	3	98.00	30,000	1	30.00	7.50	7.50	7.50	7.50		30.00				
	Participant level knowledge sharing																
	Focus groups and participatory M&E	meeting	88	508.00	5,000	1	5.00	1.25	1.25	1.25	1.25		5.00				
	Cluster level meetings - half-yearly	meeting	40	327.00	7,000	0	0.00	0.00	0.00	0.00	0.00		0.00				
	Documenting lessons leanrt	LS	5	582.00	100,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	Learning route - domestic	LS	3	1,922.00	550,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	Videos for farmer-to-farmer, equipment	set	1	161.00	150,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	Videos for farmer-to-farmer, initial training	training	1	536.00	500,000	0	0.00	0.00	0.00	0.00	0.00		0.00				
	Videos for farmer-to-farmer: follow up	training	1	4,698.00	4,000,000	0	0.00	0.00	0.00	0.00	0.00		0.00				
	Videos for farmer-to-farmer:backstopping	LS	1	1,172.00	1,000,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00				

INDIA: FOCUS NAGALAND AWPB: April 2018 to March 2019 Component: 3 PROJECT MANAGEMENT Subcomponent:3.1 Project manageemnt and M&E and KM

A/C			Appr	aisal	Unit Cost	AWP	&B	Quarterly	planned exp	enditure (00	0 INR)		Fi	nancing F	lan (000 INR))		-
Code #	Activity	<u>Unit</u>	Total <u>Qty</u>	Amount (000 INR)	<u>INR</u>	Qty	Amount (000 INR)	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>GOM</u>	<u>IFAD</u>	<u>CSS</u> (90%)	<u>CSS</u> (Govt 10%)	<u>CONVER</u>	<u>BEN</u>	
	Dissemination & communication																	
	Project start-up workshop	workshop	1	515.06	500,000	1	500.00	125.00	125.00	125.00	125.00		500.00					
	Village information kit	village	650	6850.59	10,000	300	3,000.00	750.00	750.00	750.00	750.00	300.00	2,700.00					
	Posters and leaflets	lumpsum	5	465.46	80,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
	Translation of technical materials	lumpsum	4.5	1020.38	200,000	0.5	100.00	25.00	25.00	25.00	25.00	15.00	85.00					
	Printing of technical materials	lumpsum	5	3490.97	600,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
	Annual knowledge sharing event	event	5	2915.23	500,000	0	0.00	0.00	0.00	0.00	0.00		0.00					
	Attending national events	person	25	874.57	30,000	0	0.00	0.00	0.00	0.00	0.00		0.00					
	Editing and design of publications	lumpsum	5	2910.34	500,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
	Website design and operation	lumpsum	6	5481.57	800,000	1	800.00	200.00	200.00	200.00	200.00	120.00	680.00					
	Printing of communication materials	lumpsum	5	3751.70	600,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
	Communication Videos	lumpsum	4	2292.38	500,000	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
	Total investment costs			169,954			44,892.00	35,666.75	2,741.75	2,741.75	3,741.75	8,001.00	36,891.00	0.0	D			
	RECCURENT COSTS																	
	Staff recruitment expenses	LS	1	307	300,000	1	300.00	75.00	75.00	75.00	75.00		300.00					
	Audit officer	pers_month	72	4146	50,000	12	600.00	150.00	150.00	150.00	150.00		600.00					
	A. PMU: Staff salary & allowances																	
	State Project Director	pers_month	72	14095.20	170,000	12	2,040.00	510.00	510.00	510.00	510.00	2,040.00	0.00	0.0	D			
	Dy Director - Agriculture	pers_month	72	5803.90	70,000	12	840.00	210.00	210.00	210.00	210.00	840.00	0.00					
	Dy Director - Horticulture	pers_month	72	5803.90	70,000	12	840.00	210.00	210.00	210.00	210.00	840.00	0.00					
	Dy Director - Animal Husbandry	pers_month	72	5803.90	70,000	12	840.00	210.00	210.00	210.00	210.00	840.00	0.00					
	Executive Engineer	pers_month	72	5803.90	70,000	12	840.00	210.00	210.00	210.00	210.00	840.00	0.00					
	Director - SWC	pers_month	72	5803.90	70,000	12	840.00	210.00	210.00	210.00	210.00	840.00	0.00					
	Procurement consultant	pers_month	28	4552.33	150,000	10	1,500.00	375.00	375.00	375.00	375.00	150.00	1,350.00					
	ACF Forests	pers_month	72	5803.90	70,000	12	840.00	210.00	210.00	210.00	210.00	840.00	0.00					
	Asst Registrar of Cooperation	pers_month	72	5803.90	70,000	12	840.00	210.00	210.00	210.00	210.00	840.00						
	Deputy Director, Fisheries	pers_month	72	5803.90	70,000	12	840.00	210.00	210.00	210.00	210.00	840.00	0.00					
	Deputy Director, Sericulture	pers_month	72	5803.90	70,000	12	840.00	210.00	210.00	210.00	210.00	840.00						
	Deputy Director, Land Resources	pers_month	72	5803.90	70,000	12	840.00	210.00	210.00	210.00	210.00	840.00	0.00					
	Project Support Specialist	pers_month	72	7462.16	90,000	12	1,080.00	270.00	270.00	270.00	270.00	108.00	972.00					
	Project Assistants	pers_month	144	4145.65	25,000	24	600.00	150.00	150.00	150.00	150.00	60.00	540.00					
	Finance and Accounts Manager	pers_month	72	8291.29	100,000	12	1,200.00	300.00	300.00	300.00	300.00	120.00	1,080.00					
	Accounts Officer	pers_month	72	4145.65	50,000	12	600.00	150.00	150.00	150.00	150.00	60.00	540.00					
	Accounts Assistant	pers_month	72	2487.39	30,000	12	360.00	90.00	90.00	90.00	90.00	36.00	324.00					
	Drivers	pers_month	216	4477.30	18,000	36	648.00	162.00	162.00	162.00	162.00	648.00						
	Grade IV staff	pers_month	144	2487.39	15,000	24	360.00	90.00	90.00	90.00	90.00	360.00	0.00					
	Support to CSS operations	pers_month	216	7358.00	30000	24	720.00	180.00	180.00	180.00	180.00	72.00	648.00					

Contd...

INDIA: FOCUS NAGALAND AWPB: April 2018 to March 2019 Component: 3 PROJECT MANAGEMENT Subcomponent:3.1 Project manageemnt and M&E and KM

A/C			Appr	aisal	Unit Cost	AWF	P&B	Quarterly planned expenditure (000 INR)		00 INR)	Financing Plan (000 INR)						
Code #	Activity	Unit	Total		INR	Otv	Amount	Q1	02	03	04	GOM		CSS	CSS	CONVER	BEN
0000 //	- County	<u>01111</u>	Qtv	(000 INR)	<u></u>	uly	(000 INR)	<u>w1</u>	<u> 41</u>	<u>uu</u>	<u> 44 -</u>	<u></u>		(90%)	(Govt 10%)	OUTTER	DER
	B. DPMU: staff salary			(******)			(,							(,	(,		
	District Project Manager - JDA	pers month	576	56380.78	85,000	96	8,160.00	2,040.00	2,040.00	2,040.00	2,040.00	8,160.00	0.00				
	Project Director-ATMA	pers month	576	46431.23	70,000	96	6,720.00	1,680.00	1,680.00	1,680.00	1,680.00	6,720.00	0.00				
	Field Coordinator DD Agriculture	pers month	576	46431.23	70,000	96	6,720.00	1,680.00	1,680.00	1,680.00	1,680.00	6,720.00	0.00				
	District Vet Officer	pers month	576	46431.23	70,000	96	6,720.00	1,680.00	1,680.00	1,680.00	1,680.00	6,720.00	0.00				
	District Finance Manager	pers month	288	16582.58	50,000	48	2,400.00	600.00	600.00	600.00	600.00	240.00	2,160.00				
	Agriculture/Horti Officers /n	pers_month	2880	149243.25	45,000	480	21,600.00	5,400.00	5,400.00	5,400.00	5,400.00	21,600.00					
	Block, Circle Agri/AH Assistants	pers_month	4320	149243.25	30,000	720	21,600.00	5,400.00	5,400.00	5,400.00	5,400.00	21,600.00					
	Project assistants	pers_month	576	16582.58	25,000	96	2,400.00	600.00	600.00	600.00	600.00	240.00	2,160.00				
	Drivers	pers_month	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	C. Operating costs PMU																
	Utilities	month	72	4092.05	50,000	12	600.00	150.00	150.00	150.00	150.00	60.00	540.00				
	Office operating costs	month	72	4910.46	60,000	12	720.00	180.00	180.00	180.00	180.00	72.00	648.00				
	Fuel & vehicle maintenance	LS	72	9820.92	120,000	12	1,440.00	360.00	360.00	360.00	360.00	144.00	1,296.00				
	Travel allowances	LS	72	24552.31	300,000	12	3,600.00	900.00	900.00	900.00	900.00	360.00	3,240.00				
	D. Operating costs, DPMUs																
	Utilities	month	576	13094.56	20,000	96	1,920.00	480.00	480.00	480.00	480.00	192.00	1,728.00				
	Office operating costs	month	576	13094.56	20,000	96	1,920.00	480.00	480.00	480.00	480.00	192.00	1,728.00				
	Fuel & vehicle maintenance	LS	576	13094.56	20,000	96	1,920.00	480.00	480.00	480.00	480.00	192.00	1,728.00				
	Travel allowances	LS	576	114577.44	175,000	96	16,800.00	4,200.00	4,200.00	4,200.00	4,200.00	1,680.00	15,120.00				
	E. M&E staff																
	Manager, Planning (PMU)	pers_month	72	7462.16	90,000	12	1,080.00	270.00	270.00	270.00	270.00	108.00	972.00				
	Deputy Manager, MIS (PMU)	pers_month	72	6633.03	80,000	12	960.00	240.00	240.00	240.00	240.00	96.00	864.00				
	Computer assistants (PMU)	pers_month	144	4974.78	30,000	24	720.00	180.00	180.00	180.00	180.00	72.00	648.00				
	Asst Manager Planning (DPMUs)	pers_month	288	16452.37	50,000	48	2,400.00	600.00	600.00	600.00	600.00	240.00	2,160.00				
	F. KM staff																
	Manager, KM	pers_month	66	6909.47	90,000	6	540.00	135.00	135.00	135.00	135.00	54.00	486.00				
	Manager, Gender & CI	pers_month	66	6909.47	90,000	6	540.00	135.00	135.00	135.00	135.00	54.00	486.00				
	M&E operating costs	LS	6	1364.02	200,000	1	200.00	50.00	50.00	50.00	50.00	20.00	180.00				
	Total recurrent costs			892,810			130,088.00	32,522.00	32,522.00	32,522.00	32,522.00	87,590.00	42,498.00	<u>0.0</u>	0		
	Total cost			1,062,764			174,980.00	68,188.75	35,263.75	35,263.75	36,263.75	95,591.00	79,389.00	0.0	0		

End of Tables

Chapter 9: Guidelines for village-level planning

1. **Obtaining Full Prior and Informed Consent (FPIC):** In order to obtain the FPIC, stakeholders, mainly the Village Council (VC) Presidents and Secretaries from all the villages in a district will be oriented about the FOCUS project through a workshop / training at the district level, under Deputy Commissioner as Chair. This will be organized by the district PMU soon after getting the clearance for the project from IFAD and the Gol and state governments. Immediately after the orientation, these stakeholders will do a wider level consultation with the village council members, who in turn will obtain the community consent about their taking up the project, or not, by organizing a village assembly meeting.

2. **Identification of Lead Farmers:** The Lead Farmers in each project village will be selected by the circle / block / village level officers of the project in consultation with the VCs using some of the following criteria. The Lead Farmer:

- (a) Is a famer having tenurial rights in the selected villages?
- (b) Be a jhum farmer, multiple cropper, or a special commodity farmer for at least past three years
- (c) Had stable crop yields and income for past three years
- (c) Has access to irrigation/ water source for raising nurseries
- (d) Is not a wage worker / earner
- (e) Is aware, or familiar with market, prices and policies
- (f) Is not actively engaged in other business/political activities
- (g) Has acceptable inter-personal communication skills to deal with the outsiders

3. **Training of Lead Farmers:** The selected lead farmers will be trained by the circle / block level trained staff from Agri / Horti / Vety / Land Resources and Soil & Water Conservation dept. Topics to be covered in lead farmer training would possibly include, soil and water conservation, agronomic practices for improving soil fertility, package of practices for selected crops, nursery raising identification of tree species and crop varieties for promotion in the selected villages/ cluster, formation and operationalization / promotion of the Farmer Interest Groups (FIGs). The training material for use by the lead farmers will also be provided as a part of the training kit. The training material to be used will be prepared by the FAO consultant on Capacity building.

4. **Support for Lead Farmers:** Support will be provided for establishing nursery for identified species in the project villages. Lead Farmer for starting-up the nursery will be provided, training on nursery, and financial support for procuring root stocks, mother plants, tools, net houses, fences, etc. While it will take time to produce the saleable nursery plants, the lead farmers will also be provided support to start up poultry, piggery, seeds of legumes and other crops so that while her or his nursery becomes ready for sale, the lead farmer has income generating enterprises to live on. Other things being equal, women will be given preference. Finances will be directly transferred to the lead farmer as per the plan, and will be monitored by the Project staff (AFAs, VFAs). Some of the the species identified under the project could include:

(a) Fast growing tree species and grasses, such as Gliricidia, *Tephrosia, Flemingia*, and vetiver / lemongrass,

(b) Locally preferred species such as tree bean (*Parkaria Timoriana, Parkia speciosa*)), *Champaka (Michella champaka*), *Badrang* / Indian Pepper (*Xanthozylum rhetsa*), Gamar (*Gmelina arborea*), cotton tree (*Bombax ceiba*),

(c) High value timber tree species, such as *Butea monosperma, Albizia lebbec, Melia composita, Alnus nepalensis, Cedrela toona and if possibly also Mesua ferra, Duabanga grandiflora* and / or *Duabanga meluccana, etc.*

5. Lead Farmers will identify land for nursery establishment having an area of at least 1000 sq meters. The nursery lands may be located in low lying areas and have some irrigation facility. The nursery will be fenced using local material. As far possible, the nurseries will be located near to the habitation and be accessible even during rainy season.

6. Activities the lead farmer will take up: The lead farmers primarily will be involved in planning for improving Jhum, contribution in jhum land allocation for different crops, land shaping where needed, organizing jhum Farmers Interest Groups (FIG) and training them, constructing water harvesting tanks, setting up nursery, sourcing planting material, and accessing and implementing improved agro practices on his own farm and assisting FIG members implement on their farms.

7. **Formation and promotion of Farmers Interest Group (FIGs) / CRPs:** Lead Farmer will form 20 FIGs in each village, comprising 10-20 members in each group with each member linked to 20 jhum farmers as associate member. Some of the criteria the Lead Framers will use in forming the FIGs may include: proximity of members farms to each other, crops or commodities grown / raised by farmers in which the lead farmer has expertise / specializes in, member's willingness to assist each other, etc. The lead farmer and agriculture experts/ assistants from block / circle/ village will train the associate members on different aspects of the project, and each of them in return will support 10 farmers.

8. **Role of FIGs**: The main role of FIGs would be overseeing the entire jhum project with the aim of making improvements through the training and assistance to its members and via them to the associate members. The same group will also undertake support for fallow management.

9. Land Use Planning: The project will initially have to conduct a day long stakeholders' workshop at the district level by inviting all the Chairpersons and Secretaries of Village Councils in the project area to orient them on project goal and project activities with deliberations on the impact of the project. Thereafter, the Chairpersons and Secretaries of Village Council will be requested to conduct a meeting of the Village Assembly and deliberate on whether the village wants to take up project implementation. The Village Councils will thereafter be requested to submit minutes of the meeting with records of their willingness, or otherwise for participation in the project. Based on the willingness of the community, the project implementation will proceed.

10. Thereafter, the project will identify a Lead Farmer in each village in consultation with the Village Councils. These Lead Farmers will be trained and supported for establishing nursery and livestock units. These efforts will create a cadre of village level workers linked to the Departments of Agriculture, Horticulture, Animal Husbandry and Soil and Water Conservation. The project will engage Nagaland GIS and Remote Sensing Centre (NGISRSC)⁴³ to assist in preparation of land use maps and land suitability maps for the four project districts. The project will support procurement of GPS for each village and will also develop the capacity of NGISRSC in the use of new technology for preparing the land use maps. NGISRSC will engage some agency for their capacity development in this area.

11. The project will also support digitization of land records to fix boundaries for the land allotted for settled agriculture. Based on the land use maps and also land suitability classification maps, Village Councils will be trained to: (i) identify lands suitable for agriculture based on the slope, altitude and soil texture, and to allocate land based on this scientific information for jhum, settled agriculture and forest; (ii) fix boundaries for land allocated for settled agriculture; and (iii) decide on the crops to be cultivated to ensure development of economies of scale required for accessing markets.

⁴³ The Soil and Land Use Survey Unit of the Government of India under Department of Agriculture, Cooperation and Farmers Welfare has digitally prepared a land use plan map for every major watershed in the country. Support for the planned work in FOCUS could also be obtained from these records.

Chapter 10: Guidelines for Improved jhum cultivation

1. **Jhum Improvement:** The main objectives of this component are to: i) increase the cultivation period at the same piece of land, increase jhum cycles, improve and stabilize the productivity of the lands in current jhum cultivation, reduce the labour requirement and drudgery in jhum operations, and overall to modify jhum agriculture system from a subsistence focus to a subsistence and cash income focus.



Fig. 1. Field photo of a jhum area during fallow period

12. The project intends to implement agriculture related interventions on jhum land taking into account climate change and its impact on food production and livelihoods. The project will take into account climate resilient best practices that are emerging from various research institutions such as, the NICRA programme of ICAR and NAPCC of the Ministry of Environment, Forests and Climate Change. Some of these best practices and innovations that will be introduced include: (i) use of remote sensing capacities to facilitate Village Councils to identify lands appropriate for cultivation and to avoid using steeply sloping lands for cultivation, as is prevalent currently; (ii) introduction of fertility management practices using both biological measures and also possibly through the introduction of "nano-nutrient delivery systems"; (iii) use of traditional knowledge in erosion control for ensuring extension of cultivation period from currently one year to at least three years; and (iii) use of better agronomic practices to introduce agro-forestry, linear plantation, cereal and pulse cultivation to build synergy between crops to maintain soil health on one hand and improved farmer income on the other.



Fig. 2. A recently slashed and burnt field prepared for jhum cultivation

13. **Current Jhum improvement:** The project will focus on improving current jhum and improved management of jhum fallows, which will give two-fold results. First, it will increase the productivity and the second it will lengthen jhum cycle, resulting in increased fallows. Based on the land use planning maps prepared with support from NaRSAC, communities will be encouraged to earmark the ridge and steep slopes for permanent tree farming, and side slopes for crop farming along with trees, including fruit trees. The community will be encouraged to create fire lines to prevent the spread of fire outside the land allocated for jhum. The selection of tree species will be decided based on the altitude of the area and tree maturity duration. Better planting material and agronomy for the crops will be introduced coupled with introduction of new and high value low volume crops in the system. The project will either maintain or increase the crop diversity in jhum that is important for the dietary diversity of the jhum farmers. Fertility improvement measures will involve growing of cover crops, especially the fertility building and leguminous plants during the pre-crop and fallow periods, and planting and growing of high value leguminous, timber and fuel wood plants / trees on contour bunds.

14. Based on the feedback received from the Department of Agriculture and other stakeholders, it was decided to cover all jhum farmers involved in current jhum cycle as against 10 ha per village proposed in the project design. Each jhum farmer will get support for about 25% of their jhum plot (estimated at 0.25 ha per jhum farmer) subject to the farmers implementing low cost erosion control measures. This will enable provision of support for all jhum farmers and based on the experience the farmers will be able to scale up. The support will be spread over three years to ensure that the jhum farmers continue cultivation in the same area.

(i) First Year: During the first year, the project with support from Lead Farmers will form farmer's interest groups (FIG) comprising 10-20 members, and each FIG member linked to provide technical support and facilitate accessing of the project provisions to 20 jhum farmers as associate members. The project will support the construction of low cost bunds and trenches and water harvesting structures that will improve the availability of moisture for the cultivated crops. Planting of the leguminous and other crops on contour bunds, such as *Indigofera tinctoria, Flemingia macrophylla, Flemingia semilata, Butea monosperma, Albizia lebbec, and Tephrosia candida*, and *Gliricidia maculate* will contribute to improved soil fertility and moisture conservation through leaf fall and mulch, and also introduce nano-nutrient delivery systems, thereby help in stabilizing and improving productivity. Project will support crops/commodities that have marketing potential such as, bird's eye chilly, turmeric and ginger. The marketing support built under value chain development will facilitate value addition and marketing of such commodities. In addition, crops/commodities such as, rice, maize, sesame, cowpea and other pulses will also be promoted for local consumption purposes in addition to fodder trees, tubers, etc, for use as animal fodder and feed.

The project will purchase plating material from the Lead Farmers to facilitate progression of nursery activities of the Lead Farmers as business enterprise. The improved varieties of crops will be accessed from the ATARI / KVKs and other sources.

For nano-nutrient delivery, project will make arrangements with the G B Pant University of Agriculture and Technology, who has pioneered in this technology for providing capsulized form of selected nutrients. The project will support current jhum improvement in total 75,400 ha, out of which direct project support will be for 18850 ha covering 105,560 households.

- (ii) **Second Year:** Project will review the farm performance during the second year, in which the jhum households (FIGs and their associate members) are expected to take up cultivation using their own resources on the same jhum plot, including the low cost in situ conservation works, cultivation on the same plot using their own resources without shifting to the next jhum plot and starting purchase of planting materials from the Lead Farmers. This review will decide the support for the third year.
- (iii) **Third Year:** In the third year project will provide additional planting material and training in agronomic practices to those farmers who based on their own experience in the first year have implemented some improvement measures in the second year.

15. Fallow management: The FIG promoted for jhum improvement will also take up fallow management in the previous jhum (fallow jhum). Fallow management will facilitate improving soil fertility and reduction in soil erosion. For this, the project will support low cost contour bunding, including log wood bunding, trenching, creating terraces using vegetative strips of fast growing tree species and grasses, such as the perennial pigeon pea, wild sunflower (Tithonia diversifolia), Sesbania species (speciosa and aculeate), Trifolium alexandrinum, Indigofer tinctoria, stylo (Stylosanthes hamata), Gliricidia, Tephrosia, Flemingia, and vetiver / lemongrass. The seedlings of these species will be accessed from the nursery, operated (owned and managed) by the Lead Farmer. The project will also support seeding the fallows with both, annual and perennial legume cover crops, such as the perennial pigeon pea, wild sunflower, stylo, Sesbania species, Trifolium alexandrinum, Indigofera tinctoria, and this is expected to stabilize the land and improve soil fertility. The seeds of these species may be accessed from ATARI/ KVKs and other sources. Some of these leguminous crops also have significant fodder and food value. Fallow ihum improvement efforts will be monitored to avoid over exploitation and burning during the fallow period. The project intends to support in total 75,400 ha, of which direct project support will be for 18850 ha covering 105560 households.

16. **Village Forest Conservation:** The village forests remain the vital community asset for protecting water sources, supply of non-timber forest produce (NTFP), and controlling forest fires. Only the dry wood is allowed to be removed from the village forests and no commercialization is allowed for the NTFPs. The village forests in riverine area are also protected as rivers are used for navigation purposes. However, over a period of time these forests have not been maintained. It is therefore, essential to restore the village forests to meet the above objectives. This will involve demarcating village forest boundaries, constructing contour trenches / bunds, protection of water sources, raising nurseries and supplying planting material of locally preferred species such as, *Parkia timoriana, Michella champaka*, Gamar (*Gmelina arborea*), *Bombax ceiba*, etc. Village Councils will

implement this activity The Village Forest Conservation will contribute to the protection of water sources for irrigation and drinking purposes. These include:

- a) In order to ensure that the springs/ water sources being used by the village community, it is proposed to identify 2-3 water sources generally located in the village protected areas or conservation areas. Generally these areas are protected against animal/ human interferences/ activities. The water sources are generally perennial and provide water for drinking purposes to the households in the village and in case of need, can be used for protective irrigation. After the water source has been selected, the area around it is cleaned of any soil/ plant debris. Filters using locally available stones and gravel are created around the water source.
- b) In case the water is being carried in pipes, appropriate valves and joints can be added to these pipes. In case it is being carried through open channels, locally available material can be used for lining the channels. Since communities are dependent on these springs, they will be encouraged to identify the critical water sources during the land use plan exercise. The project support is to be used for critical interventions like replacement of worn out pipes and valves.
- c) Protection of water sources for irrigation and drinking water in villages: Most of the villages in Nagaland are located on hilltops and depend on water supply from the streams and springs. Thick vegetation and tree cover generally surround these water sources and communities manage the water sources.
- d) The project seeks to maintain and improve the integrity of the natural water bodies. The project interventions will help in reducing the surface runoff of rainwater in the spring-shed areas, promote deeper water percolation, and rejuvenate the water table. This will be generally in village forest areas where tree cover is good and human and animal interferences are minimal. Water channels can be renovated for improved availability of water for irrigation during the post rainy season.



Recharging groundwater helps improve spring discharge, but the water

Fig. 3. Schematic diagram of ground water recharge and filtration for human consumption

17. The Village Councils will plan village forest conservation in consultation with the forest department and funding will be provided to the Village Councils for this activity. This activity will cover an area of 15,080 ha (20 ha per village for 754 villages)

Chapter 11: Guidelines for settled cultivation

1. **Support to existing settled agriculture:** The project does not directly promote settled agriculture though many farmers have made the transition from only jhum production system to jhum and settled agriculture mixed systems, mainly on account of high levels of labour requirement and hard labour on a day to day basis throughout the year, and also because of the disinterest of younger generation in jhum cultivation. The project will support two aspects related to settled agriculture: (i) the existing settled agriculture comprising of wetland rice cultivation in bunded terraces, or terraced rice cultivation (TRC), and tree farming for various purposes in the sloping high lands, and (ii) support to the landless households (households that have access to jhum land but not to land with tenurial security).

2. **Support to existing TRC:** Most of the low land areas have been traditionally under rice cultivation in terraces. These areas will be improved through appropriate vegetative methods and developing supplementary irrigation systems. The project will support farmers undertaking terraced rice cultivation. The main aim of this will be to increase soil fertility, productivity and cropping intensity, and stabilize productivity. The project will form FIGs and train them on improved crop husbandry. Soil fertility improvement through Sesbania rostrata, and Azolla pinnata growing for rice cultivation, and developing supplementary irrigation system (at least one in each of the selected villages) for rice cultivation in low land areas will also be supported. The project will support 45240 households covering 11310 ha .The project will select short duration improved local paddy varieties in consultation with KVKs/ATARI. In addition, the project will also support double cropping (pulses/ginger/ onion), rice-fish cultivation and fish farming in ponds in each of the selected villages depending on the feasibility to undertake this activity.



Fig 4. Schematic diagram of a terrace for rice cultivation

3. **Orchards and plantations in uplands:** The project will support existing settled agriculture in uplands by providing them with quality planting material for horticulture crops, such as coffee, cocoa, orange and pineapple, and spices such as black pepper, turmeric and chilly to improve the farm productivity and income of the farmers in the short and medium term. High value timber tree and other species, such as *Butea monosperma, Albizia lebbec, Alnus nepalensis, Melia composite, Cedrela toona, (Castanea dentata), bay leaf (Laurus Nobilis), cinnamon (Cinnamomum tamala), Texus baccata, Agar (Aquilarea agallocha), Ginseng (Panax ginseng) and Rudraaksha (Aelaeocarpus ganitrus) will be introduced in the system to add to the farmers' income in the long run. Project's marketing support interventions under value chain development will support value addition and marketing of crops/commodities. The project will support 45240 households covering 11,310 ha.*



Fig. 5. A field view of settled agriculture in previous jhum area

4. **Contour Bunding:** Contour bunding is a proven sustainable land management practice for marginal sloping and hilly tracts who practice Jhum cultivation. It has been used extensively to control soil erosion and promote water retention and increase crop productivity. Since it is made of local resources, it is low cost and can be replicated on large scale. Contour bunds are constructed along contour lines. They are usually made of stones or soil (sometimes with the remains of the crops). They are built along the contour lines for slowing down the flow of rainwater /water on the slopes and prevent soil erosion.

5. They are designed on slope, soil type and intensity of rainfall and normally have a height of 70 cm and base width of 70cm and top width of 35 cm. The contour lines in the field are marked using "A" frame or water level and the lines marked using wooden / bamboo pegs. The soil from above the contour lines is used for making the bunds. In case stones are available, they can also be used for making contour bunds. Planting of grasses and leguminous tree species stabilizes these bunds.

6. **Construction of low cost contour bunds:** After selection of the jhum areas, using either the A frame or water level, the trained Village level assistant with the support of the farmers / village council members, mark the contour lines in the field using bamboo pegs.

7. The farmers cultivating the jhum area will dig burrow pits for excavation of soil and make bunds of size of 70 cm base width and 35 cm top width. In case stones are available in the jhum area, stone bunds can be made. In addition, locally available trees can be used for making smaller log wood bunding in between the soil/ stone contour bunds.

8. After construction the bunds, the Village field assistant should verify the size of the bunds using a trapezoidal frame and randomly check whether the bunds have been along the contour as far as possible. The length and breadth and depth of the borrow pits are measured for determining the volume of earth work. This is recorded in the measurement book to be maintained by the VFA and it will be the basis for making payments to the farmers / laborers once the work has been completed.



9. **Contour trenching:** Contour trenches are normally constructed along the contour in sloping areas to slow down the run off and conserve soil. They are generally continuous trenches but in places where the slope depth is not uniform, the contour trenches are staggered across the slope. It is essential to mark the contours using A frame or water level as any gradient in the trenches will make it a diversion drain.

10. They are designed based on slope, soil type and rainfall. They are normally 0.6 M depth and 0.3 M width can be of various lengths in 3-5 M in case of staggered trenching. The continuous trenches are a series of trenches constructed of 30-50 M length and fixed interval of up to 30 M. The vertical interval can be varied based on slope and soil depth. There is a need to undertake de-siltation work once in 2 years, as soil would be deposited in the trenches.

11. The staggered trenching involves the excavation of trenches of shorter length in a row along the contour with interspace between them. These trenches are arranged in straight line (staggered form). Suitable vertical intervals between the rows are restricted to impound the runoff without overflow. In the alternate row, the trenches are located directly below one another. The trenches in successive rows are thus staggered, with the trenches in the upper row and the interspace in the lower row being directly below each other. The length of the trench and the interspace between the trenches in the same row should be suitably designed such that no long unprotected or uninterrupted slope to cause unexpected runoff or erosion. As the trenches are not continuous, no vertical disposal drain is excavated. The cross-sectional area of these trenches should be designed to collect the runoff expected from intense storms at recurrence intervals of 5-10 years.

12. Planting grasses and valuable tree species can also stabilize these trenches.

13. **Construction of contour trenches:** After selection of the jhum areas, using either the A frame or water level, the trained Village level assistant with the support of the farmers / village council members, mark the contour lines in the field using bamboo pegs.

14. The farmers cultivating the jhum area will excavate the, 0.3 in width and 0.6 m in depth in portion length of 3-5 liner meters. The dug soil will be placed in the lower portion (down slope side) of the land to avoid filling of the trench with the dug soil during rains.

15. After construction the trenches, the Village Field Assistant should verify the size of the trenches by randomly checking whether the trenches have been along the contour as far as possible. The length and breadth and depth of the trenches could be measured for determining the volume of earth work. This is recorded in the measurement book to be maintained by the VFA and it will be the basis for making payments to the farmers / laborers once the work has been completed.



SKETCH SHOWING STAGGERED RECHARGE TRENCHES



16. **Narrow bench terraces:** Bench terracing is one of the oldest mechanical methods of erosion control having been used for manly centuries in many countries. Bench terrace, though not very scientifically designed, have been extensively used in India in the mountainous regions of Kerala of H.P and Assam.

17. Bench terracing consists of transforming relatively steep land into a series of levee or nearly level strips or steps running across the slope, vertical risers separate the strips. The risers if sloping may be of earth construction, steep risers are supported by masonry [stones]. Bench terracing is adopted only on slopes steeper than 15% [for more than 8%] and where soil conditions are favorable. The use of bench traces retards erosion losses and makes cropping operations on these slopes possible and safe.

18. *Types of bench terraces:* Generally there are three types of bench terraces, either based on slope, or based on use / application.

A) Based on slope	B) based on use <i>lapplication</i>
1) Level and table top	1) Hill type
2) Sloping inwards	2) Irrigated type
3) Sloping outwards	3) Orchard type
4) Puerto Rican or California type	

19. Classification based on slope is presented below:

20. **Table top bench terrace:** Table top bench terrace are suitable for areas receiving medium rainfall which is evenly distributed and which have highly permeable and deep soils .in paddy fields it may be used for slopes as mild as 1% and used where irrigation facilities are available.

21. **Sloping inwards bench terrace:** In heavy rainfall areas, bench terraces of sloping inwards type are more effective. It prevents impounding of water and useful for crops susceptible to water logging.

22. **Sloping outwards bench terrace:** Bench terraces sloping outwards are effective only in low rainfall areas whit a permeable soil of medium depth at lower ends graded channels are provided for safe disposal of runoff.

23. **Puerto Rican Type:** In this type of terrace, the soil is excavated little during every ploughing and gradually developing bench by pushing the soil downhill against a mechanical of vegetative barrier. Mechanical or vegetative barrier is established across the land at suitable interval and the terrace is developed gradually over the years, by pushing soil downhill and subsequent natural levelling.

24. **Steps in design of bench terraces:** For the design of the bench terraces for particular area, the average rainfall, the soil type, soil depth, slope and farming practices of the area should be known. The design consists determining the following:

- 1. Type of the bench terrace.
- 2. Terrace spacing or the depth of the cut.
- 3. Width of terraces
- 4. Terrace cross section.

25. Selection of the type of bench terrace depends upon the rainfall and soil, condition.

26. Terrace Spacing: It is normally expressed in terms of the vertical interval between two terraces. It depends upon soil, slope, surface condition, grade and agriculture use. The vertical interval (V.I.) is dependent on the depth of cut. Since the depth of cut and fill are to be balanced, the V.I. is equal to double the depth of cut. The depth of cut should not be too high so as to expose the bedrock. Other considerations are:

- 1. Find Out the maximum depth of productive soil,
- 2. Maximum admissible cutting depth—D/2 or d
- 3. Given land slope, [S]
- 4. From this, the width of the terraces [W] can be computed for a given slope [S]

27. Terrace cross section:

Design of terrace cross consists of deciding

- 1) The battler slope
- 2) Dimensions of shoulder bund

3) Inward slope of then terrace and the dimensions of the drainage channel in case of terrace sloping inward, and

4) Outward slope in case of terraces sloping outward.

The height of the embankment [bund] should be increased sufficiently to provide for shrinkage of soils, so that the ultimate slope, as per design can be obtained after compaction.

D. The cross- section of shoulder bund along outer edge of terrace should also be designed suitably to make the bund stable against slipping and overt to piping.



Fig. 6. A field photo of using A frame for developing bench terrace



CROSS-SECTIONAL VIEW OF BENCH TERRACES

28. **Construction of narrow bench terraces:** The area selected for bench terracing (slopes between 20-30 %), is demarcated by wooden pegs in terms of length and width in a given location. Contour lines are marked using A frame and pegs are used to mark the same. The narrow bench terraces are manually made using simple tools like diggers and spades. Generally, the width could vary between 2-3 M and length can be up to 100 M depending on the slope and location. The normal practice is to keep the topsoil separately in one place and after the terrace has been created and levelled; the topsoil is applied on the freshly created terraces. Hence the measurements here include lead and lift of soil / earth and for shaping the bunds created at the edges of the terraces. Sometimes, these bunds are made of locally available stones.

29. The farmers cultivating the jhum area will remove the surface soil from the slopes and keep it is separate place for spreading on the created bench surface. They may opt for 2-3 M wide and varied length of the bench depending on the situation. The piling of the surface soil usually is on the lower side of the created bench. The spread of this will eventually become the top soil of the bench and also avoid its run-off during rains. Some farmers may also choose to use stones and other available materials for making of the benches.

30. After construction the benches, the Village Field Assistant should verify the size of the bench by randomly checking whether the benches have been across the contour as far as possible. The length and breadth of the benches would be measured for determining the volume of earth work. This is recorded in the measurement book to be maintained by the VFA and it will be the basis for making payments to the farmers / laborers once the work has been completed.

31. Farmers will be encouraged to plant leguminous trees and fast growing tree species and grasses, such as *Neel*, Gliricidia, *Tephrosia, Flemingia*, and vetiver / lemongrass on these bunds to stabilize the terraces.

32. Water harvesting structures (ponds/ tanks): Farm ponds have a significantly role in rain fed farming system where annual rainfall is more than 500 mm, but with high levels of surface runoff. It helps in mitigating the negative effects of rainfall variability as it stores water from rainfall excess and provides for utilization during prolonged dry spells by means of supplemental/protective irrigation. It also helps in pre-sowing irrigation of *rabi* crop. In high rainfall regions of India, farm pond can be used for multiple uses such as protective/supplemental irrigation, fish culture integrated with paddy cultivation.

33. Water harvesting structures like ponds, tanks are generally built in relatively flat areas either at the base of the hill slopes or in the terraced areas where rice is cultivated. The location of ponds/ tanks is decided on the catchment and diversion channels. The area is demarcated using measuring tapes and wooden pegs. The soil is excavated from the area in trapezoidal manner so as to ensure depth at required level. Payments are made on the soil excavated and also types of soil as the rates vary based on hardness of soil and percentage of parent material. The bottom of the pond is generally puddled to ensure that percolation into the soil is reduced to a minimum. If necessary, the ponds/ tanks can be lined with plastic sheets to prevent water losses, the cost maybe borne by the farmer.

34. The normal size of the water-harvesting pond can be 5 M long, 5 M wide and 1.5 M deep. Different types of farm ponds are depicted in the diagram based on the location in the catchment.

35. The pond will have inlet and outlet appropriately placed so as to store run off water and also any diversion from the perennial streams. The water can be used for supplemental irrigation through pipes/ channels.



Different types of farm ponds : surface (a), spring (b) and offstream (c) and their location in the catchment

36. **Construction of water harvesting structures:** The construction of farm ponds maybe done by the individual farmers using their own labor or on the basis of out sourcing to professionals. However, it would require technical assistance from the selection of sites to the design of the ponds as they would be constructed at varied situations. Farmers practicing jhum and settled agriculture who would be interested and qualify for this support would be oriented to the specifications and other requirements. Depending on the size of the ponds and the chosen design (specifications on the depth, bund size, etc., earth work, i.e. digging of the pond according to the specification will be carried out. The dug earth would be placed on three sides of the pond, except the side on the up-slope and will be used for making the dikes of the pond.

37. After digging of the ponds and the construction of the pond- bunds, the Village Field Assistant would verify the size of the pond by checking whether the ponds have been constructed as per the design specification and on the most suitable sites. The estimates of the earth work would be measured and recorded in the measurement book to be maintained by the VFA, and it will be the basis for making payments to the farmers / laborers once the work has been completed.

38. Farmers will be encouraged to compact the pond bottom and pond bunds, and plant leguminous trees and fast growing tree species and grasses, such as *Neel, Gliricidia, Tephrosia, Flemingia, and vetiver / lemongrass on these bunds to stabilize them.*

Chapter 12: Guidelines for agricultural value chain development

A. Production Support

1. **Rationale for production support**: Production support under Value Chain component is to further increase marketable volume and the marketing support will facilitate aggregation, value addition and linkage to outside markets. The beneficiaries under Value Chain and Market access will be a subset of beneficiaries under jhum improvement and settled agriculture. The important cash crops from the value chain perspective at present are Naga-chilli large cardamom and ginger. Most of the cash crops including spices and vegetables are organic by default, as farmers do not apply any fertilizers. The value chain constraints include, inadequate availability of quality planting material/seed, inappropriate /unscientific package of practices, lack of aggregation to determine the marketable quantity to feed into supply chain, lack of testing and certification to access premium organic market and limited access to market players from outside the state.

2. The value chain study⁴⁴ conducted as a part of the project design has identified five key sub sectors/crops and areas of support required, which include production system improvement, marketing and value addition support in respect of ginger, cardamom, orange, vegetables and chilli. The fragmented production and availability of limited marketable surplus makes it difficult to start aggregation and market linkages. The design mission in consultation with staff of agriculture and horticulture agreed to support Naga-chilli, large cardamom and ginger for production support.

3. Naga-chillies have high levels of oleoresins and capsacinoids which are used in the food and pharmaceutical industries. The market demands top quality and consistent product. Drying and grading operations needs to be maintained at high standards. Large cardamom is another important spice crop of India and grows in the forest ecosystem and has been domesticated. Nagaland is one of the states in north-eastern India where large cardamom are cultivated. Both these crops are not perishable, low volume and high value produce. The average productivity in the state has been around 2-2.5 tons/ ha for Naga chilli and 0.47 tons/ ha for large Cardamom. Productivity of cardamom has declined on account of nematode infestation resulting in root rot. The productivity of both Naga-chilli and cardamom is expected to increase by 30 to 50% by provision of improved planting materials and appropriate package of practices including treatment regime for nematode infestation.⁴⁵ A significant volume of ginger is produced, but production is fragmented and competition from other states and countries has severely depressed the market price. Quality seed for ginger remain an issue. Based on the above factors, the project will focus on promoting and increasing area under Naga-chilli, ginger and cardamom cultivation.

4. The project will promote farmer interest groups (FIGs) comprising 20 farmers per group in respect of three spice crops namely Naga-chill, ginger and cardamom in 50 clusters covering about 4 villages per cluster. The FIG members will be provided access to improved planting material of Naga-chilli, ginger and cardamom, and bio-fungicide such as Trichoderma for cardamom. FIG members will be trained in better package of practices in collaboration with local KVKs and the Horticulture Department. Training of farmers will help in increasing survival of plants and better application of nutrients (organic) and management of pests and diseases.⁴⁶ In total about 400 FIGs covering 8000 households will be supported.

1. Capacity building

5. Project would engage Food and Agriculture Organization of United Nations (FAO) to provide a mix of training and handholding support to key interventions planned under the project. The major activities envisaged in this include; (i) preparation of training materials and conducting training of Veterinary Officers in animal production related issues covering pigs, cattle, goats and poultry; (ii) preparation of training materials and conducting ToT in implementing Sloping Agricultural Land

⁴⁴ Value Chain Analysis Report for Mizoram and Nagaland, Sanjay Kumar Gupta (Value Chain Consultant)

⁴⁵ Central Institute of Horticulture, Dimapur- www.cihner.org.in

⁴⁶ ATMA and Horticulture Mission for NE states and Himalayas- <u>http://tmnehs.gov.in</u>)

Technology (SALT); (iii) preparation of training materials and conducting ToT related to terrace rice cultivation; (iv) preparation of training materials and conducting TOT for establishment of private nurseries of high quality planting materials; (v) engagement of Specialist Consultants in Highland farming systems, Agro-forestry, soil and water conservation, organic certification, animal production and to formulate policy reforms related to Agricultural Produce Marketing Committee Act; (vi) prepare a long term weather data based agro-climatic atlas for Nagaland; (vii) development of a computerised MIS and the support and training of MIS staff in its operation; and (viii) support for project monitoring and evaluation including baseline survey and endline survey with impact assessment. FAO will submit the technical proposal to the state government which will review and submit to IFAD for approval. Thereafter GoN will enter into a TA Agreement which among other things will provide details on the activities, work plan, payment modalities and reporting requirements.

6. Training of trainers by FAO: the ToTs are meant for the state level staff and to be organised at the state level. The training will have a mix of classroom training and field visits within the state. For each of the identified areas of support mentioned above, FAO trainings to cover existing practices followed and identified gaps, better package of practices and how these practices need to be put into practices, roles of project staff to oversee implementation of better practices, likely risks and mitigation measures, and a set of training materials to participants to be used as a reference material during the implementation phase.

7. Training of district level, block and circle level officers: trained state team would further train the team members from district, circle and block level, to be organised at the district level, by adopting methodologies from the training manual developed by the FAO with a focus on integrating adult learning methodology that will include pictorial representations, videos, case studies and role plays. These training materials will be translated into the local language and printed after its development, to be used as a reference material during the implementation phase.

8. Training of Village Level workers: the trained district and circle/block level staff would further train the village level workers that include village level project staff, lead farmers, CRPs, CAHWs, who provide handholding support to FIGs during the implementation. Such training should deliver two-third of content through practical sessions, role plays, videos, case studies, pictorial representations and field visits, and remaining portion of theoretical sessions. Participants should also be provided reference materials that they can use during the implementation phase to support FIGs.

9. Handholding support: FAO is to engage a number of consultants such as SALT expert, TRC expert, Nursery expert, Spice expert, and Livestock expert, to provide handholding support to project staff during the implementation period in rolling out field application of training program. These consultants to provide intermittent support coinciding with field level activities to be executed in villages.

2. Commodity cluster development

10. **Cluster approach:** Project shall adopt cluster approach for select value chain commodities wherein at least four villages form a cluster, which ensures economies of scale in terms of availability of a minimum of a truck load of produce for selling, attractive enough for marketing players to get into business partnership with commodity farmers. The clusters / villages will be selected based on the suitability (soil, climate, water, etc.) of soils, slopes and participating farmers' interest and ability to invest in labour to ensure establishment of the selected crops. Cluster ensures that collective procurement of agriculture inputs and business development services i.e. transportation and logistics services, become economical for farmers. Clusters develop around strategically located villages with comparative advantages in terms of presence of motorable road and transportation access, banking services, collection centres and processing units. The project shall support existing and new value chain farmers to become part of clusters. Interested farmers in these clusters will have to allocate a separate plot of jhum or in fallow jhum land to grow only the selected crops.

Identified Value Chains and targets:

11. Value chains: project will develop value chains for selected products. A value chain study⁴⁷ carried out as part of the project design process has identified a number of sub-sectors with potential for value chain interventions. These are spices (large cardamom, ginger, chilli, and turmeric), oranges, -, bamboo, vegetables, and pineapple. Based on the potential benefits from improving market linkages, the project will initially focus on cardamom, ginger and chilli in Nagaland, - once dried these are non-perishable, low volume and high value products that can stand the cost of transport to more distant markets. At the same time, the project will provide marketing support for widely grown cash crops, such as oranges, turmeric and bamboo, including support for aggregation and producer organisations, and links with the private sector. With closer proximity to markets (both inside and outside of the state) and a more developed horticultural sector, the potential for value chain and market development is greater in Nagaland, and here the project will also support the establishment of a small marketing unit in the Agriculture Marketing Board to provide support on policy, market intelligence and planning issues.

12. Rationale for selection: The value chain study⁴⁸ conducted as a part of the project design has identified five key sub sectors/crops and areas of support required, which include production system improvement, marketing and value addition support in respect of ginger, cardamom, orange, vegetables and chilli. These crops are grown by a large number of farmers, have marketable surplus in the state with potential to offer higher income. The fragmented production and availability of limited marketable surplus makes it difficult to start aggregation and market linkages. The mission initially suggested only two crops (Naga chilli and Large cardamom) for value chain production support, however, based on discussion with representatives of agriculture and horticulture staff, ginger was also included for project support.

Value chain	Cluster and	Area (Ha)	Farmer	FIGs to be	Project support
commodity	villages		households	formed	
Cardamom	50 clusters	2000	4000	200	FIG formation
	and 200				Planting materials
Naga Chilli	villages	1000	2000	100	Package to
					practices
Ginger		1000	2000	100	Technical support
					Marketing support
Other major	Need based as	Marketing support			
crops, if any					

13. Targets for Nagaland

14. **Community Resource Person Engagement:** once the clusters are identified, the project will identify and train two Community Resource Persons (CRPs) for each cluster in various aspects of nursery management, planting material selection and in micro-propagation techniques for rapid multiplication of quality planting material and package of practices. The project will support the CRPs to establish nurseries of Naga-chilli, Ginger and Cardamom for production of quality planting materials. This effort can be expanded to other crop varieties, such as pineapple and other fruit crops. The qualification of a CRP shall include an existing progressive farmer, 12th standard or a graduate in agriculture/horticulture/extension, native of concern circle/block, entrepreneurial bent of mind, interested in nursery development and horticulture. Project should advertise CRP selection requirements in local newspapers and social media platforms. DMU team (technical and marketing team) shall conduct interviews at the state level to select CRPs. The project will identify and support 100 CRPs in the project districts, 2 CRPs per cluster.

15. **Training of CRPs**: district and circle/block level officers would train the CRPs in various aspects of nursery management, planting material selection and in micro-propagation techniques for rapid

⁴⁷ Value Chain Analysis Report for Mizoram and Nagaland, Sanjay Kumar Gupta (Value Chain Consultant)

⁴⁸ Value Chain Analysis Report for Mizoram and Nagaland, Sanjay Kumar Gupta (Value Chain Consultant)

multiplication of quality planting material and package of practices. These trainings would be organised at the district level in local language and would have a mix of class room training and field visits. CRPs would also be provided with reference materials that they can use for transferring knowledge and extending technical support to value chain farmers.

16. The project will support the CRPs to establish nurseries of Naga-chilli, Ginger and Cardamom for production of quality planting materials. This effort can be expanded to other crop varieties, such as pineapple and other fruit crops. Project support to include procurement of mother stocks of planting materials, shed-nets, green house, tools/equipment, technical training, and package of practices. CRPs would raise and manage the nursery for selected value chain commodities (Naga chili, ginger and cardamom) and also other local plants in demand. The project would buy quality planting materials from CRPs for supplying to FIGs. CRPs would remain in touch with FIGs and become the source for transferring technical knowledge on good package of practices to FIG members. CRPs would become village level contacts for project to pass on technical information to FIGs.

17. **FIG formation and training:** The project will promote farmer interest groups (FIGs) comprising 20 farmers per group in respect of three spice crops namely Naga-chill, ginger and cardamom in 50 clusters covering about 4 villages per cluster. The District team, consisting primarily of village and circle level staffs shall be responsible for forming FIGs, farmers with common interest, in villages. The team shall make a village visit plan, inform village council and villagers in advance about the prescheduled meeting dates in villages. In the village meeting project team needs to share objectives of the project, roles and responsibility of FIGs, project support. The project team needs to clarify the doubts or expectations the villagers may have. The village meetings should be moderated in such a manner that villagers' expectations are managed within the project mandate. The team may plan need based visits to a village to form FIGs. Each FIG to have a separate bank account.

18. **Project support to FIGs**: The FIG members will be provided access to improved planting material of Naga-chilli, ginger and cardamom, and bio-fungicide such as Trichoderma for cardamom. The project would buy good quality planting materials from CRPs and make it available free of cost to value chain FIGs. FIG members will be trained in better package of practices in collaboration with local KVKs and the Horticulture Department. Training of farmers will help in increasing survival of plants and better application of nutrients (organic) and management of pests and diseases.⁴⁹ FIGs would be introduced to innovative model of digital delivery of extension, support for organic certification or sustainable/good agriculture practices. Potential and capable FIGs would be supported to start agro processing units in project locations. Project would also facilitate, keeping in mind the needs of value chain farmers, a number of marketing interventions such as buyer seller meets, market exposure visits, participation in trade fairs and exhibition, linkage with market players In total about 400 FIGs will be supported. The project will support engagement of short term consultants as commodity specialists to work on establishing marketing linkages.

19. Project staff would form FIGs commodity wise and map them district wise for delivery of project support. FIGs would receive the support through service providers selected by the project team. Project staff would prepare district wise implementation plan based on AWBP and the project phasing plan given in the project implementation manual, to support FIGs. For timely delivery of support to FIGs, field level workers and FIG members should also be informed about the implementation plan with list of activities to be executed and expected timeline for service delivery.

B. Marketing Support

1. Establishment of a Marketing Unit

20. The major constraints to value chain development of traditional spice, and agricultural and horticultural crops are mainly issues related to marketing. They include: (i) limited aggregation for achieving economies of scale required for cost effective collection, transportation and storage; (ii) insufficient investment in post-harvest management practices, including primary processing to add value and also to reduce volume for transportation; (iii) inadequate data on marketable quantity to

⁴⁹ ATMA and Horticulture Mission for NE states and Himalayas- <u>http://tmnehs.gov.in</u>)

feed into supply chain, and on linkage with premium markets on account of issues related compliance to certification and quality standards; and (iv) limited access to market players from outside the state.

21. The project's marketing efforts will be directed towards both the project promoted commodities (Naga-chilli, ginger and Cardamom) and also other commodities and crops promoted under jhum improvement and settled agriculture, including commodities such as turmeric, orange, passion fruit and pineapple, which are grown in sufficient quantities for market entry to be viable. The project will support engagement of short term consultants as commodity specialists to work on establishing marketing linkages.

22. Project shall establish a marketing section, to be housed in the State Agriculture Marketing Board manned by competent staffs. This unit will produce market intelligence reports, conduct (or commission) market studies, and policy reforms required marketing of agriculture and horticultural produce. This will enable the line departments plan production based on market intelligence and inputs from the marketing section. In addition, this unit will act as focal point to for identify market linkage partners and to facilitate market support activities of the project. Project shall hire following qualified and competent staffs to manage and extend marketing support to interventions planned under the project:

23. **Manager- Market Intelligence (72 person-months):** The expert shall have a master's degree in marketing, business administration, economics or related field, and at least 10 years of experience in market intelligence for commercial or social marketing/enterprises, collection centres and processing units. He should have experience of identifying and establishing contacts with market players for commodity prices and market information and linkages.

24. **Manager- Market Policy and Research (72 person-months):** The expert shall have a master's degree in business, marketing, statistics, policy research, social sciences or related discipline, and at least 10 years of experience in livelihoods and development projects, study market (domestic and international) trends and knowledge of and experience in interpreting and using qualitative and/or quantitative research to propose evidence-based strategies.

25. **Manager- Market Linkage (72 person-months):** The expert shall have a master's degree in marketing, business administration or related field, and at least 10 years of experience in commercial or social marketing/enterprises and agriculture and livestock value chain development in project states, north east region, or hilly regions. He should have experience of training, multi-stakeholders' management, and establishing market linkages for microenterprises of community institutions such as FIGs/SHGs/Cooperatives/FPCs.

26. **Marketing Assistants:** Project shall hire marketing assistants with relevant qualifications (master/graduate degree in business, marketing, statistics, research, social sciences or related discipline) and minimum 5 years of experience to provide assistance to efforts of Managers in rolling out marketing support implementation in project districts.

27. The key roles and responsibilities to be performed by marketing section staffs include (but not limited to):

Marketing staff to	Key roles and responsibilities						
be placed							
Manager - Market Intelligence	 Commission need based specific market studies during the project implementation. A guideline for value chain studies provided in Annex 12.1. Identify sources and contacts for regular collection of commodity prices at state, regional, national and international level. Identify reliable reports and sources that regularly undertake market projection studies for project specific commodities. Identify state, regional and national level fairs and exhibitions, places for market exposure visits, buyer seller meets, trainings/workshops etc. that project can participate. 						
Marketing staff to Key roles and responsibilities							
---	--	--	--	--			
be placed							
	 Conduct visits to project locations to provide guidance and advisory support in close coordination with district staffs. 						
	 Work in close coordination with Manager-Market Policy and Research and Manager-Intelligence. 						
Manager - Market Policy & Research	 List out and analyse all major policies in the state including CSS related to select value chain crops. List out and analyse all major policies related to marketing infrastructure i.e. common facility centres. List out all existing marketing infrastructures in project districts and in the state for possible convergence. Analyse supply and demand data (state, regional, national and international) for major crops Research and analyse all market information as requested by Manager-Market Linkage Work in close coordination with Manager-Market Linkage and Manager- 						
	Intelligence						
Manager - Market Linkage	 Prepare commodity wise seasonal calendar of marketable commodities capturing preproduction, production and harvesting phases. List out all major markets players (traders, processors, corporate) for value chain crops and other major crops, operating currently in the state. Establish contact with market players and initiate discussions for establishing market linkages. Finalise terms of procurement from farmers and supply to market players. Overview timely construction of marketing infrastructure i.e. collection centres Facilitate participation of commodity groups in trade fairs and exhibitions, market exposure visits, buyer seller meets, trainings/workshops etc. Conduct visits to project locations to provide guidance and advisory support in close coordination with district staffs. Work in close coordination with Manager- Market Intelligence and Manager – Market Policy and Research. 						
Marketing	• Work under the overall guidance of three managers and provide need						
assistants	based support to facilitate smooth execution of marketing interventions.						

28. **Facilities and infrastructure for the marketing unit:** Marketing section will have requisite facilities and infrastructure such as office space, computer sets with internet facility, furniture, printer, provision of vehicles, and resources to support marketing interventions under the project such as buyer-seller meets, training of project staffs, meetings and workshops, participation in trade fairs and exhibitions, and undertaking need based sector studies.

2. Cluster Planning for value chains

29. **Cluster planning**: Block and village level project staffs shall be responsible for undertaking participatory cluster planning exercise in villages. Project staffs shall organise village meetings on a pre-decided day and using a format collect information such as major marketable produce in the village, number of families engaged in the production, existing selling channels used and prices fetched, key challenges faced by producers and available marketable surplus quantities. Once the cluster planning exercise is completed in all villages project staff should form clusters for selected value chain commodities. One cluster can have minimum of four villages. Community members are likely to be engaged in multiple commodities shortlisted for promotion under the project. Compact lands should be selected for better monitoring and management. Therefore, area based commodity clusters, for ensuring economies of scale, need to be identified under the project.

30. **Participatory planning in cluster villages:** Proper planning is key to minimising market risks and making right marketing decisions. Project field staffs, in collaboration with local communities, should undertake a participatory advance (6 months to 1 year) planning exercise in villages. This would provide sufficient time to marketing team to identify potential market players, discuss and finalise terms of trade, plan logistics, and post-harvest management. Once the entire marketing project team (state staff, district staff, circle/block staff, village staff and lead farmers) is in place, the advance planning exercise should be completed within two-months and may contain following information.

- Annual seasonality calendar, month-wise, for production and harvesting phase of selected commodities
- Cluster wise details of number of farmers producing select commodity
- Existing area under cultivation, commodity wise
- Expected production volume, commodity wise
- Procurement plan, villages to collection centres
- Discuss roles and responsibilities of lead farmers, villager level staff, circle/block level staff, and district and state team

31. The plan should be updated after the FIGs receive improved planting materials and package of practices, and start production work, to arrive at actual area under cultivation for selected commodities and expected production volumes. State marketing team shall organise district wise workshops, to be attended by district staff, block and village level staff, and lead farmers to prepare a cluster wise annual marketing plan.

32. **Infrastructure creation in clusters:** Cluster development would involve creating common marketing infrastructure for simple value addition such as cleaning, sorting and aggregation. For this, project shall facilitate creation of a common facility centre in one of cluster villages connected by a motorable road and transport facility, also having presence of support services such as postal and banking service, and communication facilities.

33. **Management of commodity clusters:** FIGs from villages where common facility centres are established shall be responsible for day-to-day management of these commodity centres with support from concern project staffs at circle/block and village level. For commodities identified under a cluster, a separate, commodity-wise management and marketing plan needs to be prepared.

3. Market Promotion

34. **Market exposure visits:** In order to provide effective marketing support to farmers under the project, it is important that project staff, village level workers, and farmers have good understanding of the marketing principles to build remunerative partnership with the market players. Market exposure visits provide the quickest opportunity to gain practical understanding of market dynamics, learn trade practices adopted by value chain players, understand and learn buyer-seller behaviour, marketing process, price variations, risks involved, need and use of marketing infrastructure, and also explore market linkages.

35. Market exposure visits would help project stakeholders internalise practical marketing principles in order to promote market led production support under the project. It is important that during the exposure visit and also after the visit, the learnings are discussed and disseminated to all value chain FIGs. Project marketing staffs would find it easier to convince community members about marketing interventions proposed and planned under the project. Project stakeholders would also gain understanding of use of marketing infrastructure for storing the produce and maintaining optimal inventories.

36. The marketing team at the state level would be responsible to identify and list out relevant markets at state, regional and national level related to value chain commodity (ginger, large cardamom and chilli) for planning the exposure visits. The marketing need to prepare a yearly calendar for planning the exposure visits. The project team can take CRPs, lead farmers, and value chain FIG representatives on the market exposure visits. Before the exposure visit, marketing team

needs to develop key points to capture the learning and orient the participants on the same. After the exposure visit, project team needs to develop the communication plan to ensure learning are disseminated to all FIG members, and few actionable points agreed that community is going to adopt and/or integrate in their existing marketing interventions.

37. The specific areas that participants need to focus during the exposure visit include type of market players operating there and roles performed, commodity evaluation criteria and price fixing mechanism, commodity qualities available and price relationship, weighing of commodities, storage of commodities, volumes of commodity traded, terms of payments, and process for simple value addition such as cleaning, sorting and grading process.

38. **Buyer-seller meets:** the shortlisted commodities (ginger, chilli and large cardamom) produced in the state are default organic with no or minimal chemical residue. These kinds of commodities not only have local demand but good potential among conscious domestic urban consumers and western export markets who would be willing to pay premium price. However, there is limited awareness and popularity of these commodities in other parts of the country. Buyer-seller meets provide an opportunity to bring in potential market players from outside the state and expose them to commodities from the state. Therefore, project plans to support organising buyer seller meets during the implementation phase.

39. Buyer seller meets are beneficial for both sellers and buyers, most of whom are likely to be from outside the state. To project farmers and staff, there are multiple expected benefits; an opportunity to explore direct markets outside the state, learn expectations of buyers for commodities produced in the state, expected volumes, negotiate prices and terms of partnership. The buyers on the other hand, would discuss directly with the producers, learn about commodity uniqueness and explore direct linkage possibilities. It may also provide opportunity for building contract farming arrangements.

40. Project team needs to prepare list of potential market players (processors, aggregators, exporters) to be invited to participate in buyer-seller meets. The initial list can be generated by talking to other agencies who organised similar events in the past, also contacting Spice Board of India and APEDA. The state team shall organise these meets at the state level, to be participated by state level market players, outside corporate agencies already operating in the state, new aggregators, processors and exporters from outside the state. State marketing team should join social media platform such as LinkedIn related to specific spices groups and/or commodity groups. Project team should establish contact with Spice Board India, Guwahati Spice Development Agency and APEDA to explore organising these meets in partnership with them. Project team also needs to participate in similar buyer seller meets organised by other agencies in the region.

41. **Participation in trade fairs and exhibitions**: Government agencies organise a number of trade fairs and exhibitions at regional and national level, basically to promote commodities from the rural areas. Participants get an opportunity to display and sell horticulture/agriculture based processed products manufactured by them. A trade fair (trade show, trade exhibition, or expo) is an exhibition organized so that companies in a specific <u>industry</u> can showcase and demonstrate their latest products and services, meet with industry partners and customers, study activities of rivals, and examine recent <u>market trends</u> and <u>opportunities</u>. An exhibition, in the most general sense, is an organized presentation and display of a selection of items.

42. Project would encourage village level producers participate in relevant trade fairs and exhibitions, organised at state, regional and the national level. This would not only expose them to outside markets but interact with participants from other states who are likely to bring similar products. It would provide an opportunity to sell directly to end consumers, assess their feedback for making product improvement, learn about their expectation to buy products on regular basis. Participation in such events would improve direct selling and communication skills of producers.

43. Project shall facilitate community institutions (FIGs/Cooperatives/FPCs) to participate in these trade fairs and exhibitions to display and market various commodities supported under the project. State marketing team will be responsible to identify and prepare an yearly calendar of events where project beneficiaries can participate, and facilitate participation in these events. State team can

contact Spice Board of India and APEDA to get details of events organised/facilitated by them. After attending the trade fairs and exhibitions, project staffs, together with related community, should discuss the learning and impacts, and integrate the same while participating in all future events. Towards the end of the project, when commodity groups mature, project can organise similar events in the state in collaboration with other relevant departments and agencies

4. Value Addition

44. **Digital delivery of extension services:** The project plans to introduce an innovative modality for digital delivery of extension and monitoring of production practices, input use and expected production. This can be accessed by outside market players to support their procurement decisions by identifying the number of farmers cultivating a particular crop, quantity of produce expected, and package of practices used. This would reduce the need for face to face interaction required to access market players and increase the reliability quotient. Introduction of this system would also enable the farmers to make a quick progression into organic certification.

45. <u>CropIn Technology Solutions Private Limited, based out of Bangalore, a farming technology</u> solutions start-up developed this app based technology. The software product tags farming land from the moment a farmer decides to plant or sow seeds. The tags convey the information through an <u>Android</u>-based smartphone app to field officers of institutions that work with farmers. It makes every farm and every farmer traceable in terms of tracing the plot, area, plantation time, and pesticides used. The technology uses an affordable cloud-based pay-as-you-go platform. The technology helps farmers on several counts, most importantly, informing and educating them on ways to salvage and improve the productivity of crops. Retailers benefit by tracing the produce details and using it as an USP to capture premium markets.

46. Project team can get in touch with the service provider and discuss modalities. Project team can also make an exposure visit to see application of the technology in the field and learn it's benefits to the farming community. Once the project team understands the use of technology and its benefit to farmers, it needs to carry out an internal exercise in consultation with project district teams to decide on following items.

- Area in hectares to be covered including selection criteria
- Number of farmers to be covered including selection criteria
- Number of clusters to be covered including selection criteria
- Handholding mechanism to support farmers
- Regular monitoring plan

47. Once the project team is convinced about the technology, it can identify and shortlist potential market players to form partnership who offer remunerative prices to farmers. Project team can prepare an annual implementation plan, timeline, and sharing of roles and responsibilities among project team, technology service provider and market players.

48. Project will provide computer tablets to clusters/farmers to facilitate adoption of this new technology platform. FIG members will be trained in operating the tablet as part of the agreement signed with the technology service provider. Service provider needs to ensure that farmers are trained properly during the course of the agreement period. It is important to engage market players from the beginning of the implementation arrangement. The district team will prepare and execute monitoring and handholding plan to support farmers involving visits by technology service provider and the market players.

49. **Organic certification:** Project team, based on market and stakeholders' analysis, may decide to promote organic certification, good agriculture practices or sustainable agriculture practices, provided a cost-benefit analysis clearly shows additional benefits to farmers and assured market linkages. The project may promote such practices in around one third of the area selected for production support for value chain commodities. Project needs to identify reputed players who offer such services and provide assured market linkages for commodities produced using sustainable

practices. Project may enter into an agreement with selected player(s) and jointly draw up an annual action for field implementation including training and support to farmers.

50. Project can also converge with a Mission Organic Value Chain Development for North Eastern Region (MOVDNER), a CSS that also aims to promote ginger, king chilli, turmeric, rajmah, soybean and brown rice in the Nagaland state. The scheme plans to support FIGs/FPOs/FPCs for pre-harvest and postharvest crop management, and marketing support for setting up functional infrastructure for collection, aggregation and grading units, integrated processing unit, integrated pack house, refrigerated transport vehicle, pre-cooling/cold stores/repining chambers and organising NE organic bazars.

51. **Common facility centres:** Postharvest management of agriculture produce help farmers to add value to the produce, hold back stock to avoid distress sale immediately after the production when prices are generally lowest, and learn vertical integration of services to realise better marketing opportunities. Project would facilitate setting up common facility centres in clusters identified for promotion of select value chain commodities. Project plans to support 50 common facility centres in Nagaland. The facility would be created in one of the clusters villages with road and transport connectivity, and having access to other support services such as banking, postal, and internet connectivity. Common facility centres will have need based facilities for simple value addition such as aggregation, cleaning, sorting and weighing machine. The facility would have options for multiple commodities for round the year utilisation. The FIG from the village where common facility is created, would be responsible for managing it on day-to-day basis. The block and village level project staff would organise regular meetings of FIGs from cluster villages to discuss and prepare annual plan for optimal use of common facilities by cluster villages.

52. **Setting up agro-processing units:** Once the commodity clusters are established, community starts production of value chain commodities and marketing support is provided by the project by facilitating market linkages. Once the clusters are stabilised in couple of years of operation, some FIGs are likely to come forward to set up agri-processing units to further income opportunities. In addition, the project will also support next level of processing of spices such as extraction of oleoresins, capsanoids, natural plant based dyes, etc. Following are some likely scenarios:

Scenario	Type of agro-processing unit	Key deciding factor
Scenario 1	First level processing such as cleaning, sorting and grading etc.	Agreement with a market player /processor
Scenario 2	First level processing	Excess production in clusters
Scenario 3	Value addition (change in form)	Agreement with a market player
Scenario 4	Value addition (change in form)	Excess production in clusters

53. The project would facilitate setting up agro-processing units in project locations by supporting capable FIGs. However, care should be taken that such units are promoted only after doing a costbenefit analysis that ensures higher income and profit margins to farmers when compared with their existing income from the activity. Such units should be promoted when market linkages are assured. The project will also prepare plans to attract private sector and other agencies from outside the state to establish processing and value addition of select crops. Project team should identify and initiate discussion with interested market players to forge partnership. Project team will help develop a proper business plan that include a financial plan indicating cash flows and key financial indicators. However, few units on pilot basis can be promoted, especially for scenario 2 and 4, where FIGs plan to target domestic market within the state. Interested FIGs would be provided relevant training and capacity building support.

54. Selection of community entrepreneurs: after the couple of years of project implementation, some capable FIGs are expected to show interest in setting up agro-processing units and approach district teams for project support. The project team should develop some objective criteria for selection of

capable FIGs interested in setting up processing units in project areas. The FIG selection criteria may include prior experience of some members in running and managing similar units, past experience of working in similar units, entrepreneurial mindset of some members, existing unit run by any member and support requirement for upscaling, good record of marketing selected commodities. FIG should have access to any existing building and required infrastructure for setting up the unit.

- 55. The support that project team needs to provide to agro-processing units would include:
 - a. Capacity building: project should provide sufficient capacity building support to selected members in terms of technical aspects as well as management of the unit. State, regional or national level competent agencies could be contacted to train such entrepreneurs. Exposure visits can also be planned to similar units within the north-east region or at national level.
 - b. Marketing support: the state marketing team shall be responsible to provide marketing support in terms of identifying potential market players to facilitate linkages. For local sale, local markets in an around the village, nearby towns and state capital can be explored.
 - c. Business development services (BDS): once the processing units are set up, these may require various BDS support including financial linkage to meet working capital and business expansion requirements. Project team should identify a pool of experts, from diverse areas of enterprise management, from within the state for technical back stopping, on as-and-when required basis.
 - d. Investment support: after the processing unit starts functioning it would require working capital to support expansion of operations and explore bigger orders. Project team need to contact financial institutions, both public and private, operating in the state, explore linkages to meet the financial requirement of such units.
 - e. Monitoring and handholding support: the district teams will be responsible to prepare a monitoring and handholding plan for agro-processing units set up by communities in their respective districts. The monitoring plan would be prepared in consultation with state team and staffs at block and village level. Quarterly meetings could be organised at the state level to review the progress and action plan, attended by respective district teams, service provider and market players.

56. **Establish marketing linkages:** Establishing sustainable marketing linkages for selected value chain commodities are critical to enhance income of project target group. The marketing linkages may be established in several ways, such as contract farming, wherein farmers produce specific varieties, as decided with a market player, on a pre-decided price deciding mechanism. In another case, an existing market player may be willing to procure commodities already produced by project farmers. Marketing team should

- Identify and prepare a list of market players who might be interested in procuring selected commodities from Nagaland.
- Establish contact with these market players through emails, telephone calls, and personal meetings, if required.
- Gauge interest of market players to procure from Nagaland, terms and conditions, price determination mechanism, interested to work with farmers, and willingness to forge long term partnership.
- Shortlist potential market players for establishing partnership
- Invite shortlisted market players to visit project locations, sample testing and finalisation, commodity procurement mechanism, commodity testing and valuation mechanism, arrangement for transport facility, invoicing and mode of payment.
- Agree and prepare an annual plan for procurement and marketing.

57. **Contract Farming:** the process of Contract Farming in rural economy is a new concept and has been made legal after the amendment of the APMC Act at State levels. The concept was largely adopted across assortment of crops, regions and firms. The process of contract farming involves

cultivating and harvesting for and on behalf of big business establishments (TATA, Reliance, ITC and PepsiCo) or Government agencies and forwarding the produce at a pre-determined price. In return, the contracted farmers are offered high price against their farm produce. The role of contract farming in rural economy is becoming more and more important, since organized farming practice has become the need of the hour in the world of rapid industrialization. The rapid industrialization process has created shortage of farmland, which in turn has necessitated organized farming practice in the country.

58. The process of contract farming involves scientific and optimum use of land and farm resources for maximum output of agriculture produce. The liberalization of economy, has seen a sudden spurt in contract farming in the country. Today more and more established business houses are taking interest in the business of contract farming. This has happened as a result of rapid growth of retail industry in the country. The growth of retail industry has propelled the growth of farm retail, which caters fresh vegetables and fruits from the farms to the masses. The process of contract farming involves, engaging rural Indian farmers for the cultivation of agricultural produce under strict government policies.

59. Under contract farming a bipartite agreement is made between the farmers and the corporates, the latter directly contributes to the management of the firm via supply of inputs, technical assistance and marketing of goods so that the produce is tailor made as per the company's requirements. As there are no middlemen involved, farmers get a predetermined sale price from the corporates. The process is easy and simple in which the farmers need not have to worry about seeds and credit and also stay away from making multiple trips to the mandis. By signing a contract, farmers get immunity from fluctuating market demand and fluctuation in the prices.

The project marketing team needs to identify, collect and analyse information and experience of 60 various state agriculture marketing boards in the country who have promoted contract farming for spices. The marketing unit will establish contacts with agencies, such as Sresta Organics, Patanjali, and other agencies to develop contract farming modalities for the FIGs promoted under the project. Patanjali has shown interest to buy dried turmeric, tulsi, aloe vera, etc. The marketing section will analyse all market interests and explore the possibility of entering into contract farming arrangements. Collaboration with IDH India (a trade initiative supported by the governments of Netherlands and Sweden) has been firmed up. Once the project implementation starts, IDH will: (i) conduct a study to validate the business case for organic spice production to the local spice farmer and explore the market demand; (ii) validate the market size for Cardamom both for the domestic and the international markets from India; (iii) explore the model and the business case for a local (near to farm gate) processing plant in Nagaland and the statutory and local requirements to start up such an enterprise; (iv) work with the local partners of Sustainable Spice Initiative (SSI) to identify the parties who would be interested in providing technical support and enter into a long term MoU; and (v) define market requirement parameters for sourcing products from the North East.

C. Innovation Fund

61. **Rationale:** Several societies, associations, cooperatives, public sector companies, producer companies, local agro-enterprise and innovators operate in the state. These agencies and individuals operate in an environment of limited scale, inadequate capital and inability to access latest technologies and large scale markets. This apart, in order to realise the potential of the agricultural and allied sectors, a higher scale of operations is required to enter external markets on competitive terms and/or fetch a premium price for products produced in Nagaland. The project's value chain support will facilitate expansion of production and marketing, and is envisaged to generate a new set of entrepreneurs with market linkages. In addition, higher level investment is required to establish extraction of oleoresins, capsanoids and tumerons. These need to be funded in a sub-project mode. Also, some local young entrepreneurs have business ideas to start small scale businesses but lack technical and managerial skills. Limited entrepreneurship and marketing opportunities coupled with low volume high cost of transport and limited risk-taking ability constrain agri-business development in the state. The Innovation Fund is envisaged to overcome these constraints by supporting potential agencies who can offer innovative solutions to project target communities.

62. Innovation Fund aims to provide sustainability to economic activities of FIGs supported with project interventions by inviting private sector players to foster partnership with local communities. Project support to potential local and private enterprises is likely to ensure long term sustainability of agribusiness enterprises of target communities even after the project completion. Innovation Fund would encourage and provide opportunity to local entrepreneurship to flourish and prosper, promoting entrepreneurial culture in the state, a key requirement to enhance income opportunities for target community. Private sector would bring entrepreneurial knowledge, marketing and management skills, business leadership, that in turn would help in its transfer to local community. It would also provide marketing opportunity of local products to outside markets.

63. In order to support these interventions, the project will establish a fund and seek proposals from interested agencies and provide funding based on a detailed business plan and agreed outcomes. This support will be available to legally registered and tax compliant local agencies that have already implemented innovative interventions requiring scale up support with demonstrated ability to bring own funds to part finance the proposal. The project will prioritize the needs of youth while approving sub-projects funded by the Innovation Fund. Sub-projects of youth taking up enterprise related to aggregation and value addition will be funded on a priority and capacity building aspects will be built into this. In addition, the project will actively identify agencies that have capacity to submit sub-projects that train youth in specific vocations and provide funding for enterprise establishment coupled with technical backstopping. Such agencies will be funded using Innovation Fund. The operational details of the Innovation Fund is provided in Annex 12.2.

<u>S. No.</u>	What is to be done How is to be done		Who will do it
	Production support		
1.	Train and support to CRPs	Selection and placement	PMU
2.	Train and support to FIGs	Formation and capacity building	PMU
	Marketing support		
3.	Establishment of marketing section in horticulture department	Recruitment of staffs	SPD & MD
a.	Placement of teams in district (state, district, block and village level staffs)	Recruitment and placement of staffs	PMU
b.	Setting up facilities and infrastructure in marketing section	Purchase of goods and services	SPD & MD
4.	Implementation plan preparation	State and district level meetings to discuss project reports/plans	PMU and DMU
a.	Targets for Nagaland state	Refer project documents	PMU
5.	Participatory planning in commodity clusters	Participatory exercise in villages	DMU
6.	Commodity cluster development	Develop commodity clusters	PMU/DMU
a.	Cluster identification and planning	Use cluster selection criteria	
7.	Marketing and handholding support		
a.	Plan market exposure visits	Identify potential locations and plan	PMU/DMU
b.	Organise buyer-seller meets	Identify potential market players	PMU
C.	Participate in trade fairs and exhibitions	Identify relevant trade fairs and exhibitions	SMU/DMU
d.	Digital delivery of extension services	Identify service providers and sign agreement	DMU

Checklist of value chain interventions

India Fostering Climate Resilient Upland Farming Systems in Nagaland and Mizoram Draft Project Implementation Manual for Nagaland

<u>S. No.</u>	What is to be done	How is to be done	Who will do it
e.	Promote organic certification	Identify service providers and sign agreement	DMU
f.	Establish common facility centres	Potential FIG selection	PMU/DMU
8.	Setting up agro-processing units	Identify potential FIGs	PMU
9.	Establish marketing linkages	Identify potential market players	Marketing section
10.	Innovation Fund	Call for proposal and selection	PMU/PSC

Annex 12.1: Guidelines for value chain studies - Nagaland

Value Chain development

Value chain development approach, an end-to-end approach, is increasingly seen as an effective methodology and management with an ultimate goal of bringing better returns to farmers by building their capacities. Value chain analysis, its integral component, provides a macro view of the select value chain, processes and flows of produce, inefficiencies and constraints, market dynamics, roles performed and values taken up by various players, key stakeholders and influencers, and prevailing opportunities. It provides an analysis challenges faced primary producers and helps design and implement effective micro strategies to support them.

A value chain "describes the full range of activities that are required to bring a product or service from conception, through the intermediary phases of production and delivery to final consumers, and final

disposal after use". This includes activities such as inputs supply, production, and processing, marketing, distribution and support services, up to the final consumer. Activities constituting a value chain are often divided among several businesses, though they may sometimes be contained within a single, large business. Value chains require cross cutting support services (logistical, financial and technical) and enabling government policies, to flourish. These activities can take place within a single country, or be spread across two or more countries. Movement of produce from farmers/producers to the end markets and consumers may involve multiple marketing channels. A commodity produced in villages of Nagaland, through chain of



intermediaries' traders, processors, and exporters, find markets in neighbouring as well as far off developed countries.

Under the project, value chain development process aims to analyse every stage of the commodity movement i.e. from production to the end consumer, to support producers realise higher values. At present, hardly any value addition takes place at the farmer/producer level leading to a large chunk of produce moving out of village and the state in the raw form. Value addition activities are generally taken up by players with higher capital base located at higher order markets. However, simple aggregation at village/cluster level with rudimentary value addition activities like cleaning, sorting, grading, drying etc. can fetch higher price to the target community.

Importance of Value Chain Approach

- Gives information about market channel and segmentation, market prices at every level helps in preparing a marketing plan
- Gives information about all stakeholders involved direct and indirect; helps develop linkages and partnerships
- Helps in developing market based strategies
- Can be applied to all commodities/products existing in rural areas

Objectives of value chain development

The main objective of the value chain development is to improve the farm gate prices to the producers. This objective will be achieved by:

- Organising the producers into marketing groups/producer companies essentially to achieve the economies of scale to take up collective marketing.
- Eliminating or reducing the role of middlemen and letting the organised producers sell directly to processors, exporters and terminal markets.
- Facilitate integration of producer with larger value chain market systems so that the poor producers maximize their earnings and remain relevant players in the value chains.
- Focusing on creating additional value/income by introducing better production practices, simple value addition in terms of aggregation, sorting, grading and processing, and collective marketing.
- Capacitating producers on value chain development and marketing
- Establishing linkages with potential private players, processors and bulk traders

3. Stakeholders in value chain development

Value chain development involves working with two types of stakeholders; primary and secondary players.

Primary players: The primary players in a value chain are involved in creation and/or movement of commodities from producers to end markets, and include input suppliers, producers, middlemen, processors, retailers, wholesalers, and corporate agencies. It is important to capture key roles performed by primary players in the value chain.

Secondary players: The secondary players in the value chain provide cross cutting support services related to logistics, training, finance, extension services, transport and packaging. While some players provide specific services, others provide multiples support services.

4. Five-steps of value chain development

Step 1	Identification of Value Chains		
Step 2	Selection of Value Chains		
Step 3	Analyse Value Chains		
Step 4	Design Value Chain development strategies		
Step 5	Develop value chains (Implementation)		

Following 5-steps are involved in value chain development.

Step 1: Identification of Value Chains

Project needs to encourage and promote viable economic activities among target beneficiaries. Since majorities of them are small and marginal farmers, project needs to identity most suitable commodities/ crops based on socio-economic parameters, agro-climatic conditions, market opportunities, marketing infrastructure and presence of enterprise support systems. Identification of feasible value chains in a project area can done by following three ways:

- 1. Organizing workshop by inviting key stakeholders (NGOs, Government agencies and resource agencies and expert individuals) operating in the project area
- 2. Referring to recent and similar secondary reports relevant for the project area
- 3. Undertaking a value chain and market study

This step provides a long list of potential economic activities in the project area. Project can shortlist potential activities based on its mandate, and availability of technical and financial resources.

In the Nagaland state, the inception mission identified large cardamom, Ginger, Turmeric, King Chillies, Orange, Bamboo and Pineapple as potential commodities. The value chain study, conducted as part of project design for the state, ranked seven commodities in the priority order; Large cardamom, Ginger, Orange, King chilli, Turmeric, Pineapple and bamboo for support based on productivity, market, economic and stakeholders (farmers and market players). The first four commodities namely cardamom, ginger, orange and king chilli were shortlisted for undertaking value chain analysis.

Step 2: Selection of Value Chains

Once the long list of potential activities is available it is important to select few most potential commodities that can be promoted in the project area. The project design completion mission selected king chilli and large cardamom as value chain commodities for production and marketing support under the project, in consultations with agriculture and horticulture departments. However, during the mission visit, based on suggestions and discussion with representatives of core project team, ginger was added as the third commodity for project support.

Project staff may consider following selection criteria for shortlisting potential economic activities:

- Engagement/interest of small and marginal farmers
- Involvement of large numbers of farmers
- Development of commodity clusters
- Possibility of productivity enhancement in crops
- Market potential/growth rate of agriculture commodities
- Possibility of value addition at community level
- Possibility of linkages with various markets/players
- Project mandate
- Crop gestation period
- Value of commodity i.e. high value low volume

Step 3: Analyze selected Value Chains

In case project decides to commission a value chain study, as mentioned under step 1, by engaging an internal team or an external agency, the first 2-steps would also become part of the study. Once the commodities are selected, based on their importance to community and project mandate, analysis is carried out to get deeper insights related to market dynamics, primary and secondary stakeholders' engagement, supply and demand patterns, policy environment and support ecosystem.

Since the project mandate is to support small and marginal farmers, the study output should take into account their context, and needs to include:

- End markets and market segments
- Market channels and trends within the value chain
- Primary actors in the value chain, their roles, and interrelationships
- Value chain map
- Constraints and opportunities that are holding back growth and competitiveness of primary producers
- Identify viable solutions that can address value chain constraints for primary producers

Example: Cardamom value chain map



Using the value chain map, analyse supply chain and existing marketing system in terms of input sourcing, production practices and technologies used, access to finance, access to business development services, market access, and constraints faced by farmers.

Market influencing factors

Macro level (Global)	Micro level (National and State level)	
 Major characteristics of the commodity 	 Package of practices adopted 	
 Weather conditions in countries 	 Rainfall distribution pattern 	
 Production status in competing countries 	 Scale of operations 	
• Stock available in cold storages/Carryover	 Presence of agro-processing units 	
stocks	 Productivities and process efficiencies 	
World demand/growth of consumer	 Organic and quality certifications 	
industries	 Domestic consumption demand 	
Seasonal price fluctuations and time of	 Presence of market players/exporters 	
arrival in the market	 Price competitiveness 	
• Hedging among the various varieties of	Business, marketing and entrepreneurial	
commodities	skills of producers and local players	
 Government's export & import policies 	 Business enabling ecosystem 	

Step 4: Design Value Chains development strategies

Value chain development strategies are designed by analyzing constraints, as identified during the analysis of selected value chain, and proposed interventions suggested by stakeholders to overcome those constraints. The team engaged in field survey and analysis should collectively design strategies. It is a good practice to ratify strategies with key experts and stakeholders before finalization. For example, following table captures constraints and interventions points for large cardamom value chain analysis conducted during the project design phase:

Factors	Constraints	Solutions/Opportunities
Enabling Environment (Ease of doing business, entrepreneurship, infrastructure, rules and regulations)	 Nagaland ranks 26th among 32 states/UTs in the ease of doing business, indicating challenges faced by entrepreneurs operating in the formal sector. It adversely impacts large number of related and dependent informal sector players as well. Despite several supporting provisions under NEIIPP, there is only one cardamom packaging and marketing unit in the state. Frequent landslides, sinking lands, no farm link roads, poorly maintained roads, high transportation costs, erratic power supply, and unreliable internet connectivity pose challenges for sustainable business operations. The state requires temporary Inner Line Pass for a limited period that requires extension permission. 18 APMC markets exist in the state, only few functions but not on expected level. 	 The state ranking has improved from 31st in 2015 to 26th in 2016, further reforms would improve business ecosystem. NEIIPP provisions for information and marketing support, quality products, R&D, skill development and training, and subsidies need to be popularised and promoted. Farm link roads under NABARD scheme, godowns and cold storage, transport facility under CSS, MOVCD for NER, and provision for setting up VSAT facility for better communication in rural areas may improve business ecosystem. The special economic zone at Dimapur allows unrestricted entry to all business stakeholders that can be extended to other potential border markets. Improving management of APMCs through consensus building to support small and marginal farmers.
Production systems	 Agriculture fields are scattered, away from home; use of traditional tools lowers work productivity and increases cost of production. Cardamom productivity varies significantly within villages and across project districts i.e. 0.43 to 0.53 MT/Ha. Cardamom is very climate sensitive crop, requires a good amount sunshine, moderate shade and appropriate rainfall for high yields. Farmers use pesticides and Fertilisers but on a limited scale, production is organic by default. 	 Use of improved tools and construction of farm links roads to enhance work productivity. Capacity building, handholding support and training to farmers in improved package of practices integrating traditional practices/ knowledge, use of quality disease free planting materials, preparation and use of bio pesticides, better management practices would improve yield. Very low consumption of fertilisers and pesticides offers an opportunity for promoting certified organic farming of cardamom.
Markets, processing & Marketing system	• Farmers sell through a network of local agents, are not aware of marketing channels and final consumers. Dependency on the	 Explore direct linkages with bulk buyers and processors in Guwahati/Assam. Use of solar/electric dryers could

Factors	Constraints	Solutions/Opportunities
	 same network without price intelligence reduces bargaining power over a period of time. Smoke and sun drying contaminates the quality of dried cardamom. APMCs infrastructure exist but no regulated operations takes place for bulk marketing. Farmers are not aware of market prices beyond first level of transaction that restrict their ability to negotiate market prices with local agents/traders. Cardamom price vary significantly across the districts due to transportation cost, head loading cost, and popularity of location specific product. 	 be explored for better quality for targeting export markets. Identify and establish direct market linkages with socially inclined exporters and processing units of dried cardamom such as Patanjali, MDH, NERM, Sresta organics, and Amalgamated plantations of Tata group. Training on cardamom economics and create a market intelligence system at state and village level for prevailing prices in major cardamom markets in the region. Doing cost benefit analysis is important to take advantage of price differences prevailing across various districts in the state.
Support Service Environment (logistical, financial and technical)	 Weak horticulture extension services, adoption of improved package of practices is limited mainly to progressive farmers. Weak credit scenario (repayment of loans), banks not willing to extend agriculture loans to farmers. Banks prefer to extend loans only under government schemes with subsidy element. Farmers use personal savings, interest free loans from family and friends; informal loans are available at high rate of interest, 5- 10% per month. Last mile connectivity challenge, poor farm link roads leads to higher head loading cost to the road point. Horticulture department offers production related support but not the marketing support demanded by farmers. 	 Strengthening extension service support network by improving mobility of field extension staffs, exposure of farmers to best practices within and outside the state. Entrepreneurs Associates (EA) facilitates credit and financial services by partnering with leading banks and financial institutions like SBI, ICICI Bank, NEDFi, Axis Bank for providing micro enterprise loans to various Agribusinesses, SHGs, and SMEs. Construction of farm link roads with NABARD and CSS support to facilitate business and bring down head loading costs. Farmers need marketing support system for price information intelligence and building market linkages with buyers/exporters.

Cardamom interventions required	Key Stakeholders	Incentives for Change
Improve cardamom production and productivity	Horticulture department, KVK, Service providers in villages, cardamom producers, SPMU/DPMU, local facilitators, NGO, village council	Use of better package of practices and improved tools is expected to enhance productivity by 20-30%.
Promote better management practices through extension services	Horticulture department, KVK, CIH, CSS, service providers in villages, producers, SPMU/DPMU, NGO, farmers' associations, village council	Production of organic certified cardamom for industrial use and export markets to result in higher returns Better crop disease management system
Organize cardamom producers into clusters for collective inputs sourcing, market intelligence system and marketing linkages	Corporate and bulk buyers, exporters, Traders, farmer associations, cardamom producers, local business facilitators, APMCs, SPMU /DPMU, Spices Board India, NGO, village council	Cardamom producers to come together once they understand the benefits of economies of scale, reduction in overhead costs such as transportation and bulk inputs sourcing. Market intelligence system to help take better and informed marketing decisions.
Develop higher order market linkages with terminal market players (bulk buyers, processors and exporters)	Corporate and bulk buyers, exporters, traders, farmers' associations, cardamom producers, APMCs, NSAMB, Spices Board India, local business facilitators, SPMU/DPMU, NGO, village council	Direct linkages with higher order markets (corporate, processors, and exporters) such as NERM, Patanjali, Amalgamated plantations, food industry and Ayurvedic and Unani medicines manufacturers is likely to improve farmer prices by 20-25%.

Strategies for improving cardamom farmers' income

The shortlisted strategies should be converted into actionable points for project staff to support field implementation activities. Based on the internal discussion among project design team and with concern government department and stakeholders in the state, following actionable points have been finalised.

- Cluster development consisting of minimum of 4 villages.
- Selecting and training community resource persons (CRP), 2 per cluster
- FIG formation, one FIG having a maximum of 20 farmer members
- Production support for select value chain commodities, 3 per district. Support includes better planting materials and technical support for improved package of practices.
- Marketing support for select value chain commodities and any other emerging marketable commodity.
- Setting up aggregation centres/common facility centres and collection centres at cluster level
- Marketing support to commodity FIGs include organising buyer seller meeting, market exposure visits, participation in trade fairs and exhibitions, and promote organic certification.

Step 5: Develop value chains (Implementation)

<u>Project team:</u> The first task during the implementation phase is the recruitment of project team at state and district level (district, block and village) responsible for implementing value chain development strategies in the project villages. Community resource persons are also selected and supported to extend support services to community groups formed under the project.

Commodity clusters planning: community members are engaged in multiple commodities shortlisted for promotion under the project. Therefore, area based commodity clusters, for ensuring economies of scale, could be developed under the project. Community groups (FIGs/FPOs/Societies) formed under the project would take the responsibility for managing the clusters with support from project staffs at district as well as block and village level. Compact lands should be selected for better monitoring and management. Cluster development would involve creating common marketing infrastructure for value addition and aggregation. For commodities identified under a cluster, a separate, commodity-wise management and marketing plan would be prepared.

<u>Crop varietal selection</u>: Project needs to encourage varietal selection and production of select horticulture crops (cardamom, king chilli, and ginger) based on market analysis and demand pattern (domestic as well as international) from the stakeholders/market players such as local and outside agri-processing units, bulk traders, spice board India, corporate agencies and exporters.

Business Plan by community: proper business planning is key to minimising market risks and making right marketing decisions. Project field staffs, in collaboration with communities, would undertake a participatory advance (6 months to 1 year) planning, within couple of weeks of sowing/plantation, to prepare commodity-wise area under production, selected varieties, and estimated production quantity. This would provide sufficient time to identify interested market players, discuss terms of trade, plan logistics, and post-harvest management.

Provision of business loans and working capital: Project may collaborate with public, rural and commercial banks, MFIs/NBFCs in the state for meeting out business loans and working capital requirements of community groups looking to explore bulk market linkages. Project could also discuss with state government exploring possibility of allowing acceptance of Land Settlement Certificate, having status of *patta,* issued by VC as legal document to avail business loans above INR 0.3 million.

Business and market intelligence unit: project may facilitate creation of market intelligence unit at the PMU level, staffed by a qualified candidate, to prepare database of potential market players including processors, bulk traders, and exporters, discuss terms of partnership building, and keep commodity wise supply estimates, and track regional and global price patterns. He/she would also coordinate with other agencies and individuals working in select commodities within the state. He/she would prepare list of all public and private agencies currently procuring select commodities from the state to discuss market linkages possibilities. It would help establish market information system in commodity clusters under the project. PMU will be supported by DMU and village level service providers and business facilitators.

<u>Pre-harvest and post-harvest management system</u>: crop varietal selection, quality seed/seedling and other inputs procurement, improved tools/equipment, provision of technical training and extension services, IPM/bio-pesticides, organic cultivation process, provision of irrigation, infrastructure creation for facilitating simple value addition at cluster level, improved storage practices, creation of go-downs/cold stores at cluster level, electronic weighing machine, and plan transportation logistics. The facilities, at cluster level, be developed for multiple commodities for round the year utilisation potential.

Capacity building on business management: project would ensure capacity building and training programme critical to successful management of business operations. Practical training would include helping community do cost-benefit analysis, commodity valuation techniques, grading of commodities and price relationship, importance of simple value addition at village level, proper accounts and record keeping, business and marketing principles, use of mobiles and internet for business linkages, and membership in commodity based social media platform and groups. Project would prepare a list of practitioner trainers from the state as well from the NER.

<u>Capacity building modules</u>: capacity building support should be based on the needs of commodity clusters and community members engaged in it. Generalise and commodity wise technical training, and business and marketing training module should be developed. Integrating indigenous traditional knowledge and practices is critical for better acceptability. Advance skills modules on business management and entrepreneurship should be planned for members already having basic skills.

Demonstrations and exposure visits: project should also identify and shortlist successful models of best practices for shortlisted commodities, cluster development and management from the state as well as from NER and other parts of India. In order to convince farmers about improved practices demonstration plots should be developed in clusters. Community members responsible for leading and managing the commodity clusters, and relevant projects staffs should organise exposure visits to such successful models.

Building Public Private Community Partnership: Based on inputs and active collaboration with market intelligence unit, project staffs need to identify potential market players i.e. bulk buyers, processing units, corporate agencies, and exporters who have mandate and are willing to collaborate with community and the project to forge win-win partnership. The partnership may be explored in the areas of pre-harvest management, technology transfer for value addition, post-harvest management, contract farming, and market linkages.

Provision of monitoring and handholding support: project needs to make provision of counselling and handholding support to commodity clusters by forming a panel of state level practitioner trainers, experts and technical agencies who would provide need based but specific support to commodity clusters developed under the project. Project team needs to develop a robust and participatory review and monitoring plan to assess impact of project interventions, and make necessary course correction whenever required.

Exit strategy and sustainability: FIGs, the community institutions, formed for project implementation are trained and supported to manage project interventions in villages and engage with outside stakeholders. Project provides handholding support to FIGs during the entire project period in terms of delivery of extension services and linkages with technical service providers and market players, which are expected to continue even after the project completion. Project interventions should also result into promoting local leaderships, who are expected to carry forward the linkages created during the project period. Market service providers who work with communities may find it remunerative to carry forward the linkages for a win-win partnership. Potential FIGs may also come together to form higher order institutions (federations/FPCs/FPOs) to manage large scale operations.

Annex 12.2: Draft Guidelines for an Innovation Fund

A. Rationale, objectives, criteria

a) Rationale

1. Project beneficiaries, small and marginal farmers, and landless, depend on a number of local enterprises such as producers' associations, bazar associations, commodity based registered cooperative societies, input suppliers, financiers, technology providers, processing units and traders, to support their agriculture and allied activities, which are offering unique services to local producers. However, limited awareness and exposure, low economies of scale, and financial constraints make it difficult for these institutions to access business development services and grow. Some of these local enterprises mission met, such as Entrepreneurs Associates, Green Caravan, and Reiek spice processing units, face technological, marketing and financial constraints to upscale their operations to support large number of small producers. Also, some local young entrepreneurs have business ideas to start small scale businesses but lack technical and managerial skills. Therefore, for supporting potential local enterprises financially to meet FOCUS goal and objectives, is important for long term sustainability of agribusiness enterprises of project target communities. Also, project states being hilly regions, face high transportation costs for movement of agriculture commodities due to access difficulties on account of longer rainy periods, landslides, and land sinking. Limited entrepreneurship and marketing opportunities coupled with low volume high cost of transport and limited risk-taking ability constrain agri-business development. Credit remains severely constrained on account of low levels of branch network, inadequate credit history of the entrepreneurs to access credit, inability to give collateral security for obtaining loans and also unproven profitability of agriculture enterprise on a semi-commercial scale. The Innovation fund is envisaged to overcome these constraints by supporting potential agencies who can offer innovative solutions to project target communities.

b) Objectives

2. An innovation Fund (IF) is a funding mechanism through which agencies from the public, private or social sectors would work with FOCUS to implement specific sub-projects involving innovative approaches⁵⁰ that support the overall objectives of the project. Such sub-projects should, ideally, have potential to be scaled up, either by FOCUS or other actors, so as to reach a larger number of households.

3. The IF fits with the overall goal and objectives of FOCUS which is "to increase the income of farm households and enhance their resilience to climate change in hill areas of Mizoram and Nagaland by increasing the environment sustainability and profitability of farming systems practiced by high land farmers.

c) Criteria

4. FOCUS shall support all innovative initiatives that enable meeting its objectives by:

- improving existing Jhum practices through improved Jhum management and conservation works leading to strengthening of immediate and long-term household food security, and surplus marketable agriculture produce.
- promoting settled agriculture by facilitating improved production and increased income from high value cash crops.
- adopting value chain approach to encourage appropriate practices and technologies leading to value addition, building profitable market linkages, for better incomes and promoting youth entrepreneurship and skill building.

⁵⁰ In FOCUS project, <u>definition of innovation will be broad</u>, <u>encompassing processes</u>, <u>systems and technologies which are new</u> to the target group in the project area - and so, may be in use with other groups and in other areas. However, assessment of proposals will give greater weight to the more innovative, novel ideas and approaches with potential to support project target group.

B. Potential activities, who can apply, location and target group

a) Potential activities to be funded

5. Activities that shall be supported by the innovation fund include (but not limited to) the following:

- a. Testing and dissemination of innovative technologies and approaches resulting in improved productivity and efficiency of jhum cultivation, settled agriculture, livestock, value chain commodities, and marketing.
- b. Setting up grassroots level aggregation systems by supporting new and existing common facility centres in project locations for promoting marketing of agriculture produce, establishing market linkages, storage techniques, aggregation of farm produce, primary processing such as cleaning, sorting and grading, and marketing.
- c. Establishing processing units (including higher order processing such as extraction of oleoresins and capsanoids), packaging, branding, brand promotion and establishment of market linkages for value addition of farm produce.
- d. Establishing profitable marketing linkages with contract farming arrangements including trainings in improved package of practices.
- e. Promoting new technologies or processes such as Geographical Indications (GI) tagging, E-marketing, organic certification, solar drier technologies, alternative energy solutions, improved storage and farm mechanisation.
- f. Promote entrepreneurship and vocational skills amongst youth related to pre-production, production and post-harvest technologies including provision of funding support for establishing enterprise related to agriculture and allied activities.
- g. Supporting producer and business community associations, commodity based cooperative societies, and agri-processing units to improve logistical, financial and technical capabilities to expand their businesses.
- h. Supporting youth and women associations willing to undertake and promote innovation fund related activities in project locations.
- 6. Following are examples of some specific sub-projects that IF may decide to fund:
 - a. Aggregation, processing, packaging, branding, and marketing of select crops.
 - b. Expansion and technology upgradation of existing processing units and establishment of new processing units.
 - c. Technical support, training, bank loan access, and handholding support to youth for establishing agribusinesses.
 - d. Design improvement, purchase of specialised tools and equipment and marketing linkage support for bamboo and broom.
 - e. Establishing e-marketing of agriculture produce from Nagaland and Mizoram.
 - f. Establishing contract farming arrangement with reputed agencies from outside including facilitating farmers with training and improved package of practices to establish a system of market oriented production.

b) Who can apply?

7. Following is a list of potential institutions, but preference will be given to local institutions. Other potential agencies can also apply subject to approval from FOCUS.

a. Local producers' and bazar associations

- b. Local agribusiness and spice processing units
- c. Local youth associations
- d. Local commodity based cooperative societies
- e. Specialised business and marketing agencies
- f. Specialised technology service providers
- g. SHGs, FPOs, NGOs and Corporations, research institutions
- h. Local youth promoted partnership and private agencies/business entities

c) Geographical location and target group

8. FOCUS will cover 4 districts i.e. Serchhip, Mamit, Kolashib and Champhai of Mizoram state and 8 districts i.e. Kohima, Wokha, Mokochung, Zunheboto, Phek, Mon, Kiphire and Longleng of Nagaland state. The project target group includes Jhum and settled farmers, supported landless farmers and value chain commodity farmers.

9. Sub-projects funded by the IF will be established in strategic locations of project districts. Preference will be given to agencies/individuals planning to establish facilities within the project locations.

C. Selection process

a) Basic requirements

10. Agencies/business entities registered in the state of Mizoram and Nagaland respectively will be preferred. In the event an outside agency intends to apply for IF, such agencies are required to have a local partner.

- 11. The requirements for seeking IF funding are as follows:
 - a. Registered body, conforming to all the obligations under the law of the land.
 - b. Requisite organisational structures, systems and equipment to take up the sub project.
 - c. Availability of land, building, electricity connection for setting up new processing unit.
 - d. Track record for managing and implementing similar sub-projects.
 - e. Experience of working in project states or similar hilly regions.
 - f. Demonstrated experience of managing donor-assisted sub-projects.
 - g. Demonstrated financial management capacity.
 - h. Availability of staff to supervise and implement the proposed project.
 - i. Ability to monitor and evaluate the project.
 - j. No agency/business entity which has been blacklisted by the respective state government or Government of India, and also those with non-performing assets with commercial/cooperative banks, will be eligible.

b) Call for proposal

12. The selection process commences with an annual call for proposals. The call for proposals shall be disseminated through local and national newspapers by advertising a summary with a request to download the details from project's website. A system of distributing detailed call for proposals through e-mail distribution, social media platforms, and brochures will also be followed. The call for proposal advertisement/announcement may contain following points:

- a. Scope of activities, sub sectors, and sub-projects to be funded agencies can submit potential sub-projects from amongst the list mentioned under previous section.
- b. Location of sub-projects agencies need to mention specific village, block/circle, and project districts where it plans to operate.
- c. Target group: agency needs to specify its target groups (landless, jhum farmers, small and marginal farmers, youth and women), number of project beneficiaries targeted, gender, land holding requirement if any etc.
- d. Who can apply: list of agencies who can apply as mentioned in previous section. Local agencies with requisite capacities could be preference. National and regional agencies may form partnership with local agencies.
- e. Two-page concept note outlining the proposed sub-project (template annexed)
- f. Duration of sub-project maximum three years
- g. Mode of funding Primarily grant from SoCRAN/SCARM.
- h. Proposed scale of the sub-project in terms of size of the grant and numbers of households to be covered.
- i. Language of proposal: English
- j. Size of grant: Maximum up to INR 50 lakhs. Any proposal beyond INR 50 lakhs will have to be cleared by the Project Steering Committee.
- k. Funding pattern: maximum 75% grant from FOCUS and minimum 25% contribution from applicant or beneficiary. Applicants bringing higher contribution would be preferred.
- I. Working capital: confirmation from bank/s or from own sources for working capital is necessary.
- m. Number of agencies to be shortlisted: based on screening of concept note at the state level shortlisted agencies to be called for making presentation and submitting full proposal.
- n. Sub-project approval: the detailed proposals will be appraised by an appraisal committee consisting of PMU staff nominated by the State Project Director. The proposals seeking up to INR 50 lakhs support from the project and shortlisted by the appraisal committee for sanction will be reviewed and approved by the Project Management Committee. Any proposal seeking more than INR 50 lakhs support from the project and shortlisted by the Appraisal Committee for sanction will be sent to IFAD for review and approval. Thereafter, the approved proposals will be reviewed by the reviewed by the Project Management Committee and placed before the Project Steering Committee for sanction.
- o. Final date for submission of proposal by agencies one month from the call for proposal announcement.

13. Since there could be a number of sub-sector activities to be funded, IF can be announced once in a year, with a number of proposals being selected every year. The IF would be granted from second to fourth year of the project. The invitation can vary with each round - covering different sub-sectors, types of agency, and geography etc. Innovation fund invitations can also decide on number of proposals to be selected in each round - which makes the process more transparent as potential agencies would know that only a select number of proposals are going to be chosen, provided they meet minimum qualifications.

14. Local institutions with interesting propositions who do not have the capacity to respond to call for proposal documents and prepare full proposals may be assisted by the PMU, from a pool of local experts drawn from department of agriculture, banks, chartered accountants, NEDFi and NABARD. Project can provide financial assistance for preparation of the proposals.

C) Submission of proposal

- 15. The following are the basic submission requirements for the IF application:
 - a. Letter expressing intent to apply for the IF
 - b. IF proposal
 - c. Organisation's profile
 - d. Organisation's registration documents (not necessary if the lead is a government agency)
 - e. Two-page concept note outlining the proposed sub-project (template annexed)

d) Short-listing agencies and concept notes

16. FOCUS (SoCRAN/SCRAM) would form a Screening Committee at PMU, headed by a senior staff, consisting of technical and marketing staffs, to screen proposals and draw up a shortlist. In case, a subject matter specialist is not available within PMU for any particular proposal, the same can be hired from pool of local experts or open market. Shortlisting concept note would involve:

- Assessment of the qualifications of agencies/business entities. This would include: (i) an examination of documents and other information as mentioned in the announcement; and (ii) an assessment of the experience, resources and qualifications to implement the proposed sub-project. The latter point will vary according to the type and scale of the sub-project.
- b. Evaluation of the concept note against a number of criteria to determine how well it meets the objectives of the FOCUS Innovation Fund, and cost effectiveness.
- c. The shortlisting of agencies and concept papers to be completed within one month and shortlisted agencies are intimated.

17. In case, the project receives concept papers from a large number of agencies, project may restrict number of agencies based on fund availability by developing suitable screening and selection criteria.

3) Invitation for presentation

18. Shortlisted agencies/business entities could be invited within two weeks to make a Powerpoint presentation to the Screening Committee for final screening, where bankers may also be invited wherever appropriate. The presentation could cover the following aspects of the proposal:

- a. The objectives of the proposed intervention and what problem is to be addressed?
- b. What is the proposed innovation? Where has this been tried before? What are success factors? What are the risks involved?
- c. Proposed outputs
- d. Implementation modalities: sub-project implementation, management and monitoring, timeline, responsible staffs, number of staffs, institutions to be involved in implementation
- e. How would innovation be made sustainable? What would be the exit strategy for subproject activities?
- f. What resources are needed to implement the sub-project? What resources would come from sources other than FOCUS?
- g. What is the potential for scaling up? How scaling up will be done?

19. After the presentation, there could be a question and answer session to clarify issues and to provide the Screening Committee with a better information on the proposal. Following presentations, the Screening Committee will make a final selection of sub-project implementing agencies and intimate them to submit the full proposal **within one month** of the official communication.

f) Selection of final full proposal and approval

20. Once the full proposals are received from the shortlisted agencies, PMU would list out all proposals received. Shortlisted agencies have 30 calendar days to submit final proposal (refer attached template) from the date of intimation. Proposals received after the deadline set by the PMU will no longer be accepted for that round. The Screening Committee shall review the full proposals, select them, and then go for final approval by the Project Management Committee. The sub project approval process is detailed in section 3.2. Once final approval has been given, a grant agreement shall be signed between the agency and PMU for implementation of the sub-project. The selected agency shall commence implementation within 30 days of receipt of the first instalment of funds. The selection criteria are provided below:

- a. Relevance of the proposed project to the goals and objectives of the FOCUS Project and its strategic contribution towards achievement of project outcomes.
- b. Logic and clarity of the design (identification of clear and detailed activities, inputs, outputs and results; assessment of risks and mitigation; anticipated quantifiable improvements).
- c. Technical, market and financial feasibility of the proposed project.
- d. Use of strategic partnerships and collaborations to undertake the project in consultation with key stakeholders and project beneficiaries.
- e. Willingness to commit own finances, human resources and equipment needed for project implementation.
- f. Value for money and cost effectiveness

g) Funding disbursement procedures

- 21. The following shall guide the utilization and releases of funds for the IF:
 - a. Fund release for activities under the IF shall be done only after a grant agreement has been signed by the PMU and the selected agency/business entity.
 - b. The release of the grant monies shall be guided by the schedule of payment and milestones to be achieved as indicated in the final activity proposal and grant agreement.
 - c. Grant funds shall be released in up to four (4) instalments:
 - 1st instalment 30% upon signing of grant agreement
 - 2nd instalment 30% upon acceptance of first report and achievement of agreed milestones.
 - 3rd instalment 30% upon acceptance of second report and achievement of milestones.
 - 4th instalment 10% upon acceptance of final report and achievement of milestones.
 - d. If procurement of machineries and equipment are involved then instalment terms may be revised suitably. Before any succeeding instalment of money is released the organization must submit an utilisation report for previously released money. In case sub project face techno-managerial issue, PMU will have to provide professional support.

h) Monitoring and Evaluation

22. The monitoring team created under the project at state and district level shall be responsible for monitoring and evaluating implementation of IF subprojects in the state. The marketing and technical team at state and district level shall review the performance of subprojects, discuss ways to improve their efficiencies, and provide overall guidance and support for their growth. Specific subprojects specialists can also be hired to provide need based techno-managerial support to subprojects.



FOCUS Innovation Fund (IF) Proposal Selection Process



Template for a Sub-Project Concept Note

The following information should be included in a brief concept note of no more than two pages:

- Name of the implementing agency
- Name of sub-sector
- Project intervention topic
- What is the current problem that will be addressed by the sub-project?
- How will the sub-project address this problem?
- What results will be expected?
- How will these results be measured and reported?
- What is the proposed location for the sub-project?
- How many households will be directly involved?
- What is the target group (profile of participating households)?
- Approximately how much will the sub-project cost?
- How will it be funded (grant from FOCUS, contributions from the implementing agency, convergence funding)?

Template for full proposal (For shortlisted agencies)

S.No.	Proposal elements	Details
	Agency Details – Name, address,	
	registration number, contact person,	
	phone and email	
1	Title of the Project	
2	Sector/Sub-Sector selected and	
	reason for selection	
3	Project objectives	
4	Key success factors	
5	Proposed geographical location and	
	target group	
6	Detailed project methodology	
7	Implementation plan with timeline	
8	Review and monitoring plan	
9	Total time of the project	
10	Financial proposal with milestones to	
	be achieved (activity wise)	
11	Key expected outputs and impacts	

Items	BUDGET (In INR Lakh)			
	Year 1	Year 2	Total 3	Total
A. Equipment & Machinery (Non-				
Recurring Costs)				
(1) Equipment				
(2) Plant & Machinery				
Sub-Total (A)				
B. Recurring Cost				
(1) Operating expenses				
(2) Training				
(3) Travel				
(4) Human Resource				
(5) Other Costs/Contingencies				
(6) Institutional overhead charges				
Sub-Total (B)				
Grand Total (A + B)				

Budget Template

Institution/Agency/business entity financial contribution, if any

#	Contribution by item	Year 1	Year 2	Year 3	Total

Score card for assessment of innovation fund proposal

#	COMPONENT	Elements	Allotted	Score	OBSERVATIONS
			Score	Awarded	
1.	Innovation	 a) Business/economic oriented b) New process/methodology c) New technology/skill building d) Uncertain 			
2.	Beneficiaries focus	 a) Jhum farmers/settled farmers/landless b) Value chain farmers c) Women centric d) Other 			
3	Relevance and design logic				
4	Risk factors (Links to other components on the scale)	a) Low – Medium – High b) Market risks c) Technical/viability risks d) Other			

India Fostering Climate Resilient Upland Farming Systems in Nagaland and Mizoram Draft Project Implementation Manual for Nagaland

5	Technical	a)		
	feasibility	b)		
	(Subject	c)		
	Specific)			
6	Market feasibility	a)		
7	Timeline	a) Within 3 years b) More than 3 years c) Uncertain		
8	Economies of			
	scale			
9	Budget size/cost			
	effectiveness			

Chapter 13: Guidelines for livestock value chain

A. Introduction

1. Livestock is a way of life of the people in North-Eastern Region and is an integral part of Naga culture and diet, with most village households keeping a few pigs and/or chickens. Cattle and goats are also kept, but are greatly outnumbered by pigs. However the population of livestock, especially pigs and poultry, in the state is declining, and around half the meat consumed comes from other states. Pigs are the most important livestock in the state and play a major role in the livelihood of the small farmers. The rearing of pigs is related to their culture and on an average every household in the state rear pigs. Pork is the most preferred meat as the population is predominantly tribal.

2. Cattle and goats are also kept, but are greatly outnumbered by pigs. In some areas there are also Mithun. As per the livestock census of 2012, there has been tremendous decline in the pigs and poultry population compared to 2007 census. As against 6,97,790 pigs in 2007, the pig population was decreased to 5,03,688 in 2012. Similarly, the poultry population was also declined from 32,82,194 in 2007 to 19,95,485 in the 2012 census. The detail of the trend of livestock population in Nagaland from 14th livestock census (1987) to 19th livestock census (2012) is at Annex 13.2.

B. Pigs:

1. Background:

3. Pig rearing is one of the most important occupations of rural poor especially among the tribal masses of India. It has largely remained under free ranged rearing with weaker section of society both as a source of income and choice of meat for consumption. Pig is the most efficient feed converting animal among all domesticated livestock species and can play an important role in improving the socio – economic status of the weaker section of society. The bulk of the pig population in India is of the indigenous type (over 70%) with a low growth rate and productivity. However, in Nagaland, the exotic/cross-bred pigs outnumber the indigenous breed (Annex 13.2).

4. The share of pork in total national meat production has been static over last 15 years at about 10%. The average yield of pig meat is about 35 Kg / animal which is about 55% less than the corresponding world average of 78 Kg/animal (Bio-security Guidelines for Piggeries; DADF, Gol). Pig rearing in India is still is in unorganised sector that requires science & technology driven support to make it a vibrant enterprise. The majority of the Indian pig population is owned by small & marginal farmers and landless labourers, who cannot afford much for scientific piggery, which need good housing, quality food and better health management. More over to sustain pig production, and also to produce safe food for human consumption, animal health management including hygiene and bio-security is essential.

5. The project will focus mostly on the pig sub-sector. Pigs are also an important form of savings as they can be sold to meet unexpected expenses. Pig production is largely a backyard activity, relying on traditional methods with pigs being mostly fed on a variable supply of household waste and crop by-products. Most households only fatten pigs and a significant proportion of weaned piglets come from other states.

6. In addition, there will be a significant intervention in backyard poultry, with support for mithun in some villages. There is also provision in the project budget for expenditure of GoN funds on development of other livestock (such as cattle, goats, ducks, quails) and aquaculture. This money (an average of Rs 20 million per year) would be used as a demand driven fund during project period.

2. Constraints and opportunities for development

7. The following are some issues that need to be addressed through various interventions:

Housing:

• What are the main problems with current pig housing?

- The prevalent traditional pig housing system is mainly platform type using mostly wood and bamboos for the construction. Wood or bamboo as floor material is non-durable (damaged by animal bite and natural aging due to urine and water).
- Wooden floors pose risk of injury to animals once it is worn out.
- More laborious and time consuming for cleaning the wooden floor and less hygienic posing risk to animal health.
- Management of animal is also difficult in wooden floor (treatment, servicing etc...)
- How can housing be improved?
 - Concrete floor to be supported, which will be strong and long lasting.
 - Easy for management & keep the farm more hygienic.
 - Bedding with saw dust for floor material may also be done to make odourless pig rearing.
 - Use of CGI sheet as roofing material.
 - Side walls and partitions can be managed with locally available wood or bamboo.

Feeding:

- What are the main problems with current feeding practices?
 - Farmers not aware about the nutrient content of feed both in energy and protein source and feed the animal randomly and sometimes the farmers even feed their animal more than the actual requirement.
 - High price of feed ingredients is one of the major obstacles in pig farming as most of the feeds/ingredients are imported from other states.
 - High cost of transportation and poor road connectivity makes it further expensive in remote pockets.
- How can feeding be improved?
 - Educate the farmers about the nutritive contents of a particular feed/fodder both in terms of energy and protein and the requirements of the animal.
 - Several non-conventional plant sources with high crude protein have been identified for incorporation in pig ration which could be cultivated in large scale for meeting the deficiency of protein.
 - Processing and utilisation of non-conventional feeds. During the flush season there is abundance of non-conventional feeds such as guava, Jack Fruit, the cover of pine apple etc which gets rotten and lay wasted can be processed and converted into potential animal feeds.
 - In Kiphire and some part of Phek and Zunheboto there is abundant production of maize which the state Govt./project can intervene for conversion in to animal feed after processing and support the marketing.
 - Encourage and support the farmers to produce feeds and fodders especially rich in protein. The protein sources for pig like soybean and ground nut is not cultivated in large scale, therefore, cultivation of soybean and groundnut is the alternative for meeting the demand of vegetable protein source.
 - Hay making and ensiling of abundant fodder such as sweet potato with tapioca and molasses can be made for use during lean season.
 - In areas with perennial water source Azola culture has a huge potential as a supplementation of protein feed to livestock as it can be harvested on weekly basis.
 - Demonstration of feed grinding and mixing nutrients,

Breeding

- What are the main problems with current practices?
 - Absence of systematic breeding programs and lack of quality breeding stock, i.e weaned piglets.
 - Haphazard and indiscriminate breeding with inferior germplasm in terms of growth rate. Due to limited number of boar keepers, there is excessive use of the available boars resulting in (in-breeding).
 - Due to very high inbreeding rate, it leads to overall reduction in the production and reproductive performance of the animals leading to poor litter size.
- How can breeding be improved?

- Current government breeding programs need to be reassessed and innovative community-based breeding systems developed, supported by a need-based training program on the care and management of breeding stock.
- Expansion of the stock of preferred type (Large Black/Burma cross) and making available quality piglets and crossbred boars for sale to breeders.
- Making available improved pig germplasm at farmers' door step is an approach in improvement of pig production.
- Establishment of breeding unit at each district and piglet multiplication centres at block / village levels is the earnest need for meeting the demand of quality pig germplasm.
- Introduction of superior germ-plasm organised and systemic breeding through AI is the alternative. For this purpose existing AI system needs further strengthening including setting up of boar semen stations at district level and maintenance of cold chain up to the village level/ end use.

<u>Health</u>

- What are the main heath challenges?
 - Inefficient health care services and lack of availability of medicines and vaccines often leads to failure of pig production system.
 - Piglet mortality due to Piglet Scour is the main cause of mortality in the villages, which can be corrected by hygienic management and proper care of piglets.
 - Current systems for vaccine delivery do not work. Thus, alternatives are required through community-based training in the early clinical diagnosis of these viral diseases and the collective actions require preventing the spread of infection by immediate reporting and adopting simple bio-security measures.
 - Infectious and contagious disease like Swine fever, FMD etc. occurs frequently can be prevented by vaccination.
 - Capacity building in developing trained man power and making availability of vaccines and medicines for prevalent diseases through timely intervention could transform the health care situation and augment the productivity.
 - Porcine Reproductive & Respiratory Disease Syndrome (PRRS) an exotic disease reported first time in the country in 2013 from Mizoram is a major concern and challenge to entire North Eastern States. This disease needs to be controlled by surveillance, immediate reporting and movement restriction to check spread to other states. In this case vaccination is not practiced as a matter of policy of the Government of India.
 - Agalactia Can be corrected by purchasing piglet from a known source having good pedigree record of the parent.

3. **Proposed Interventions**

8. The project needs to develop a steady supply chain for quality piglets. They also need to invest to develop a source for pig feed. The farmers need to be trained on advanced pig rearing practices and provided support for building proper housing for the pigs. The farmers also need to be provided financial assistance for procuring quality feed that forms around 80% cost of pig rearing. Finally, the there is a need to identify pork sellers in the urban locations and help in establishing market linkages for the farmers.

9. There is scope and requirement for tying up agencies from government and private sector for carrying out the envisaged project activities. The major areas that require support from such external agencies are technical know-how, community organisation, finance and market linkage. There is a clear disconnect between pig farmers in the villages and the pork market in the urban locations. Pig rearing is done by rural households to meet their own consumption needs especially during the festive seasons. There is hardly any commercial motive among the common farmers for pig rearing. Sale of live pigs is rare among these households and is done mostly to meet immediate financial needs. Mostly mixed local breeds are reared by these households as pure breeds are very hard to come by.

Feeding

10. The biggest constraint in pig production is lack of feed (including the high cost of feed ingredients).

11. The North East as a whole and Nagaland in particular produce enough maize round the year, but the important protein sources for pig i.e., soybean and ground nut is not cultivated in large scale. Therefore, the import of soybean and groundnut meal is only option for meeting this requirement. High cost of transportation and poor road connectivity makes feed even more expensive in remote pockets. The cultivation of soybean and groundnut has been demonstrated and is now under popularization stage for meeting the demand of vegetable protein source. Several non-conventional plant sources with high crude protein have been identified for incorporation in pig ration which could be cultivated in large scale for meeting the deficiency of protein. For programs aiming to identify feeding practices that give faster growth rates and better reproduction, a key opportunity results from the most commonly used feed sources being rich in energy but deficient in protein.

12. The project will build on lessons from interventions by NEPAD funded by Tata Trusts with support from ILRI and will disseminate, though two demonstrations in each village, of feed and fodder plants (to be grown as a "pig food garden", on *jhum* land or as an intercrop in plantations). Pigs are not being fed enough protein, so the project will introduce and demonstrate azola production with in households of each village. A small feed grinding unit will be established in each village – there is a supply of locally produced maize in eastern Nagaland, and dried cassava is widely produced. An innovation from NEPAD, silage from sweet potato plants, will be scaled up through two demonstrations in each village.

13. In addition, the following research trials/ demonstration will be conducted:

- Participatory testing of non-conventional protein-rich feed resources like rice, beans, legume forages and soybean,
- Participatory testing of improved varieties of crops such as tapioca/cassava, *Colocasia/taro* and sweet potato

14. Each of these feed interventions conforms to the principle of providing pig producers with information and technological options that allow them to combine feeds optimally in relation to their local conditions, costs of production (including family labour) and the contribution of each feed to meeting the nutrient requirements of their pigs for profitable performance.

Activity: Feed and Fodder	Years								
Numbers of units	Y1	Y2	Y3	Y4	Y5	Y6	Total		
Improved feed & fodder	377	377	377	377	0	0	1508		
Improved silage	377	377	377	377	0	0	1508		
Azola cultivation	377	377	377	377	0	0	1508		
Feed grinding machine	754	0	0	0	0	0	754		
Fodderiser	754	0	0	0	0	0	754		

Pig Breeding:

15. The constraint to increased production is absence of systematic breeding programs and lack of quality breeding stock and weaned piglets for fattening. Current government breeding programs need to be reassessed and innovative community-based breeding systems developed, supported by a need-based training program on the care and management of breeding stock. Key elements required are expanding the stock of the preferred type (Large Black/Burma cross) and making available quality piglets and crossbred boars for sale to breeders for use in fee-paying mating systems. To sustain crossbreeding, which is integral to increased productivity, breeding stock of the indigenous pigs needs to be made available. Making available improved pig germplasm at farmers' door step is an approach in improvement of pig production.

16. Improving the genetic quality of pigs will capture the interest of farmers and encourage investment in improved practices. The project will support the establishment of 148 pig breeding units at block / village levels (at least one per village cluster). These units will be operated by progressive farmers and entrepreneurs, including youth. Each breeding farmer/entrepreneur will be given 5 day's training followed by exposure visits with in the state and also other states. The project will provide a 50% subsidy for the cost of breeding stock and buildings, with the farmer undertaking to insure the animals. These units will produce improved stock (such as Large Black and Hampshire crosses) for sale to village level pig breeders.

17. In addition, the project will provide a 50% subsidy on weaned piglets of improved types (coming from progressive breeders and government farms of the state or outside the state). These will go to individual households and women's SHGs. About 8750 piglets will be supplied each year from the second year of the project duration – with a total target of 35,000.

Activity:	Years								
	Y1	Y2	Y3	Y4	Y5	Y6	Total		
Pig breeding units (148 units)									
Breeding Stock (6 sows & 1 boar)	37	74	37	0	0	0	148		
Housing for pigs	37	74	37	0	0	0	148		
Piglets of improved type (backyard)	0	8750	8750	8750	8750	0	35000		
Artificial Insemination									
Construction of Boar Semen Station	4	0	4	0	0	0	8		
Processing Unit	4	0	4	0	0	0	8		
Breeding Stock (Boars)	20	20	0	0	0	0	40		
Cold Chain – Refrigerators	74	74	0	0	0	0	148		
Back-up/ solar unit	74	74	20	0	0	0	148		
Maintenance of solar unit	74	148	148	148	148	148	814		

18. Artificial Insemination is the key in pig reproduction and any effort to develop this activity will go in a long way in the breeding activities both in the rural and urban areas as well up to village level. In the project it is proposed to set up boar semen stations, one in each district, with proper cold chain extending up to the village cluster and further to the farmer's door step.

Pig housing

19. The prevalent traditional pig housing system is mainly platform type using mostly wood and bamboos for the construction. Wood or bamboo as floor material is non-durable (damaged by animal bite and natural aging due to urine and water). Also wooden floors pose risk of injury to animals once it is worn out. Management of animal is also difficult in wooden floor for treatment, servicing etc.

20. To improve the environment in which pigs are kept – and so improve growth rates and reduce health problems, the project will demonstrate two improved pig houses in each village (providing cement, iron sheets etc. with the farmer providing wood, stones and construction labour. The project will also demonstrate improved compost making (vermi-compost or other techniques) with two units set up in each village.

C. Poultry

1. Background:

21. As per the livestock census of 2012, the population of poultry was 1,994,485 as compared to 3,282,196 in the 2007 census. As in other sub-sectors like pigs, where there has been a tremendous decline in the population.

2. Constraints and opportunities for development

22. The following are some issues that need to be addressed through various interventions:

> What are the main production systems at the village level?

- The main production system at village level is backyard chicken rearing of non-descript type. For poultry, the project will establish small dual purpose backyard poultry units, targeted at the poorest women, with the aim of improving household food security and generating income from the sale of eggs and meat. Farmers should be supported by supplying improved poultry units. Livestock producers would get trained in their villages in a range of animal husbandry topics on management, nutrition and animal health care.
- > What are the main problems faced by poultry producers?
 - Like in pig sector main problem is feed, mineral mixture/vitamin supplement for poultry and improved germ-plasm.
 - Lack of health care management and immunization
- > What can be done to make improvements?
 - Potential improvements: package of improved practices: housing, feeding, heath care, improved breeds
 - Improved backyard poultry can be developed by providing the farmer with improved breeds of chicks with comparatively improved type of housing, feed and proper health care at the farmer's door step.
 - Immunisation of birds against the prevalent poultry diseases in the state.

3. Proposed Interventions

23. For poultry, the project will support to establish small backyard poultry units, targeted at the poorest women, with the aim of improving household food security and generating income from the sale of eggs and meat. The project would provide the birds and equipment with the household/entrepreneur constructing a house of an improved type. Livestock producers would get trained in their village in a range of animal husbandry topics.

24. It is proposed to establish 24000 backyard poultry units targeted at the poorest women, each with 20 birds of improved backyard dual purpose breed. For these units the project would provide the birds and equipment with the household/entrepreneur constructing a house of an improved type.

Activity:	Years							
Poultry Breeding	Y1	Y2	Y3	Y4	Y5	Y6	Total	
Backyard poultry units (20 birds each)	0	6000	6000	6000	6000	0	24000	

D. Mithun

25. Through the project, it is proposed to support existing Mithun owners in 60 villages with demarcation and fencing about 300 Kms. of forest grazing areas, water supplies in these grazing areas, and establishment of 60 community Mithun shelters and animal handling equipment. The use of mineral blocks would also be demonstrated. This intervention will be implemented by the society/ community people and AHVD will be the facilitator and supervisor. About four poor farmers will be supported by providing one Mithun calf in each Mithun village.

Activity: Mithun Development	Years						
	Y1	Y2	Y3	Y4	Y5	Y6	Total
Community mithun shelter/coral – materials (villages)	10	20	30	0	0	0	60
Community mithun shelter - wood and labour (villages)	10	20	30	0	0	0	60
Water supply to grazing areas (troughs & pipelines)	40	80	120	0	0	0	240
Labour for water supply	40	80	120	0	0	0	240
Fencing of grazing areas - barbed wire (Kms)	50	100	150	0	0	0	300
Fencing of grazing areas - poles and labour (Kms)	50	100	150	0	0	0	300
Mineral block demonstration	10	20	30	0	0	0	60
Supply of Mithun calves to poor farmers	20	40	60	60	60	0	240

E. Animal Health:

26. Nagaland, with the porous international borders, is hugely threatened by emergence of exotic diseases like PRRS, as well as by frequent occurrence of outbreaks of swine fever, FMD etc. Inefficient health care services, and lack of availability of medicines and vaccines, aggravate the situation further and often leads to failure of pig and other livestock production systems. Annex 13.3 has the details of common animal diseases of Nagaland.

27. Capacity building in developing trained manpower, and making availability of vaccines and medicines for prevalent diseases through timely intervention could transform the health care situation and augment the productivity further. A participatory process should be applied to evaluate the impacts of pig diseases and their threats to the viability of small-scale herds, particularly in relation to designing effective prevention and control systems for swine fever and FMD.

28. Current systems for vaccine delivery do not work. Thus, alternatives are required through community-based training in the early clinical diagnosis of these viral diseases and the collective actions require preventing the spread of infection by immediate reporting and adopting simple bio-security measures. Such community-based intervention would include appointing Community Animal Health Worker (CAHW) paid by the community or a group of communities to supply a variety of services including castration, vaccination and first aid. Apart from the CAHWs, 74 Veterinary Field Assistants will be trained to assist the community workers in the implementation of the animal health activities and monitor the progress. Each VFA will be provided with a motor cycle for quick mobility. It is hoped that the immunisation programme in the state will be geared up and the outbreak of infectious diseases in animals are minimised.

29. All the pigs and poultry in the project districts will be vaccinated against the prevailing infectious and contagious diseases. DAHVS will supply vaccine both for pigs and poultry out of the GoN project allocation.

Deworming and Mineral Mixture/vitamin supplementation:

30. Deworming of pigs will be demonstrated during the first two years of the operation of the project and about 150,000 pigs will be included. Thereafter the farmers will be educated and encouraged to practice de-worming of their animal at least once in a year. Also the project will have a provision of revolving fund in all the 754 villages in the project districts to purchase mineral mixture and vitamin supplement which will be sold to the farmers on actual cost basis. The fund will be revolved and continued during the project period and beyond.

Activity: Animal Health											
	Y1	Y2	Y3	Y4	Y5	Y6	Total				
Vaccination - pig diseases											
Foot & Mouth Disease (doses)	50000	100000	200000	200000	200000	200000	9500000				
Classical Swine Fever (doses)	50000	100000	200000	200000	200000	200000	9500000				
Deworming											
(demonstration)	50000	50000	50000	0	0	0	150000				
Mineral Mixture/ vitamin Supplement (revolving fund)	754	0	0	0	0	0	754				
Poultry Vaccination											
Ranikhet Disease (doses)	100000 0	1000000	1000000	1100000	1100000	1100000	6300000				
Fowl Pox (doses)	100000 0	1000000	1000000	1100000	1100000	1100000	6300000				

NB: A short write up on the animal diseases prevalent in Nagaland and incidence in 2016-17 is at Annex 13.3.

F. Food Safety & Hygiene

31. The food safety of pork is at a very primitive stage in Northeast as a whole and Nagaland in particular. This requires attention and improvement. With rising pork consumption and an increasing number of market participants between producer and consumer, the public health risks from unhygienic practices are growing. Currently there is little or no routine ante and post mortem inspection of slaughter pigs in urban areas where significant numbers of pigs are slaughtered and their pork sold.

32. The government has established abattoirs in some of the districts. In villages and small towns, most pigs are killed and sold under conditions of very poor hygiene. This has implications on human health and the project would aim to raise awareness of these threats through an information campaign and training butchers and pork sellers/handlers in better practices and provide some hygienic equipment for their shops.

33. An evaluation should assess the requirements for improved infrastructure and for training in meat hygiene and food safety based upon consumers' needs, perceptions and willingness to pay. Given that, producers in Nagaland sell a high proportion of pork directly to consumers, an assessment of local slaughter practices is central to the risk analysis. It is in this context that the project envisages improvement in the meat market chain in the rural areas and for the purpose it is proposed to train the meat sellers about hygienic meat handling including setting up clean meat in the villages. All the villages will be included and at least one meat shop personnel will be identified, trained and given equipment for the demonstration shops. Also there is a provision for putting up 750 slaughter slabs in cooperation with Village Councils for hygienic slaughtering of the pigs/poultry, where there will be provision for enough water and electricity. These will allow more hygienic slaughtering and reduce waste of by-products.

Activity	Years						
Improvements to meat market chain	Y1	Y2	Y3	Y4	Y5	Y6	Total
demonstration shops	354	400	0	0	0	0	754
Slaughter Slabs	250	250	250	0	0	0	750

G. Implementation arrangements:
34. The project is proposed to be implemented in all the 754 villages of the identified 8 districts of Nagaland initially for a period of six years from 2018 onwards. In the livestock sector, emphasis has been laid mainly on piggery and less extent poultry & Mithun. However, other species will also be included for which separate provision has been made.

35. At the village level livestock development activities would be carried out by a Community Animal Health worker (CAHW), with one in each village who will be trained to provide preventive health services and first aid, as well as providing advice on improved husbandry practices. With women having a major role in livestock wherever possible the CAHW will be a woman – at least 50% should be women. Both women and men CAHW must be committed to serve the community and stay in the village during the project period & beyond. CAHWs will be selected from amongst the progressive farmers ready to volunteer to work for the entire project period and beyond.

36. Capacity building of the CHAWs has been emphasised in the project. Towards this, customised training manuals for pig farmers, poultry farmers and CHAWs will be developed based on the existing training manuals/ available literature and will be translated in to local language. The CAHW will be trained to provide preventive health services and first aid, as well as advice and information to the farmers in the villages on improved husbandry practices including feeding and housing. The detailed training programme for CAHW is in Annex 13.1. The CAHW will receive an honorarium of Rs.1000 per month for first two years of the project period. Thereafter, CAHWs will be expected to generate their own income from fees for vaccination, Deworming, castration and other health services.

37. The CAHW will be supervised by Veterinary Field Assistants (VFA). There will be about 74 VFA in the project area (with one VFA supporting 2 village clusters). VFA and CAHW would provide village-level training for livestock producers. Each VFA and CAHW will get two 5-day training courses.

Activity - Capacity Building	Years						
	Y1	Y2	Y3	Y4	Y5	Y6	Total
Veterinary Manpower (5 days)							
Veterinary officers (ToTs)	30	0	0	0	0	0	30
Veterinary Field Assistants	74	0	0	74	0	0	148
Community Animal Health Workers	754	0	754	0	0	0	1508
Pig Breeders/Farmers (5 days)							
Training of pig farmers (breeder)	37	74	37	0	0	0	148
Exposure visits - in state	37	74	37	0	0	0	148
Exposure visits - other states	37	74	37	0	0	0	148
Training of farmers (backyard) by VFAs & CAHWs (4 days)*	22620	37700	45240	45240	0	0	150800
Meat Handlers (5 days)							
Training on hygienic meat handling (Butchers/pork handlers/sellers)	354	400	0	0	0	0	754

38. The overall training programme in the livestock sector is as follows:

* **Note:** Training to the farmers at village level will be undertaken by the CHWAs and VFAs and about 175-180 farmers from each village will be trained on improved housing, feeding, management and health care of animals.

39. The FAO Technical Assistance programme for FOCUS will support capacity development through ToT and training manuals. In addition, a number of studies will be carried out along with technical back-stopping. Details are in Annex 13.4.

Annex 13.1: Training Programme for Community Animal Health Workers

The training to the CAHWs will be conducted by the ToTs/VFAs after selection and recruitment of the CAHWs in each village. The training will be of 5 days duration in the class room as well as hands on training in the field. After the training the CAHWs will be taken to exposure visit out- side the state to learn the package of practice in the rearing, health and husbandry practices of piggery and poultry as well as first-aid & demonstration of minor surgical procedures and vaccination. The training contents for CAHW has been developed keeping in view the activities, he has to undertake in the village including training of the farmers. More emphasis has been given on hand on training on first-aid and vaccination. Broad outline of the 5 day's training that would be imparted to the CAHWs based mostly on piggery is listed as under.

1. Animal Health and First Aid-

A. Common Diseases of Pigs and their preventive Measures

- i) Assessment of Diseased Pig
- ii) Most Important / common Diseases of Pigs, their treatment and control measures
 - CSF,
 - FMD,
 - PRRS
 - Swine dysentery,
 - Piglet Anaemia,
 - Parasitic Infestation
- B. Immunization/ Preventive vaccination against major diseases of pigs (CSF, FMD)
- C. Role and Responsibilities of the CAHWs to overcome the disease problem
- D. Mode of Transmission of germs and adoption of hygienic practice for prevention and control of germs
 - a. Mode of Transmission of infectious agents
 - b. Sanitation
 - c. Routine Sanitation Program
 - d. Special Sanitation Program in the event of pigs suffering from disease
 - e. Disinfection- Common Disinfectants and usage
 - i. Washing Soda,
 - ii. Lime,
 - iii. Potassium Permanganate,
 - iv. Phenol,
 - v. Calcium Hypochlorite,
 - vi. Boric Acid

E. Surgical Procedures for the Minor problems of Pigs

- a. Castration
- b. Artesia ani (no anus)
- c. Ear notching
- d. Foot-rot
- e. First-aid to cut wounds
- f. Dressing of maggoted wounds

F. First Aid to wounds – Equipments and medicines requirement

- Cotton
- Saline solution
- Haemostatic drugs
- Anaesthetic drugs
- A pair of scissors
- Curved cut-edge needle

- Suturing material
- Forceps
- Shaving blade

NB: The vaccination/ vaccination schedule as well as treatment of minor ailments of poultry diseases will also form part of the training to the CAHWs.

2. Understanding the prevailing pig rearing system with its importance on livelihood.

- Prevailing pig production and marketing system in the village/locality
- Major problems faced by the pig producers
- Economics of pig keeping
- Role of pig on livelihood of the poor/ small pig keepers
- Scope for improvement of the prevailing production system

Production issues:

- Number of pigs kept by each household
- Breed type
- Rearing objective
- Herd Type
- Housing System
- Major Feed Resources
- Major Disease Problem
- Economics of Pig Production
- Marketing Issues
- Livelihood Importance
- Advantages of Pig Rearing

Prevailing Housing System of Pigs

- Open Ranging
- Tethering
- Open Enclosure
- Penning

Scientific Housing

- Points to be considered in the construction of pig sty
- Location Orientation of House
- Type of Pig House
- Floor
- Drainage System
- Construction Material
- Feeding and Water Troughs

Provision for Pregnant and Lactating Sow/ Diseased Pig/ Boar -

Floor Space Requirement

3. Identification of better germplasm - Available Breeds of Pigs & detailed description on-

- Large Black
- Large White Yorkshire
- Hampshire
- Ghungroo
- Non Descript
- Selection of pigs/piglets for rearing

1. Restraining and Transporting Live Pigs

- Restraining of Pigs
- Method of restraining piglets

- Restraining of older pigs
- Points to be considered during transportation

2. Care and management of different categories of pigs:

- Care and management of pregnant and lactating sow
- Care and management of neonate/ piglet
- Care and management of growing and finishing pig and boar
- Culling
- Maintenance of Records

3. Reproductive Cycle of Sows

- Puberty
- Factors influencing puberty
- Oestrous Cycle
- Sign of Heat
- Points related to pig reproduction

4. Feeding different categories of Pigs

- Main Components of Nutrients
- Water
- Protein
- Vitamins
- Carbohydrates
- Minerals
- Salt
- Commonly Used Feed Stuff by small pig producers
 - i. Pasture in swine feeding
 - ii. Use of by-product and waste products

5. Cultivation of Food /Feed Crops for pigs

- Importance of cultivation of food feed crops
- Standard methods of cultivation of different food feed crops(Sweet Potato, Tapioca, Colocasia, Maize)
- Demonstration of Azola cultivation
- Demonstration & usage of feed grinding machine
- Demonstration of Silage making
- Demonstration of Composting using pig manure

Annex 13.2: Livestock population

		14 th	15 th	16th	17 th	18 th	19 ^m
SI.	SPECIES	Livestock	Livestock	Livestock	Livestock	Livestock	Livestock
No.		Census,	Census,	Census,	Census,	Census,	Census,
		1987	1992	1997	2003	2007	2012
1	Cattle	202977	330661	383308	451017	469818	234974
2	Buffalo	15284	34397	36131	33757	33920	32648
3	Mithun	12796	25988	33345	40452	33355	35258
4	Sheep	815	3027	2339	4187	3649	3815
5	Goat	72148	148724	160761	174929	178072	99350
6	Dog	61917	102893	90986	141373	161617	113021
7	Rabbit	-	-	20207	38408	41922	44227
8	Pig	314027	526201	571176	644214	697790	503688
9	Horse & Pony	270	6458	1133	893	799	473
10	Duck	11378	192168	80467	116576	120131	125961
11	Poultry Birds	1061812	1973061	2363058	2672554	3282196	1995485
12	Turkeys	-	-	-	-	-	1592
13	Quails	-	-	-	-	-	657
	Total	1753424	3343578	3742911	4318360	5023269	3191149

Table 1: Distribution of Livestock population:

Source: Livestock census data, 2012

Table 2 Age-wise distribution of Pig in Rural and Urban areas

Animal		Rural		Urban	Gross	
		Exotic /CB	Indigenous	Exotic /CB	Indigenous	Total
Male	<6 months	84064	32335	17264	1911	135574
	>6 months	83102	31480	18288	1950	134820
Female	<6 months	74510	26508	14357	1023	102588
	>6 months	74869	26594	14265	1168	116896
	Total	316545	116917	64174	6052	503688

Source: Livestock census data, 2012

Annex 13.3: Economically important common Animal Diseases in Nagaland

- 1. Foot and Mouth Disease (FMD): Foot and Mouth Disease: Foot-and-mouth disease (FMD) is a highly communicable viral disease of cloven footed animals caused by an Aphthovirus of the family Picornaviridae. There are 7 serotypes: A, O, C, Asia-1, SAT-1, SAT2 and SAT3 in the world. In India. "O", A & Asia 1 strains of the FMD virus are prevalent and so in the state of Nagaland. Frequent occurrence of FMD outbreak in the state is causing a great economic loss to the livestock farmers. Though, vaccination is practiced against this disease, there are periodical outbreaks every year. This may be due to the fact that the immunization that requires twice in a year is not done as per the vaccination schedule. Moreover, not all the susceptible animals are vaccinated resulting in the outbreaks. During 2016-17, the state recorded is 7 outbreaks. 615 attacks and 70 deaths causing an annual economic loss of Rs. 38.28 lakhs (approx.)
- 2. Hemorrhagic septicaemia (HS): Haemorrhagic septicaemia in cattle and buffaloes was previously known to be associated with one of two serotypes of P. multocida an acute, highly fatal form of pasteurellosis that affects water buffalo and cattle in tropical areas of Asia, and is reported throughout India in one part of the year or other. In Nagaland also it is prevalent especially in the rice bowl area of the State, particularly Jalukie under Peren district and in the surrounding villages of Dimapur district. Reports of the outbreaks were also recorded in milk shed areas where proven sire and milch animals are available. In 2016-17, a total of 10 outbreaks were recorded resulting in mortality of 250 nos. of bovine species.
- 3. **Black Quarter:** Blackleg, black quarter, quarter evil, or quarter ill is an infectious bacterial disease most commonly caused by Clostridium chauvoei, a Gram-positive bacteria species. It is seen in livestock all over the world, usually affecting cattle, sheep, and goats. In 2016-17 there was no report of any outbreak of this disease in Nagaland.
- 4. Classical swine fever (CSF) or hog cholera (also sometimes called pig plague) is a highly contagious viral disease of pigs caused by a Pestivirus from the Flaviviridae family. Clinically, it is indistinguishable from African swine fever and can cause very serious losses. This is one of the identified disease of Nagaland. It prevalent is very common due to high import of live pigs from outside the State. The porous nature of the State boundaries both at the National & International also aggravates the outbreaks. In 2016-17, the State recorded 13 Nos. of Outbreaks with 162 deaths.
- 5. Enterotoxaemia: Enterotoxaemia, also known as overeating or pulpy kidney disease, is a condition caused by Clostridium perfringens type D. These bacteria are normally found in the soil and as part of the normal micro flora in the gastrointestinal tract of healthy sheep and goats. Goats. This is an emerging disease in the State of Nagaland. During 2016-17 it recorded 6 Outbreak, 90 Attack and 30 Death. The outbreaks were recorded in the small & commercial farms who import parent stock from outside the State.
- 6. Canine Rabies:- As per the livestock census report 2012, Nagaland has 110155 dogs and almost 95% of the dogs are local (desi) variety. Rabies virus belongs to the order Mononegavirales, viruses with negative-stranded RNA genomes. Within this group, viruses with a distinct "bullet" shape are classified in the Rhabdoviridae family, which includes at least three genera of animal viruses, Lyssavirus, Ephemerovirus, and Vesiculovirus. The virus is transmitted to humans via bites and scratches from infected animals. Rabies is caused by a virus that affects the central nervous system, particularly causing inflammation in the brain. Domestic dogs, cats, and rabbits, and wild animals are the reservoir host and once infected shows the signs and death is ultimate. This practice makes the dogs very vulnerable to Rabies from Rabid dogs from other villages or even from jackal and foxes. In Nagaland the dogs and are mostly reared under semi confinement particularly in villages. During day time the dogs are let loose and are allowed to roam freely or they accompany their owner to the field or jungle and only at night time temporary shelters are provided to prevent against heat, cold, rain etc. In urban areas most dogs are mostly reared under confinement, In 2016-17, the state recorded 1 Outbreak, 18 Attack and 18 Deaths.

- 7. Newcastle disease / Ranikhet disease:- Newcastle disease is an infection of domestic poultry and other bird species with virulent Newcastle disease virus (NDV). It is a worldwide problem that presents primarily as an acute respiratory disease, but depression, nervous manifestations, or diarrhoea may be the predominant clinical form. When the virus is introduced into a susceptible flock, virtually all the birds will be infected within two to six days. Newcastle disease is a minor zoonosis (disease of animals that can also infect humans) and can cause conjunctivitis in humans, but the condition is generally very mild and self limiting. This disease is prevalent in Nagaland causing large scale mortality in poultry resulting in the production losses in the State. Small & commercial private poultry farms mushrooming in the adjoining areas of Dimapur are most affected. In the rural areas reporting of the disease is not done and the exact proportion of the mortality is not known. Vaccination against the disease is done only in the urban areas to a limited extent. During 2016-17, the State recorded 6 Outbreak, with 380 Attack and 250 Deaths.
- 8. **Fowl pox:** Fowl pox is a slow-spreading viral infection of chickens and turkeys characterized by proliferative lesions in the skin that progress to thick scabs (coetaneous form) and by lesions in the upper GI and respiratory tracts (diphtheritic form). Fowl pox is seen worldwide. Chickens with Fowl Pox will often exhibit a drop in egg production, loss of appetite and/or weight loss in addition to the tell-tale lesions on the skin (dry fowl pox) or lesions inside the mouth and throat (wet fowl pox). Symptoms generally persist for several weeks in a bird and several months in a flock. It is relatively a milder disease in Nagaland and is normally not a threat in the State. But sporadic incidence of the disease is reported across the State. In 2016-17, the State recorded 8 Outbreak, 350 Attack and 80 Death from Fowl Pox.
- 9. Peste des petits ruminants (PPR): Peste des petits ruminants (PPR) is an acute, highly contagious, world organization for animal health (OIE) modifiable and economically important transboundary viral disease of sheep and goats associated with high morbidity and mortality and caused by PPR virus PPR also known as 'goat plague', characterized by fever, sores in the mouth, diarrhoea, pneumonia and sometimes death. It is caused by a morbillivirus in the family of paramyxoviruses that is related to rinderpest, measles and canine distemper. It is prevalent in most parts of India but has not been reported in Nagaland during 2016-17.

S.No	Disease	Species affected	Outbreak	Attack	Death
1	Foot and Mouth Disease	Cattle & pigs	7	615	70
2	Haemorrhagic Septicaemia	Cattle	10	?	250
3	Classical Swine Fever	Pigs	13	?	162
4	Enterotoxaemia	Sheep & goats	6	90	30
5	Canine Rabies	Dogs	1	18	18
6	Ranikhet disease	Poultry	6	380	250
7	Fowl pox	Poultry	8	350	80

Animal Disease outbreaks in Nagaland (2016-17)

Annex 13.4 : Training manuals and support for livestock development from FAO Technical Assistance

For FOCUS the following manuals will be required:

- 1. Manual for Tots (Veterinary Officers/VOs)
- 2. Manual for Veterinary Field Assistants (VFAs)
- 3. Manual for Community Animal Health Workers (CAHWs)
- 4. Manual for pig & poultry farmers/keepers
- 5. Manual for Meat handlers

For the purpose of Sr. no 1-3, the manual will remain almost the same except that the training for VOs will be more scientific and technical, whereas for the VFAs and CAHWs it will be field oriented depending upon the understanding and perception of the individual. Farmers/grass-root level training material will be more on pictorial, videos, available short films, fillip charts etc. For the meat handlers, clean and hygienic meat handling would be required to be addressed separately and for CAHWs more emphasis would have to be given on hand on training on first-aid and vaccination. Broad outline of the manual for all these areas based on piggery are listed as under.

MAJOR AREAS TO BE COVERED

A. Understanding the prevailing pig rearing system with its importance on livelihood.

- Prevailing pig production and marketing system in the state/district/ village/locality
- Major problems faced by the pig producers
- Economics of pig keeping
- Role of pig on livelihood of the poor/ small pig keepers
- Scope for improvement of the prevailing production system
- Production issues:
 - Number of pigs kept by each household
 - Breed type
 - Rearing objective
 - Herd Type
 - Housing System
 - Major Feed Resources
 - Major Disease Problem
 - Economics of Pig Production
- Marketing Issues
- Livelihood Importance
- Advantages of Pig Rearing

B. Prevailing Housing System of Pigs

- Open Ranging
- Tethering
- Open Enclosure
- Penning

Scientific Housing

- Points to be considered in the construction of pig sty
- Location Orientation of House
- Type of Pig House
- Floor
- Drainage System
- Construction Material
- Feeding and Water Troughs

Wall

Provision for Pregnant and Lactating Sow/ Diseased Pig/ Boar -

• Floor Space Requirement

C. Identification of better germplasm - Available Breeds of Pigs & detailed description on-

- Large Black
- Large White Yorkshire
- Hampshire
- Ghungroo
- TND(Tamworth and Desi) Breed
- Non Descript
- Selection of Pig/ Piglets for Rearing

D. Artificial Insemination (AI):

- Setting up of boar semen station
- Identification of breeding boar (species)
- Maintenance of semen station (semen collection, processing, preservation and transport)
- Maintenance of cold chain during transport and AI

E. Restraining and Transporting Live Pigs

- Restraining of Pigs
- Method of restraining piglets
- Restraining of older pigs
- Points to be considered during transportation

F. Care and management of different categories of pigs:

- Care and management of pregnant and lactating sow
- Care and management of neonate/ piglet
- Care and management of growing and finishing pig and boar
- Culling
- Maintenance of Records

G. Reproductive Cycle of Sows

- a. Puberty
 - i. Factors influencing puberty
 - ii. Estrous Cycle
 - iii. Sign of Heat
- b. Points related to pig reproduction

H. Selection of Breeding Animals and Breeding System

- a. Parameters for selection of breeding male(boar)
- b. Parameters for selection of breeding female
- c. System of breeding
 - i. In breeding
 - ii. Out-breeding or Out-crossing
 - iii. Crossbreeding
- d. Type of Breeding
 - i. Natural Breeding
 - ii. Artificial Insemination

I. Feeding different categories of Pigs

- a. Main Components of Nutrients
 - i. Water

- ii. Protein
 - a) Plant Source
 - b) Animal Source
- iii. Vitamins
- iv. Carbohydrates
- v. Minerals
- vi. Salt
- b. Commonly Used Feed Stuff by small pig producers
 - Pasture in swine feeding
 - Use of Byproduct and waste products

J. Computation of Ration with locally Available Feed Resource

- a. Nutrient Requirement for Different Category of Pigs
 - Pre-starter Piglet
 - Starter piglet
 - Grower Pig
 - Finishing pig
 - Adult male pig (Boar)
 - Adult female pig(Gilt, Sow)
 - Pregnant Sow
 - Lactating Sow
- b. Cultivation of Food Feed Crops for pigs
 - Importance of cultivation of food feed crops
 - Standard methods of cultivation of different food feed crops(Sweet Potato, Tapioca, Colocasia, Maize)
 - Azola cultivation

K. Common Diseases of Pigs and their preventive Measures

- Assessment of Diseased Pig
- Most Important Diseases of Pigs, their treatment and control measures
 - CSF,
 - FMD,
 - PRRS
 - Swine dysentery,
 - Piglet Anaemia,
 - Parasitic Infestation
- a. Immunization/ Preventive vaccination against major diseases of pigs (CSF, FMD)
- b. Role and Responsibilities of the producer to overcome the disease problem
- c. Mode of Transmission of germs and adoption of hygienic practice for prevention and control of germs
 - Mode of Transmission of infectious agents
 - Sanitation
 - Routine Sanitation Program
 - Special Sanitation Program in the event of pigs in a flock suffering from disease
 - Disinfection- Common Disinfectants and usage
 - Washing Soda,
 - Lime,
 - Potassium Permanganate,
 - Phenol,
 - Calcium Hypochlorite,
 - Boric Acid

- d. Surgical Procedures for the Minor problems of Pigs
 - Castration
 - Atresia ani (no anus)
 - Ear notching
 - Foot-rot
 - First-aid to cut wounds
 - Dressing of maggoted wounds

L. Economics of Small Piggery unit

- a. Points to Consider before starting a new pig farm
- b. Backyard Pig Farming as supplementary source of income
- c. Commercial Pig Farming as source of self employment

M. Credit and Insurance scheme for pigs

- a. Micro credit scheme
- b. Financing of Joint Liability Groups
- c. SBI Loan for piggery
- d. Insurance of pigs

N. Field Visits

- i. Backyard Farm
- ii. Commercial Farm
- iii. Demonstration of food-feed crop plots
- iv. Demonstration of silage making
- v. Demonstration/operation of Feed grinding machine
- vi. Demonstration of compost / vermi-compost making (including use of pig manure)
- vii. Demonstration & use of first-aid kit.

Chapter 14: Guidelines for Market access infrastructure

A. Introduction

1. In Nagaland the priority for agriculture is high, which has reduced the budget allocation for the improvement of link roads. Since the market access is very important to transport the agricultural products to the market, the project has provision for the construction of about 600 units of cross drainage, side drains and other minor improvements of the existing gravel roads connecting to the clusters of the project district. This will cover about 200 km of gravel road.

2. Even-though there is no major rehabilitation or new construction of link roads in the project, the State will be constructing number of link roads through other source of funding. Therefore capacity building of the engineering cell will enable them to build proper roads. The engineering cells will be supported by short term design and survey consultants, each with two man-months of input. The Engineering cells will also be equipped with survey equipment, design software and mobility for their effective functioning.

3. Construction of common facility and cardamom dryers: The project covers construction of 50 collection centres including cardamom dryers in clusters where cardamom is grown. The clusters will be identified during the implementation phase for the construction of these facilities.

4. The implementing agency for link roads and common facilities is the Department of Agriculture (DoA) and the District Engineering cell.

5. Districts out of 11 were covered by the Project, they are Mon, Longleng, Zunheboto, Wokha, Kiphire, Phek, Mokokchung and Kohima.

6. Link Roads: Initially the project planned to construct a total of around 70 km of earth road (with proper side and cross drainage, 100 km of gravel road to PWD standards, and a bitumen surface of 100 km of existing gravel road. However the DoA has more priority on the improvement of agriculture both Jhum and Settled agriculture which has reduced the budget allocation for the construction and improvement of initially planned roads. Therefore it is proposed to improve the cross drainage and protective works of existing gravel road for climate resilience in the settled agriculture cluster areas. About 600 units of cross drainage and other improvements will be covered by the fund allocation which will improve about 200 km of link road. Approximately 38,700 households from 146 villages covered by the project will benefit from the improved road. Some of the activities that include improvement are:

Item No.	Description							
1	Insurance, labour camps, establishments							
2	Jungle clearance, foundation excavation, formation cutting							
3	Improvement of GSB and base-course repair with proper camber to certain stretches.							
4	Providing and laying RRM retaining/Breast walls for climate proofing of weak areas.							
5	Construction of gabion wall for climate proofing/strengthening of weak areas.							
6	Providing and constructing hume pipe culvert using bigger diameter pipe (900mm) to accommodate increased discharge and for cleaning purpose.							
7	Providing and making causeway complete							
8	Providing and making slab culvert 3m, 4m span complete							
9	Providing and laying of stone pitching or stone soling in hard stones, hammer dressed.							
10	Constructing road side stone pitched drains in wek areas							
11	Bioengineering works in slide/erosion prone areas							

7. Since the improvement works are of minor in nature with small amounts, the works can also be carried out by communities under technical guidance and supervision.

B. Planning and design

8. The planning phase which is the first year of the project includes engagement of the consultants, regular and contract engineers, identification of intervention required, design, estimate, tendering and evaluation. With proper groundwork and planning done in the first year, it is expected to address the existing challenges of hurried executions and with it all the associated problems of poor road quality. It will also tackle the issues related to delayed clearances and social issues arising from community land and site selection. During the planning following activities should be carried out:

- i) Formation of District Technical committee and Road User Groups (RUG)
- ii) Identify roads for intervention
- iii) Carrying out survey works, design, drawings and BoQ with climate resilient features
- iv) Incorporate climate resilient activities as described above and also provided in the BoQ format
- v) Obtaining necessary approvals
- vi) Preparation of tender documents
- vii) Identifying the project management personnel or preparing to hire technical staff, as required.
- viii) Budget is secured
- ix) Tendering
- x) Evaluation and award of work

9. Implementation partners: The planning, design and construction will be carried out by the following implementing partners:

- i.) Department of Agriculture, Engineering Division: Headed by the Superintending engineer or Executive Engineer with additional powers and authority. The Division will be strengthened by additional regular and contract staffs and support from short term TA.
- ii.) District Engineering Cell: Headed by the Assistant Engineer and contract site engineers, one each.
- iii.) Village council: Over all implementation of the project.

10. The identified roads will be surveyed and inventory list prepared for the improvement of cross drainage and protective works requirement. There is significant effect due to climate change which is causing erratic and heavier intensity of rainfall. These factors need to be considered during planning, design and construction.

11. The works will be implemented by the private contractors procured through open bidding, a National competitive bidding procedure will be followed. A standard BoQ format is also prepared and attached as Annex 14.1. A standard bidding document as per the IFAD guideline is prepared for use in procuring works and attached as Annex 14.2 and a format for bid evaluation is provided in Annex 14.3 The large contractors although have experience in general construction but has no knowledge in climate resilient construction and quality is neglected. Therefore it is also essential to build capacities of these contractors and also require strict quality monitoring mechanism. Proper design, procurement and supervision thus becomes critical to achieve the objective of the project.

12. **Selection criteria:** The roads shall be selected from the set criteria for the economic benefit. The selection criteria applied for the proposed Link Roads are:

- (i) Maximum number of house hold benefiting from the road
- (ii) Maximum Command area for agricultural activities
- (iii) Type of Agriculture practice settled agriculture, Oil palm, WRC etc.

(iv) Length of road – selected 3 km and above as shorter length can be rehabilitated by the Government fund

C. Construction

13. For the purpose of the implementation of the project roads following implementing modalities are proposed:

i. Planning

Project location	Mon, Longleng, Zunheboto, Wokha, Kiphire, Phek, Mokokchung and Kohima.
Sector	Climate resilient Agriculture
Project duration for the Planning/design Phase	12 months
Project duration for the Implementation Phase	4-5 years
Project duration for the Defect liability period	12 Months

14. **Implementation:** Once the work is awarded to the contractor the work is supervised and monitored by the District Engineering Cell deputing at least one dedicated site engineer. The periodic monitoring will be done by both at the District level and Department level. The critical events to be supervised and monitored during construction are:

- i) All necessaries guarantees are obtained from the contractors during the mobilization period and before releasing any payments
- ii) That the contractors prepare work plan and submits to the engineer for approval
- iii) Ensure the contractor mobilizes personnel and equipment committed in the bid
- iv) Ensure the contractor follows the Quality Assurance procedures required by the contract
- ii) Monitor work progress and notify contractors in case of delays and that the contractors submit mitigation measures to cover up delays
- iii) Make timely payments to the contractors
- iv) Ensure environmental damages are minimum
- v) Ensure contractors follow health and safety measures of the workers
- vi) Carry out handing of works after completion
- vii) Carry out rectification of defective works during defect liability period (DLP)

Design	and implementation plan Nagaland (Link Road &	Collection ce	enter)				
SN	Activities	18/19	19/20	20/21	21/22	22/23	23/24
А	Pre-tender phase						
1	Carry out inventory and survey of improvement work						
2	Prepare Bill of Quantities & specifications						
3	Invite tenders						
4	Evaluate and award works		-				
В	Construction						
1	Site establishment and mobilization						
2	Carry out preparatory works						
3	Collect construction materials						
4	Carry out drainage and protective works						
5	Carry out other repair works			<u>.</u>			
6	Completion and handing and taking						
7	Defect Liability period						
8	Construction of collection centers/dryers						



Organization Chart for Project Implementation

D. Collection Centres:

15. A total of 50 collection centres including 10 cardamom dryers are proposed in cluster areas to collect and stock the agricultural products in the market shed so that they are ready for transport to the market. The Collection Centres will be constructed in the cluster areas only and that have access by link roads. A typical standard design is provided in this PIM. The design can be suitably modified to cater to the volume of agricultural products. Since most of the land is sloppy site specific modification and estimate is required. The facility centres provide weighing area, sorting and storing. A lockable store will be provided to keep small equipment other items. The market shed has a small office to keep records and a toilet and shower.

16. **Selection criteria:** Following selection criteria for common facilities and collection centers are applied:

- (i) Cluster area
- (ii) Volume of production
- (iii) Connectivity with Link road

17. **Design features:** The collection centres are simple structures constructed in the close proximity of the production area. It is anticipated that the facilities will enable farmers to prepare their products to transport to the market. The collections can be done before the arrival of the trucks which

will save waiting time. The centres will have basic facilities and the structure is simple mainly to reduce the cost. The size may vary from cluster to cluster depending upon the volume of products. A collection centre will have store, weighing area and sorting. A small office is provided to keep record of the products and other information. A small toilet with shower is provided which is essential part of the facility.

18. **Equipment:** The centre will have weighing machine, tarpaulins, wheel barrows, shovels and other hand tools.

19. In Nagaland there are already 19 collection centres constructed by APMC. Therefore it is essential to make an inventory of these centres and to map them to avoid duplication. After mapping the collection centres should be constructed in clusters where there are no collection centres.



20. Large Cardamom dryers: The large cardamom growers traditionally cure their cardamom by direct heating in the locally constructed firewood dryers. Capsules dried under this method are black in colour with smoky smell. ICRI-Gangtok had developed a scientific curing technology for large cardamom by introducing Modified dryer (Bhatti) in which cardamom capsules are dried using indirect heating system in which the dried capsules retain the pink [maroon] colour and natural flavour. In order to popularize this method, there is also subsidy @ INR 9,000/- for 200 kg capacity and Rs.12500/- for 400 kg capacity Modified Bhatti towards 33.33% cost of construction of Modified Bhatti respectively. The farmers can adopt these types of dryers for improved quality of cardamom and greater efficiency of energy that is consumed by curing. A budget provision for construction of 10 drier sheds are kept for the installation of these dryers, collection and short time storing of dried cardamom. Depending upon the volume of production the size of construction shed should be decided. A typical plan is provided to determine the facilities required.

21. These drier sheds should be constructed in the cluster where large cardamom is grown. If the volume of production is very high it may be more appropriate to construct two of these instead of constructing one large shed.



\$ GEOD AND ME OID O

Annex 14.1: Example of Bill of Quantities

BILL OF QUANTITIES - Nagaland

Note: This note is provided to guide to prepare the BoQ and should be deleted before tendering. The latest Schedule of Rates (SOR) of Rural Roads (PMGSY) and PWD, Nagaland should be used in preparing the estimate. Items which are not available should be analysed using market rate. The item description should be suitably customized to meet the description of the respective items. Since this is a standard format any items not relevant for that particular work should be deleted and similarly new items be added.

Government of Nagaland

Name Of Project:

Name of Road:

Bill of Quantities

Date:

Item No.	SOR Ref	Description	Unit	Qty	Rate INR	Amt INR
BILL NO.1:	GENERAL					
1.1		Provide insurance cover from the start date to the end of the Defects Liability Period for Contractor's All Risk (Works, Plants and Materials, Loss or Damage to Equipment and Third Party Liability.				
1.1 a		All risk insurance	item			
1.1 b		Personal injury or death	item			
1.2		Installation of labour camps, contractor's site office, accommodation, stores, cement godown and other necessities according to environment code of practice.	item			
1.3		Provide safe water supply, bath/wash rooms, pit latrines including water connection to toilets, dust bins, solid waste disposal, septic tanks & soak pits, fire extinguisher, personnel protective equipment and provision of adequate lights as per ECoP to workers/employees - Services, safety & sanitary etc.	item			
1.4		Construct Site Office for PMU including furniture	each			
1.5		Erect and maintain notice boards at each end of the site.	each			
	1	SUB TOTAL FOR BILL NO. 1				
BILL NO. 2:	SITE CLEA	RANCE				
2.1		Clearing of vegetation and trees of girth < 300 mm, disposal within 50 m of the site.	sqm			
2.2		Cutting trees including removal of stumps and their roots and backfilling to required compaction.				
2.2a		Girth above 300 to 600 mm	each			
2.2b		Girth above 600 to 1200 mm	each			
2.2c		Girth above 1200 mm	each			

	SUB TOTAL FOR BILL NO. 2			
BILL NO. 3:	ROAD WORKS-FORMATION CUTTING			
3.1	Earthwork in formation cutting, using excavator for 6.1m clear formation width including uprooting of vegetation and trees, stacking of useful materials for re-use and disposal of surplus earth within 50m lead and all lift for all types of soil and rock with or without blasting. Excavation of earthen drain with adequate slope as per typical cross sections.			
	The construction methodology shall follow climate resilient technic using controlled blasting, maintainng designed batter slope, cross fall, balanced cut and fill.			
3.1a	All types of soil & rock with or without blasting	cum		
3.2	Segregation and placing of boulders on the face of rockfill	cum		
	SUB TOTAL FOR BILL NO. 3			
BILL NO. 4:	PAVEMENT WORKS			
4.1	Preparation of sub grade with proper camber by excavating earth to depth equal to pavement thickness, consolidation with roller, disposal of surplus earth within 50m lead - All types of soil & rock with or without blasting.	sqm		
4.2	Providing and laying Granular sub-base course (GSB) to required grade for laying and compacted to required density as per material gradation and aggregate quality specified. Materials to be obtained from excavation up to a lead of 5km to climate proof the subgrade.	cum		
4.3	Providing and laying waterbound macadam graded aggregate base course to required degree of compaction with proper formation of crossfall/camber by using well graded crushed aggregates 63-40mm. (Minimum compacted thickness should be 150 to 200 depending upon CBR value)	cum		
4.4	Supply and apply blinding material from borrow pits including watering, rolling and cleaning excess materials	sqm		
	SUB TOTAL FOR BILL NO. 4			
BILL NO. 5: WALLS				
5.1	Providing and laying RRM retaining wall in stone masonry in CM 1:5 including earthwork in foundation, plastered and white washed parapets, weepholes, bond stones, top PCC 1:2:4 50mm thick, base PCC 1:3:6 150mm thick, backfilling using 50% stone and 50% soil (without organic materials). The item shall also include providing and fixing of hard bond stone @1.5m c/c every alternate layer, the external face of the masonry shall be in coursed layer with hammer dressed stones finished with neat flush pointing complete as per drawing. The rate shall be quoted per metre length of the wall.	cum		
5.2	Excavation in foundation trenches or drains not exceeding 1.5m in width or area 10sqm on plan, including dressing & ramming, disposal of surplus soil within 50m lead & 1.5m lift. All types of soil	cum		
5.3	Providing and laying hand packed stone soling with hard stones.	cum		
5.4	Providing and fixing of formworks including centering and shuttering in foundation and wall top.	sqm		
5.5	Providing and laying of plain cement concrete M10 (1:3:6) using 40mm and down grade aggregates excluding	cum		

1	the cost of formworks in foundation.			
	Providing and laying RRM retaining wall in stone masonry in CM 1:5 including weepholes and bond stones			
5.6	@1.5m c/c every alternate layer, the external face of the masonry shall be in coursed layer with hammer	cum		
	dressed stones finished complete as per drawing.			
5.7	Providing and laying in position plain cement concrete 1:2:4, 40mm and down gauge aggregates excluding the	cum		
	cost of centering and shuttering in foundation.			
5.8	Providing and laying of 20mm cement plaster in CM 1:4 including adequate curing[1700]	sqm		
5.9	Providing and painting White washing on new works, three or more layers.	sqm		
5.10	Providing and laying filter material (600mm wide) with 100 to 200mm stones along the rear face of the wall	cum		
	Back filling of walls, with selected suitable excavated Quarries material (50% stone and 50% soil) in layer			
5.11	not exceeding 200mm in depth (compacted), consolidating each layer with power roller or portable compactor, watering etc. within 50m lead	cum		
5.12	Providing and laying hand packed stone soling with hard stones.	cum		
	Providing and laying RRM retaining wall in stone masonry in CM 1:5 including weepholes and bond stones			
5.13	@1.5m c/c every alternate layer, the external face of the masonry shall be in coursed layer with hammer	cum		
	dressed stones finished complete as per drawing.			
	Construction of gabion wall as per drawings, including excavation of foundations, sides and back filling,			
	delivery of materials etc. complete. The height of the wall shall be measured from the bottom of the gabion			
5.14	foundation to the top of the gabion wall. The wire diameter for gabion box shall be: wire netting 2.7mm,	cum		
	selvedge wire 3.4mm, binding and bracing wire 2.2mm. The hexagonal mesh size shall be 100mmx120mm			
	with minimum 2 twists.			
	SUB TOTAL FOR BILL NO. 5			
BILL NO.				
6: PIPE				
CULVERT				
6.1	Providing and constructing hume pipe culvert using NP3 900Ø hume pipe over a granular compacted bed, and well compacted backfill on top min 600mm height etc complete.			
6.2	Excavation in foundation trenches or drains not exceeding 1.5m in width or area 10sqm on plan, including	cum		
	dressing & ramming, disposal of surplus soil within 50m lead & 1.5m lift.			
6.3	Filling of trenches, sides of foundations etc. in layers <200mm using selected excavated earth, ramming etc,	cum		
	within lead 50m & lift 1.5m.			
6.4	Providing and laying in position plain cement concrete 1:2:4, 40mm and down gauge aggregates excluding the	cum		
	cost of centering and shuttering in foundation.			
6.5	Providing and laying Random Rubble Masonry with hard stone in foundation and plinth in cm 1:5.	cum		
6.6	Providing and laying of 20mm cement plaster in CM 1:4 including adequate curing	sqm		
6.7	Supply and place RCC hume pipe 900 dia class NP3 including collar at designated location as per drawing. The	mtr		
	increased diameter is to accommodate higher discharge due to higher intensity of rain and access for cleaning.			
6.8	Providing and laying of Granular sub-base filling to required degree of compaction and cross fall as base for	cum		
	hume pipes as per drawing.			

6.9	Providing and painting White washing on new works, three or more layers.	sqm		
6.10	Providing and laying of stone pitching or stone soling in hard stones, hammer dressed.	cum		
6.11	Providing and constructing of gabion wall ht up to 1.00m with dry stone masonry, GI wire mesh 2.70mm dia.	mtr		
6.12	Supply and place RCC hume pipe 600 dia class NP3 including collar at designated location as relief cross	mtr		
6.42	drainage as per drawing.			
6.13	Providing and fixing of formworks including centering and shuttering in foundation and slab.	sqm		
	SUB TOTAL FOR BILL NO. 6			
BILL NO.				
COLVERT	Providing and constructing of PCC slab sulvert in rem masoney supporting wall with bond stones, ween belos			
7 1	etc. rcc slab with edge barrier and GI nine railings on either side. The RCC slab culvert are provided for a clear			
7.1	snan of 3m 4m and 5m			
	Excavation in foundation trenches or drains not exceeding 1.5m in width or area 10sgm on plan, including			
	dressing & ramming, disposal of surplus soil within 50m lead & 1.5m lift.	cum		
7.2	Filling of trenches, sides of foundations etc. in layers <200mm using selected excavated earth, ramming etc,			
1.2	within lead 50m & lift 1.5m	cum		
7.2	Providing and laying of plain cement concrete M10 (1:3:6) using 40mm and downgraded aggregates excluding	cum		
7.5	the cost of formworks in foundation.	cum		
7.4	Providing and laying RCC M20 (1:1.5:3), in slab, using 20 mm and downgraded aggregates excluding the cost of	cum		
7.4	formworks.	cum		
7.5	Providing and fixing of formworks including centering and shuttering in foundation and slab.	sqm		
7.6	Providing and laying of TMT steel including cutting, bending and binding etc.	kgs		
	Providing and laying RRM retaining wall in stone masonry in CM 1:5 including weepholes and bond stones			
7.7	@1.5m c/c every alternate layer, the external face of the masonry shall be in coursed layer with hammer	cum		
	dressed stones finished complete as per drawing.			
7.8	Providing & Fixing GI Square Hollow Section 4mm thick as per drawings complete	mtr		
	SUB TOTAL FOR BILL NO. 7			
BILL NO. 8:	CAUSEWAY			
8.1	Excavation in foundation trenches or drains not exceeding 1.5m in width or area 10sqm on plan, including	cum		
0.1	dressing & ramming, disposal of surplus soil within 50m lead & 1.5m lift.	04		
8.2	Filling of trenches, sides of foundations etc. in layers <200mm using selected excavated earth, ramming etc,	cum		
	within lead 50m & lift 1.5m			
8.3	Providing and laying of plain cement concrete M10 (1:3:6) using 40mm and down grade aggregates excluding	cum		
	the cost of formworks in foundation			
8.4	Providing and laying RCC M15 (1:2:4), in foundation, using graded aggregates excluding the cost of formworks.	cum		

8.5	Providing and laying of TMT steel including cutting, bending and binding etc.	kgs		
8.6	Providing and fixing of formworks including centering and shuttering in foundation and slab.	sqm		
8.7	Providing and laying hard stone soling/ pitching hammer dressed complete.	cum		
8.8	Providing and filling with hard stones as backfill including spreading and levelling	cum		
8.9	Providing and laying of RRM in cm 1:5 in foundation including bond stone as per specification etc complete.	cum		
	SUB TOTAL FOR BILL NO. 8			
BILL NO. 9:	: DRAINS AND PROTECTIVE WORKS			
9.1	Construct stone pitched road side drains as per drawing	mtr		
	Construct lined L-shaped road side drain clear width 600 mm clear opening with 100 mm thick PCC 1:3:6,			
9.2	300mm thick RRM in CM 1:4 450mm height hill side, including excavation, leveling, including necessary form	mtr		
	works and disposal of surplus earth within 50m lead complete as per drawing to climate proof unstable areas.			
9.3	Supply and provide stone pitching as per drawings as directed by the engineer.	cum		
9.4	Construct rock filled gabion check dam or masonry check dam on steep slopes, stream beds or as toe walls.	cum		
	SUB TOTAL FOR BILL NO. 9			
BILL NO. 10	D: BIO-ENGINEERING WORKS			
10.1	Hand excavation, benching, trimming on steep slopes including necessary safety provisions.	cum		
10.2	Supply and plant live pegs for palisades.	mtr		
10.3	Supply and place live pegs for brush layering.	mtr		
10.4	Supply and construction of live check dams.	mtr		
10.5	Grass and pioneer plant seed collection, including separation, drying in the sun and storing.			
10.6a	(a) Alnus nepalensis (Utis)	kgs		
10.6b	(b) Artemesia (Titepati)	kgs		
10.6c	(c) Schima wallichii	kgs		
10.6d	(d) Any other shrubs/trees species as directed by PM	kgs		
10.7	Broadcasting of grass/pioneer plants seeds on slopes; seeding rate 25 gm/m ² .	sqm		
10.9	Direct seeding of shrubs or tree seeds at 30 cm spacing including digging holes up to 5 cm depth and covering			
10.8	with soil, with two seeds per planting hole.	sqm		
10.9	Planting of seedlings or wildlings (including the collection of wildlings from the wild) and planting them in a pit			
10.9	size 30 cm x 30 cm.	each		
10 10	Turfing of embankment with 30 x 30 cm turfs and fixed to the ground with wooden pegs, if slope is greater			
10.10	than 25°.	sqm		
10.11	Plantating of trees on road side.	each		
	SUB TOTAL BILL NO. 10			
	Grand Total			

Annex 14.2: Bidding Document for Procurement of Works



GOVERNMENTOFNAGALANDFosteringClimateResilient

Upland Farming Systems in the Northeast



BIDDING DOCUMENT For PROCUREMENT OF WORKS National Competitive Bidding (NCB) Contract No.:

Name of Project:	Fostering Climate Resilient Upland Farming Systems in the Northeast
Name of work:	
Issued on:	
Invitation for Bids No.:	
NCB No.:	
Date of sale of Bid document	
Bid documents available in	Hard copies from the office of Soft copies on (give website)
Last Date & Time of sale of Bid Document	
Date & Time of Bid Opening	
Contact address for clarification	
Cost of Bid document (nonrefundable)	For hard copies only and should be free download

Note: Minimum bidding period should be 30 days and the bid document should be made available till a day before the last submission date. Also make the bid document available in the website.

Abbreviations

BD	. Bidding Document
BDF	Bidding Forms
BDS	Bid Data Sheet
BOQ	Bill of Quantities
COF	Contract Forms
IFAD	Development Partners
ELI	Eligibility
EQC	Evaluation and Qualification Criteria
EXP	Experience
FIN	Financial
GCC	General Conditions of Contract
GoN	Government of Nagaland
ICC	International Chamber of Commerce
IFB Invi	tation for Bids
ITB	Instructions to Bidders
JV	Joint Venture
LIT	Litigation
NCB	National Competitive Bidding
PAN	Permanent Account Number
PPA	Public Procurement Act
PPMO	Public Procurement Monitoring Office
PPR	Public Procurement Regulations
PL	. Profit & Loss
SBD	Standard Bidding Document
SCC	Special Conditions of Contract
TS	. Technical Specifications
VAT	Value Added Tax
WRQ	Works Requirements

Contents

SECTIC	DN – I: Instructions to Bidders	
А.	General343	
1.	Scope of Bid	
2.	Source of Funds	
3.	Fraud and Corruption	
4.	Eligible Bidders	
5.	Eligible Materials, Equipment and Services	
В.	Contents of Bidding Documents 347	
6.	Sections of Bidding Document	
7.	Clarification of Bidding Document, Site Visit, Pre-Bid Meeting	
8.	Amendment of Bidding Document	
C.	Preparation of Bids 348	
9.	Cost of Bidding	
10.	Language of Bid	
11.	Documents Comprising the Bid	
12.	Letter of Bid and Schedules	
13.	Alternative Bids	
14.	Bid Prices and Discounts	350
15.	Currency of Bid and Payment	350
16.	Documents Comprising the Technical Proposal	351
17.	Documents Establishing the Qualifications of the Bidder	
18.	Period of Validity of Bids	
19.	Bid Security	
20.	Format and Signing of Bid	
D.	Submission and Opening of Bids 353	
24. V	Vithdrawal, and Modification of Bids 354	
25. E	Bid Opening 354	
E.	Evaluation and Comparison of Bids 355	
26.	Confidentiality	
27.	Clarification of Bids	355
28.	Deviations, Reservations, and Omissions	355
29.	Determination of Responsiveness	356
30.	Nonconformities, Errors, and Omissions	356
31.	Correction of Arithmetical Errors	357
32.	Evaluation of Bids	357
33.	Comparison of Bids	358
34.	Qualification of the Bidder	358
35.	Employer's Right to Accept Any Bid, and to Reject Any or All Bids	
<i>F.</i>	Award of Contract 358	
36.	Award Criteria	
37.	Letter of Intent to Award the Contract/Notification of Award	
38.	Performance Security	
39.	Signing of Contract	
40.		

SECTION – II: Bid Data Sheet		
SECTION – III: Evaluation and Qualification Criteria		
SECTION – IV: Bidding Forms	367	
SECTION – V: Works Requirements	377	
G. Technical Specification 379		
SECTION – VI: Bill of Quantities		
SECTION – IX: Contract Forms		

A CHECK LIST FOR THE BIDDER

S.N.	Particulars	Page
1	BID SECURITY IN THE PRESCRIBED FORMAT	
2	BID FORM FILLED, SIGNED AND SEALED	
3	POWER OF ATTORNEY PROPERLY SIGNED AND SEALED	
4	PRICE SCHEDULE PROPERLY FIILED, SIGNED AND SEALED	
	DOCUMENTS TO BE ENCLOSED	
5	COPIES OF FIRM'S RGISTRATION, PAN/VAT DOCUMENTS	
6	LATEST TAX CLEARANCE CERTIFICATE -20xx-xx	
7	COPIES OF AUDITED FINANCIAL STATEMENTS	
8	COPIES OF PAST SIMILAR EXPERIENCE	
9	COPIES OF PAST GENERAL EXPERIENCE	
10	CREDIT LINE AS PER THE BID DOCUMENT	
11	LIST OF PROPOSED PERSONNEL WITH RESUME	
12	LIST OF PROPOSED EQUIPMENT WITH SUPPORTING DOCUMENT	

Invitation for Bids

GOVERNMENT OF NAGALAND FOCUS ADDRESS:

INVITATION FOR BIDS

No. Date of publication:

- 1. Government of Nagaland has received a loan from International Fund for Agriculture Development towards the cost of **xxxxx** intends to apply part of the funds to cover eligible payments under the Contract for IFAD Loan No: **xxxxx**. Bid is open to all eligible Bidders.
- 2. SOCRAN, Lead Project Agency of FOCUS invites sealed bids under the following Terms and Conditions from the interested and eligible bidders.
- 3. The eligible bidders may obtain further information and inspect the bidding documents at office of xxxx during office hour or may visit website http://xxxxxx.
- 4. The complete set of bidding documents may be downloaded from the Project website xxxx or the interested bidder may purchase bidding document upon submission of written application along with copies of company/firm registration certificate, Tax registration Certificate (PAN/VAT) & Tax clearance of FY xxx and a cash payment (non-refundable) as mentioned below from the office of SOCRAN during office hour.

S.N.	Contract No.	Description of Work and Site	Cost of Bidding document (INRs.)	Bid Security Amount (INRs.)	Estimated Amount in INRs. (Excluding GST & Contingency)
1		Construction Work of			
2		Construction Work of			
3		Construction Work of			

- 5. The bidder may purchase the HARD COPY of the bidding documents or may choose to download free of charge the necessary part of bidding documents to prepare their bids and submit as specified in the instruction to Bidders.
- 6. Bids must be valid for a period of 90 days after the bid closing deadline. Bids must be accompanied by a Bid Security in the amount as mentioned in the BDS either in the form of Bank Draft in the name of xxxx or irrevocable and unconditional Bank Guarantee issued by a public sector/private sector bank with a minimum amount as indicated in the above table. The bid security shall be valid for 30 days beyond the validity period of the bid.
- Bidders are strictly instructed to submit their bid through only one medium i.e. through Hardcopy. Sealed bid must be delivered by hand or courier on or before 14th Feb, 2017 on or before 12:00 (noon) at office of xxxx. Bids received after this deadline will be rejected.
- 8. Bids will be opened at 1:00 Pm on 14th Feb, 2017, in the presence of bidders or their authorized representatives who wish to attend at office of xxxx. Absence of bidder's representative in bid opening shall not obstruct the bid opening.

- 9. If the last date of the Bid purchasing, submission and opening falls on a public holiday, the next working day shall be considered as the last date. In such case the bid validity and bid security validity shall remain the same as specified for the original last date of bid submission.
- 10. Bidders are strongly advised to visit the site and to assess the actual site conditions before submitting their bid.
- 11. The **SOCRAN** reserves the right to amend, accept or reject wholly or partly or all the bids without assigning any reason whatsoever.
- 12. Pre-Bid meeting shall be held at xxxxx at 1.00 pm on 3rd Feb, 2017.
- 13. Interested eligible bidders may obtain further information from the address below.

Part - I

BIDDING PROCEDURES

SECTION – I: Instructions to Bidders

	A. General
1. Scope of Bid	 1.1 In connection with the Invitation for Bids indicated in the Bid Data Sheet (BDS), the Employer, as indicated in the BDS, issues this Bidding Document for the procurement of Works as specified in Section V (Works Requirements). The name, identification, and number of Contracts of the National Competitive Bidding (NCB) are provided in the BDS. 1.2 Throughout this Bidding Document: (a) the term "in writing" means communicated in written form and delivered against receipt; (b) except where the context requires otherwise, words indicating the singular also include the plural and words indicating the plural also include the singular; and (c) "day" means calendar day.
2. Source of Funds	2.1 IFAD Funded: Payment by the IFAD will be made only at the request of the GoN and upon approval by the IFAD in accordance with the terms and conditions of the financing agreement and the project agreement between the GoN and the IFAD (hereinafter called the "Loan Agreement"), and will be subject in all respects to the terms and conditions of that Loan Agreement. No party other than the GoN shall derive any rights from the Loan Agreement or have any claim to the funds.
3. Fraud and Corruption	 3.1 The Government of Nagaland (GoN) requires that the Procuring Entities as well as bidders, suppliers and contractors and their sub-contractors under GoN/IFAD-financed contracts, shall adhere to the highest standard of ethics during the procurement and execution of such contracts. In this context, the Employer; (a) defines, for the purposes of this provision, the terms set forth below as follows: (i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party; (ii) "fraudulent practice" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation; (iii) "coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
	(iv) "collusive practice" means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party.

(iv) "obstructive practice" means:
(aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a GoN/IFAD investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
(bb) acts intended to materially impede the exercise of the GoN's/IFAD's inspection and audit rights provided for under sub-clause 3.5 below.
(b) will reject bid(s) if it determines that the bidder has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
3.2 The Bidder shall not carry out or cause to carry out the following acts with an intention to influence the implementation of the procurement process or the procurement agreement :
(a) give or propose improper inducement directly or indirectly,
(b) distortion or misrepresentation of facts,
(c) engaging in corrupt or fraudulent practice or involving in such act,
(d) interference in participation of other competing bidders,
(e) coercion or threatening directly or indirectly to cause harm to the person or the property of any person to be involved in the procurement proceedings,
(f) collusive practice among bidders before or after submission of bids for distribution of works among bidders or fixing
artificial/uncompetitive bid price with an intention to deprive the Employer the benefit of open competitive bid price,
(g) contacting the Employer with an intention to influence the Employer with regards to the bids or interference of any kind in examination and evaluation of the bids during the period from the time of opening of the bids until the notification of award of contract.
3.3 Department of Agriculture, on the recommendation of the Procuring Entity may blacklist a Bidder for a period of one (1) to three (3) years for its conduct including on the following grounds and seriousness of the act committed by the bidder:
(a) it convicted by a court of law in a criminal offence which disqualifies the Bidder from participating in the contract
(b) if it is established that the contract agreement signed by the Bidder
was based on false or misrepresentation of Bidder's qualification
information,
(c) if it at any time determines that the firm has, directly or through an
obstructive practices in competing for, or in executing, a GoN/IFAD-

	financed contract.
	(d) if the successful bidder fails to sign the contract.
	3.4 A bidder declared blacklisted and ineligible by the GoN, and/or the IFAD in case of IFAD funded project, shall be ineligible to bid for a contract during the period of time determined by the GoN, and/or the IFAD.
	3.5 The Contractor shall permit the GoN/IFAD to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the GoN/IFAD, if so required by the GoN/IFAD.
	3.6 IFAD Funded: In pursuance of the fraud and corruption policy, the IFAD.
	 (a) will reject a proposal if it determines that the bidder recommended for award has directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
	(b) will cancel the portion of the loan/ credit/ grant allocated to a contract if it determines at any time that representative(s) of the GoN or of a beneficiary of the fund engaged in corrupt, fraudulent, collusive, or coercive practices during the procurement or the execution of that contract, without the GoN having taken timely and appropriate action satisfactory to the IFAD to remedy the situation.
4. Eligible Bidders	4.1 A Bidder may be a natural person, private entity, or government - owned entity—subject to ITB 4.5—or any combination of them in the form of a Joint Venture (JV) under an existing agreement, or with the intent to constitute a legally-enforceable joint venture. In the case of a JV:
	(a) all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms. Maximum number of JV shall be as specified in the BDS. The eligibility criteria requirement of the parties to the JV shall be as specified in Section III Evaluation and Eligibility Criteria, and
	(b) the JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the parties of the JV during the bidding process and, in the event the JV is awarded the Contract, during Contract execution.
	4.2 A Bidder, and all parties constituting the Bidder, shall have the nationality of any country or eligible countries mentioned in the BDS. A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, or incorporated, and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed sub-Contractors or suppliers for any part of the Contract including related services.
	4.3 A Bidder shall not have a conflict of interest. A Bidder found to have a conflict of interest shall be disqualified. A Bidder may be considered to be in a conflict of interest with one or more parties in this bidding process, if:
	(a) they have controlling partners in common; or
	(b) they receive or have received any direct or indirect subsidy from any of

them; or
(c) they have the same legal representative for purposes of this bid; or
(d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or
(e) a Bidder participates in more than one bid in this bidding process either individually or as a partner in a joint venture. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the party is involved. However, this does not limit the inclusion of the same sub Contractor in more than one bid; or
 (f) a Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the Contract that is the subject of the Bid; or
(g) a Bidder or any of its affiliates has been hired (or is proposed to be hired) by the Employer as Engineer for the Contract.
4.4 A firm that is under a declaration of ineligibility by the GoN/IFAD in accordance with ITB 3, at the date of the deadline for bid submission or thereafter, shall be disqualified.
4.5 Enterprises owned by Government shall be eligible only if they can establish that they are legally and financially autonomous and operate under commercial law, and that they are not a dependent agency of the GoN.
4.6 Bidders shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer shall reasonably request.
4.7 In case a prequalification process has been conducted prior to the bidding process, this bidding is open only to prequalified Bidders.
4.8 Firms shall be excluded in any of the cases, if
(a) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, Nagaland prohibits any import of goods or Contracting of works or services from that country or any payments to persons or entities in that country.
(b) IFAD Funded: as a matter of law or official regulation, Nagaland prohibits commercial relations with that country, provided that the IFAD is satisfied that such exclusion does not preclude effective competition for the supply of goods or related services required;
 (c) IFAD Funded: a firm has been determined to be ineligible by the IFAD in relation to their guidelines or appropriate provisions on preventing and combating fraud and corruption in projects financed by them. 4.0 The bidder abolt most the eligibility exitering energified in certain III.

		(Evaluation and Eligibility Criteria) of bid document.	
5.	Eligible Materials, Equipment and Services	 5.1 The materials, equipment and services to be supplied under the Contract shall have their origin in any source countries as defined in ITB 4.2 above and all expenditures under the Contract will be limited to such materials, equipment, and services. At the Employer's request, Bidders may be required to provide evidence of the origin of materials, equipment and services. 5.2 For purposes of ITB 5.1 above, "origin" means the place where the materials and equipment are mined, grown, produced or manufactured, and from which the services are provided. Materials and equipment are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that differe substantially in its basic characteristics or in purpose or utility from its 	
		components.	
		B. Contents of Bidding Documents	
6.	Sections of Bidding Document	B. Contents of Bidding Documents 6.1 The Bidding Document consist of Parts I, II, and III, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8.	
6.	Sections of Bidding Document	B. Contents of Bidding Documents 6.1 The Bidding Document consist of Parts I, II, and III, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8. PART I Bidding Procedures	
6.	Sections of Bidding Document	B. Contents of Bidding Documents 6.1 The Bidding Document consist of Parts I, II, and III, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8. PART I Bidding Procedures Section I Instructions to Bidders (ITB)	
6.	Sections of Bidding Document	B. Contents of Bidding Documents 6.1 The Bidding Document consist of Parts I, II, and III, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8. PART I Bidding Procedures Section I Instructions to Bidders (ITB) Section II Bid Data Sheet (BDS) Section II Bid Data Sheet (BDS)	
6.	Sections of Bidding Document	B. Contents of Bidding Documents 6.1 The Bidding Document consist of Parts I, II, and III, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8. PART I Bidding Procedures Section I Instructions to Bidders (ITB) Section II Bid Data Sheet (BDS) Section III Evaluation and Eligibility Criteria (EEC) Section IV Bidding Forms (BDE)	
6.	Sections of Bidding Document	B. Contents of Bidding Documents 6.1 The Bidding Document consist of Parts I, II, and III, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8. PART I Bidding Procedures Section I Instructions to Bidders (ITB) Section II Bid Data Sheet (BDS) Section III Evaluation and Eligibility Criteria (EEC) Section IV Bidding Forms (BDF) PART II Requirements	
6.	Sections of Bidding Document	B. Contents of Bidding Documents 6.1 The Bidding Document consist of Parts I, II, and III, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8. PART I Bidding Procedures Section I Instructions to Bidders (ITB) Section II Bid Data Sheet (BDS) Section III Evaluation and Eligibility Criteria (EEC) Section IV Bidding Forms (BDF) PART II Requirements Section V Works Requirements (WRQ)	

		 PART III Conditions of Contract and Contract Forms Section VII General Conditions of Contract (GCC) Section VIII Special Conditions of Contract (SCC) Section IX Contract Forms (COF) 6.2 The Invitation for Bids issued by the Employer is not part of the Bidding Document. 6.3 The Employer is not responsible for the completeness of the Bidding Document and their Addenda, if they were not obtained directly from the source stated by the Employer in the Invitation for Bids. 6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the bid. 	
7.	Clarification of Bidding Document, Site Visit, Pre-Bid Meeting	7.1 A prospective Bidder requiring any clarification of the Bidding Document shall contact the Employer in writing at the Employer's address indicated in BDS or raise any question or curiosity during the pre-bid meeting if provided for in accordance with ITB 7.4. The Employer shall be required to make available as soon as possible the answer to such question or curiosity in writing to any request for clarification, provided that such request is received as mentioned in ITB 7.5. The Employer shall forward copies of its	

response to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. Should the Employer deem it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so following the procedure under ITB 8 and ITB 22.2.
7.2 The Bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself, on its own risk and responsibility, all information that may be necessary for preparing the bid and entering into a Contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.
7.3 The Bidder and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.
7.4 The Bidder's designated representative is invited to attend a pre-bid meeting, if provided for in the BDS. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
7.5 The Bidder is requested, as far as possible, to submit any questions in writing, to reach the Employer as mentioned in BDS.

	 7.6 Minutes of the pre-bid meeting, including the text of the questions raised, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3. Any modification to the Bidding Document that may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an addendum pursuant to ITB 8 and not through the minutes of the pre-bid meeting. 7.7 Non-attendance at the pre-bid meeting will not be a cause for disqualification of a Bidder.
8. Amendment of Bidding Document	 8.1 At any time prior to the deadline for submission of bids, the Employer may amend the Bidding Document by issuing agenda. 8.2 Any addendum issued shall be part of the Bidding Document and shall be communicated in writing to all who have obtained the Bidding Document from the Employer in accordance with ITB 6.3. 8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer may, at its discretion, extend the deadline for the submission of bids, pursuant to ITB 22.2
C. Preparation of Bids	
9. Cost of Bidding	9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
------------------------------------	--
10. Language of Bid	10.1 The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Employer, shall be written in the language specified in the BDS. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified in the BDS, in which case, for purposes of interpretation of the Bid, such translation shall govern.
11. Documents	11.1 The Bid shall comprise the following: (a) Letter of Bid:
Bid	 (b) completed Schedules, in accordance with ITB 12 and 14, or as stipulated in the BDS;
	(c) Bid Security, in accordance with ITB 19;
	(d) alternative bids, at Bidder's option and if permissible, in accordance with ITB 13;
	(e) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.2;
	 (f) documentary evidence in accordance with ITB 17 establishing the Bidder's eligibility to perform the Contract;
	(g) Technical Proposal in accordance with ITB 16; NA
	(h) In the case of a bid submitted by a JV, the JV agreement, or letter of intent to enter into a JV including a draft agreement, indicating at least the parts of the Works to be executed by the respective partners; and
	(i) Any other document required in the BDS.
	11. 2 The Bidder is solely responsible for the authenticity of the documents submitted by the Bidder.
12. Letter of Bid and Schedules	12.1 The Letter of Bid, Schedules, and all documents listed under ITB 11, shall be prepared using the relevant forms in Section 4 (Bidding Forms), if so provided. The forms must be completed without any alterations to the text, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.
13. Alternative Bids	13.1 Unless otherwise indicated in the BDS, alternative bids shall not be considered.
	13.2 When alternative times for completion are explicitly invited, a statement to that effect will be included in the BDS, as will the method of evaluating different times for completion.
	13.3 When specified in the BDS pursuant to ITB 13.1, and subject to ITB 13.4 below, Bidders wishing to offer technical alternatives to the requirements of the Bidding Document must first price the Employer's design as described in the Bidding Document and shall further provide all information necessary for a complete evaluation of the alternative by the Employer, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the

	technical alternatives, if any, of the lowest evaluated Bidder conforming to the basic technical requirements shall be considered by the Employer.
	13.4 When specified in the BDS, Bidders are permitted to submit alternative technical solutions for specified parts of the Works. Such parts will be identified in the BDS and described in Section V (Works Requirements). The method for their evaluation will be stipulated in Section III (Evaluation and Qualification Criteria).
14. Bid Prices and Discounts	14.1 The prices and discounts quoted by the Bidder in the Letter of Bid and in the Schedules shall conform to the requirements specified below.
	14.2 The Bidder shall submit a bid for the whole of the works described in ITB 1.1 by filling in prices for all items of the Works, as identified in Section IV (Bidding Forms). In case of Unit Rate Contracts, the Bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bill of Quantities.
	14.3 The price to be quoted in the Letter of Bid shall be the total price of the Bid, excluding any discounts offered.
	14.4 Unconditional discounts, if any, and the methodology for their application shall be quoted in the Letter of Bid, in accordance with ITB 12.1.
	14.5 If so indicated in ITB 1.1, bids are invited for individual Contracts or for any combination of Contracts (packages). Bidders wishing to offer any price reduction for the award of more than one Contract shall specify in their bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Price reductions or discounts shall be submitted in accordance with ITB 14.4, provided the bids for all Contracts are submitted and opened at the same time.
	14.6 Unless otherwise provided in the BDS and the Conditions of Contract, the prices quoted by the Bidder shall be fixed. If the prices quoted by the Bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract, the Bidder shall furnish the indices and weightings for the price adjustment formulae in the Table of Adjustment Data in Section IV (Bidding Forms) and the Employer may require the Bidder to justify its proposed indices and weightings.
	14.7 The bidder is subject to local taxes such as VAT, social charges or income taxes on non-resident international personnel, and also duties, fees, levies on amounts payable by the employer under the Contract.
	All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 30 days prior to the deadline for submission of bids, shall be included in the rates and prices and the total bid price submitted by the Bidder.
15. Currency of Bid and Payment	15.1 The currency of the bid and payment shall be in Indian Rupees.

16. Documents Comprising the Technical Proposal	Not Applicable
17. Documents Establishing the Qualifications of the Bidder	17.1 In accordance with Section III, Evaluation and Qualification Criteria, to establish its qualifications to perform the Contract, the Bidder shall provide the information requested in the corresponding information sheets included in Section IV, Bidding Forms.
	17.2 Bidder who meet minimum qualification criteria shall be qualified only if their available bid capacity at the time of bidding is more than the total estimated cost of the works. The available bid capacity shall be calculated as under:
	Assessed available bid Capacity = $(A \times N \times 1.5 - B)$, where:
	A= Maximum value of works executed in any one year during the last five years which will take into account the completed as well as works in progress converted to current Price levels;
	This shall be computed on the basis of pro-rata distribution of the total contract value over the duration of the contract for each completed work. The total value of work done coming from different works within the same year will be added to arrive at the total aggregate value of work done in any calendar year. Completion certificates and work orders furnished by the bidders shall be used for the purpose of this computation.
	B= Value at current Price levels of the existing commitments and on- going works to be completed during the contract duration of the bid under consideration (period of completion of works for which bids are invited); and
	N= Number of years prescribed for completion of the works for which the bids are invited.
	Financial turnover and cost of completed works of previous years shall be given weightage of 5% per year to bring them to current price level.
	Even if the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:
	- made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
	- record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.; and/or
	- participated in the previous bidding for the same work and had quoted unreasonably high bid prices and could not furnish rational justification to the employer.
18. Period of Validity of Bids	18.1 Bids shall remain valid for the period specified in the BDS after the bid submission deadline date prescribed by the Employer. A bid valid for a shorter period shall be rejected by the Employer as nonresponsive.
	18.2 In exceptional circumstances, prior to the expiration of the bid validity period, the Employer may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in

	writing. If a bid security is requested in accordance with ITB 19, it shall also be extended 30 days beyond the deadline of the extended validity period. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request shall not be required or permitted to modify its Bid.
19. Bid Security	19.1 The Bidder shall furnish as part of its bid, in original form, a bid security as specified in the BDS. In case of e-submission of bid, the Bidder shall upload scanned copy of Bid security letter at the time of electronic submission of the bid. The Bidder accepts that the scanned copy of the Bid security shall, for all purposes, be equal to the original. The details of original Bid Security and the scanned copy submitted with e-bid should be the same otherwise the bid shall be non-responsive.
	19.2 The bid security shall be, at the Bidder's option, in any of the following forms:
	(a) an unconditional bank guarantee from "A" class commercial bank or;
	(b) a cash deposit voucher in the Employer's Account as specified in BDS.
	In the case of a bank guarantee, the bid security shall be submitted either using the Bid Security Form included in Section IV (Bidding Forms) or in another Form acceptable to the employer. The form must include the complete name of the Bidder. The bid security shall be valid for minimum thirty (30) days beyond the original validity period of the bid, or beyond any period of extension if requested under ITB 18.2.
	19.3 Deleted
	19.4 Any bid not accompanied by an enforceable and substantially compliant bid security shall be rejected by the Employer as nonresponsive. In case of e- Submission, if the scanned copy of an acceptable Bid Security letter is not uploaded with the electronic Bid then Bid shall be rejected.
	19.5 The bid security of unsuccessful Bidders shall be returned within three days, once the successful bidder has furnished the required performance security and signed the Contract Agreement pursuant to ITB 38.1and 39.1.
	19.6 The bid security shall be forfeited if:
	(a) a Bidder requests for withdrawal or modification of its bid, except as provided in ITB 18.2:
	(i) during the period of bid validity specified by the Bidder on the Bid, in case of electronic submission;
	(ii) from the period twenty-four hours prior to bid submission deadline up to the period of bid validity specified by the Bidder on the Letter of Technical Bid and Price Bid, in case of hard copy submission.
	(b) a Bidder changes the prices or substance of the bid while providing information pursuant to clause 27.1;
	(c) a Bidder involves in fraud and corruption pursuant to clause 3.1;
	(d) the successful Bidder fails to:
	(i) furnish a performance security in accordance with ITB 38.1; or

	(ii) sign the Contract in accordance with ITB 39.1
	(iii) accept the correction of arithmetical errors pursuant to clause 31.1;
	19.7 The Bid Security of a JV shall be in the name of the JV that submits the bid. If the JV has not been legally constituted at the time of bidding, the Bid Security shall be in the names of all future partners as named in the letter of intent mentioned in ITB 4.1.
20. Format and Signing of Bid	20.1 The Bidder shall prepare one original of the documents comprising the bid as described in ITB 11 and clearly mark it ORIGINAL". Alternative bids, if permitted in accordance with ITB 13, shall be clearly marked "ALTERNATIVE". In addition, the Bidder shall submit copies of the bid in the number specified in the BDS, and clearly mark each of them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.
	In case of e-submission of bid, the Bidder shall submit his bid electronically in PDF or web forms files as specified in ITB Clause 21.1(b), If a Bidder submits both the electronic bid and a bid in hard copy within the bid submission deadline, then the submitted Bids shall be accepted for evaluation provided that the facts and figures in hard copy confirm to those in electronic bid. If there is any major discrepancy in fact and figures in the electronic bid and bid in hard copy, it shall be treated as two separate bids from one Bidder and both the Bids shall be disqualified, as per ITB Clause 4.3 (e).
	20.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be attached to the bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the bid, except for un amended printed literature, shall be signed or initialed by the person signing the bid.
	20.3 Any amendments such as interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the bid.
	D. Submission and Opening of Bids
21. Sealing and Marking of Bids	 21.1 Bidders may always submit their bids by mail or by hand or by courier. When so specified in the BDS, bidders shall have the option of submitting their bids electronically. Procedures for submission, sealing and marking are as follows: (a) Bidders submitting bids by mail, by hand or by courier i. Bidders shall enclose the original and each copy of the Bid, including alternative bids, if permitted in accordance with ITB 13, in separate sealed envelopes, duly marking the envelopes as "ORIGINAL", "ALTERNATIVE" and "COPY." These envelopes containing the original and the copies shall then be enclosed in one single envelope. ii. The inner and outer envelopes shall: (a) bear the name and address of the Bidder; (b) be addressed to the Employer as provided in BDS 22.1;

	indicated in BDS 1.1; and
	(d) bear a warning not to open before the time and date for bid
	opening.
	iii. If all envelopes are not sealed and marked as required, the
	Employer will assume no responsibility for the misplacement or
	premature opening of the bid.
22. Deadline for	22.1 Bids must be received by the Employer at the address and no later than
Submission of Bids	the date and time indicated in the BDS.
	22.2 The Employer may, at its discretion, extend the deadline for the
	submission of bids by amending the Bidding Document in accordance with
	ITB 8, in which case all rights and obligations of the Employer and Bidders
	previously subject to the deadline shall thereafter be subject to the deadline
	as extended.
23. Late Bids	23.1 The Employer shall not consider any bid that arrives after the deadline
	for submission of bids, in accordance with ITB 22. Any bid received by the
	Employer after the deadline for submission of bids shall be declared late,
	rejected, and returned unopened to the Bidder.
	24.1 A Bidder may withdraw, or modify its bid after it has been submitted
24. Withdrawal,	either in hard copy or by e-submission. Procedures for withdrawal or
and Modification of	modification of submitted bids are as follows:
Bids	(i) Bids submitted in hard Copy
	a) Bidders may withdraw or modify its bids by sending a written
	notice in a sealed envelope, duly signed by an authorized
	representative, and shall include a copy of the authorization in
	accordance with TTB 20.2 before 24 hours phor to the last deadline
	of submission of bid. The corresponding modification of the bid must
	(accompany the respective whiten houce. All houces must be.
	(aa) prepared and submitted in accordance with TIB 20 and TIB
	"WITHDRAWAL", "MODIFICATION;" and
	(bb) received by the Employer twenty four hour hours prior to the
	deadline prescribed for submission of bids, in accordance with ITB
	22. 24.2 Bids requested to be withdrawn in accordance with ITB 24.1 shall be
	24.2 bits requested to be withdrawn in accordance with his 24.1 shall be returned unopened to the Bidders after completion of the hid opening
	24.3 Ridder may submit request for withdrawal or modification only one time
	24.4 No bid may be withdrawn if the bid has already been modified
	24.5 Request for withdrawal or modification must be made through the same
	medium of submission. Request for withdrawal or modifications through
	different medium shall not be considered.
	24.6 The following provisions apply for withdrawal or modification of the Bids:
	(i) In case of bids submitted in hard copy no bid shall be withdrawn or
	modified in the interval between 24 hours prior to the deadline for submission
	of bids and the expiration of the period of bid validity specified by the Bidder
	on the Letter of Bid or any extension thereof.
	25.1 The Employer shall open the bids in public at the address, date and time
25. Bid Opening	specified in the BDS in the presence of Bidders` designated representatives
	and anyone who choose to attend.
	25.2 Thereafter, envelopes marked "WITHDRAWAL" shall be opened and
	read out and the envelope with the corresponding bid shall not be opened, but
	returned to the Bidder. No bid withdrawal shall be Permitted unless the
	corresponding withdrawal notice contains a valid authorization to request the
	withdrawal and is read out at bid opening. Next, envelopes marked
	"MODIFICATION" shall be opened and read out with the corresponding bid.

No bid modification shall be permitted unless the corresponding modification
notice contains a valid authorization to request the modification and is read
out at bid opening. Only envelopes that are opened and read out at bid
opening shall be considered further.
25.3 All other envelopes shall be opened one at a time, reading out: the name
of the Bidder; the Bid Price(s), including any discounts and alternative bids
and indicating whether there is a modification; the presence of a bid security
and any other details as the Employer may consider appropriate. Only
discounts and alternative offers read out at bid opening shall be considered
for evaluation. No bid shall be rejected at bid opening except for late bids, in
accordance with ITB 23.1.
25.4 The Employer shall prepare a record of the bid opening that shall
include, as a minimum: the name of the Bidder and whether there is a
withdrawal, or modification; the Bid Price, per Contract if applicable, including
any discounts and alternative offers; and the presence or absence of a bid
security. The Bidders' representatives who are present shall be requested to
sign the record. The omission of a Bidder's signature on the record shall not
invalidate the contents and effect of the record.

	E. Evaluation and Comparison of Bids
26. Confidentiality	26.1 Information relating to the examination, evaluation, comparison, and recommendation of Contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on Contract award is communicated to all Bidders.
	26.2 Any attempt by a Bidder to influence the Employer in the evaluation of the bids or Contract award decisions may result in the rejection of its bid.
	26.3 Notwithstanding ITB 26.2, from the time of bid opening to the time of Contract award, if any Bidder wishes to contact the Employer on any matter related to the bidding process, it may do so in writing.
27. Clarification of Bids	27.1 To assist in the examination, evaluation, and comparison of the bids, the Employer may, at its discretion, ask any Bidder for a clarification of its bid. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change in the prices or substance of the bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the bids, in accordance with ITB 31. In case of e-submission of bid, upon notification from the employer, the bidder shall also submit the original of documents comprising the bid as per ITB 11.1 for verification of submitted documents for acceptance of the e-submitted bid.
28. Deviations, Reservations, and Omissions	28.1 During the evaluation of bids, the following definitions apply:(a) "Deviation" is a departure from the requirements specified in the Bidding Document;

	(b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and
	"Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.
29. Determination of Responsiveness	29.1 The Employer's determination of a bid's responsiveness is to be based on the contents of the bid itself, as defined in ITB11.
	29.2 A substantially responsive bid is one that meets the requirements of the Bidding Document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that,
	(a) if accepted, would:
	(i) affect in any substantial way the scope, quality, or performance of the Works specified in the Contract;
	or
	(ii) limit in any substantial way, inconsistent with the Bidding Document, the Employer's rights or the Bidder's obligations under the proposed Contract; or
	(b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive bids.
	29.3 If a bid is not substantially responsive to the requirements of the Bidding Document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.
30. Nonconformity, Errors. and	30.1 Provided that a bid is substantially responsive, the Employer may waive any non-conformities in the bid.
Omissions	30.2 Provided that a bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the bid. Failure of the Bidder to comply with the request may result in the rejection of its bid.
	30.3 Provided that a bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price may be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component. The adjustment shall be made using the methods indicated in Section III (Evaluation and Eligibility Criteria).
	30.4 If minor discrepancies are found such as in technical specification, description, feature which does not make the bid to be rejected, then the cost, which is calculated to the extent possible due to such differences, shall be included while evaluating the bid.
	30.5 If the value of such non-conformities is found to be more than fifteen percent of the quoted amount of the bidder on account of minor discrepancies pursuant to ITB 30.4, such bid shall be considered ineffective in substance and shall not be involved in evaluation.

31. Correction of Arithmetical Errors	31.1 Provided that the bid is substantially responsive, the Employer shall correct arithmetical errors on the following basis:
	 (a) only for unit price Contracts, if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Employer there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
	(b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
	 (c) If there is a discrepancy between the bid price in the Summary of Bill of Quantities and the bid amount in item (c) of the Letter of Price Bid, the bid price in the Summary of Bill of Quantities will prevail and the bid amount in item (c) of the Letter of Price Bid will be corrected.
	(d) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) ,(b) and (c) above.
	31.2 If the Bidder that submitted the lowest evaluated bid does not accept the correction of errors, its bid shall be disqualified and its bid security shall be forfeited.
32. Evaluation of Bids	32.1 The Employer shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be permitted.
	32.2 To evaluate a bid, the Employer shall consider the following:
	(a) the bid price, excluding Value Added Tax, Provisional Sums, and the provision, if any, for contingencies in the Summary Bill of Quantities,-for Unit Rate Contracts, or Schedule of Prices for lump sum Contracts, but including Day work items, where priced competitively;
	(b) price adjustment for correction of arithmetic errors in accordance with ITB 31.1;
	(c) price adjustment due to discounts offered in accordance with ITB 14.4;
	(d) adjustment for nonconformities in accordance with ITB 30.3;
	(e) application of all the evaluation factors indicated in Section III (Evaluation and Eligibility Criteria);
	32.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in bid evaluation.
	32.4 If this Bidding Document allows Bidders to quote separate prices for different Contracts, and to award multiple Contracts to a single Bidder, the methodology to determine the lowest evaluated price of the Contract

	combinations, including any discounts offered in the Letter of Bid, is specified in Section III (Evaluation and Qualification Criteria).
	32.5 In case of special evaluation in civil works, if the bid for an Unit Rate Contract, which results in the lowest Evaluated Bid Price is seriously unbalanced or front loaded or substantially below updated estimates in the opinion of the Employer, the Employer may require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analysis, taking into consideration the schedule of estimated Contract payments, the Employer may require that the amount of the performance security be increased at the expense of the Bidder as mentioned in BDS to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.
	32.6 In case of e-submission bids, the Employer evaluates the bid on the basis of the information in the electronically submitted bid files. If the Bidder cannot substantiate or provide evidence to establish the information provided in e-submitted bid through documents/ clarifications as per ITB Clause 27.1, the bid shall not be considered for further evaluation.
33. Comparison of Bids	33.1 The Employer shall compare all substantially responsive bids in accordance with ITB 32.2 to determine the lowest evaluated bid.
34. Qualification of the Bidder	34.1 The Employer shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated and substantially responsive bid meets all the qualifying criteria specified in Section III (Evaluation and Qualification Criteria).
	34.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 17.1.
	34.3 An affirmative determination of qualification shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the bid, in which event the Employer shall proceed to the next lowest evaluated bid to make a similar determination of that Bidder's qualifications to perform satisfactorily.
35. Employer's Right to Accept Any Bid, and to Reject Any or All Bids	35.1 The Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to Contract award, without thereby incurring any liability to Bidders. In case of annulment, all bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.
	F. Award of Contract
36. Award Criteria	36.1 The Employer shall award the Contract to the Bidder whose offer has been determined to be the lowest evaluated bid and is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

37. Letter of Intent to Award the Contract/Notifica tion of Award	37.1 The Employer shall notify the concerned Bidder whose bid has been selected in accordance with ITB 36.1 within seven days of the selection of the bid, in writing that the Employer has intention to accept its bid and the information regarding the name, address and amount of selected bidder shall be given to all other bidders who submitted the bid.
	37.2 If no bidder submits an application pursuant to ITB 40 within a period of seven days of the notice provided under ITB 37.1, the Employer shall, accept the bid selected in accordance with ITB 36.1 and Letter of Acceptance shall be communicated to the selected bidder prior to the expiration of period of Bid validity, to furnish the performance security and sign the contract within fifteen days.
38. Performance Security	38.1 Within Fifteen (15) days of the receipt of Letter of Acceptance from the Employer, the successful Bidder shall furnish the performance security as under mentioned from A class Commercial Bank in accordance with the conditions of Contract using Sample Form for the Performance Security included in Section IX (Contract Forms), or another form acceptable to the Employer.
	 i) If bid price of the bidder selected for acceptance is up to 15 (fifteen) percent below the approved cost estimate, the performance security amount shall be 5 (five) percent of the bid price.
	 ii) For the bid price of the bidder selected for acceptance is more than 15 (fifteen) percent below of the cost estimate, the performance security amount shall be determined as follows:
	Performance Security Amount =[(0.85 x Cost Estimate – Bid Price) x 0.5] + 5% of Bid Price.
	The Bid Price and Cost Estimate shall be inclusive of Tax.
	38.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or to sign the Contract Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security. In that event the Employer may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily. The process shall be repeated according to ITB 37.
39. Signing of	39.1 The Employer and the successful Bidder shall sign the Contract Agreement within the period as stated ITB 38.1.
	39.2 At the same time, the Employer shall affix a public notice on the result of the award on its notice board and make arrangement for causing such notice to be affixed on the notice board also of the District Management Units. The Employer may make arrangements to post the notice into its website, identifying the bid and lot numbers and the following information: (i) the result of evaluation of bid; (ii) date of publication of notice inviting bids; (iii) name of newspaper; (iv) item of procurement; (v) name and address of successful bidder making contract and (vi) contract price
	39.3 Within thirty (30) days from the date of issuance of notification pursuant to ITB 37.1 unsuccessful bidders may request in writing to the Employer for a debriefing seeking explanations on the grounds on which their bids were not selected. The Employer shall promptly respond in writing to any

	unsuccessful Bidder who, requests for debriefing.			
	39.4 If the bidder whose bid is accepted fails to sign the contract as stated ITB 39.1, the bid security shall be forfeited and the Employer shall exclude the bidder on recommendation of the Procurement Committee from participating any tender for a period of two years for FOCUS related procurement.			
40. Complaint and Review	40.1 If a Bidder is dissatisfied with the Procurement proceedings or the decision made by the Employer in the intention to award the Contract, it may file an application to the Secretary, Agriculture Department within Seven (7) days of providing the notice under ITB 37.1 by the Public Entity, for review of the proceedings stating the factual and legal grounds.			
	40.2 Late application filed after the deadline pursuant to ITB 40.1 shall not be processed.			
	40.3 The Secretary, Agriculture Department shall, within five (5) days after receiving the application, give its decision with reasons, in writing pursuant to ITB 40.1:			
	 (a) whether to suspend the procurement proceeding and indicate the procedure to be adopted for further proceedings; or 			
	(b) to reject the application.			
	The decision of the chief of Public Entity shall be final for the Bid amount up to the value as stated in 40.4.			
	40.4 If the Bidder is not satisfied with the decision of the Public Entity in accordance with ITB 40.3, is not given within five (5) days of receipt of application pursuant to ITB 40.1, it can, within seven (7) days of receipt of such decision, file an application to the Chief Secretary of the GoN, stating the reason of its disagreement on the decision of the Secretary, Agriculture Department and furnishing the relevant documents, provided that its Bid amount is more than the amount stated in the BDS. The application may be sent by hand, by post, by courier, or by electronic media at the risk of the Bidder itself.			
	40.5 Late application filed after the deadline pursuant to ITB 40.4 shall not be processed.			
	40.6 Within three (3) days of the receipt of application from the Bidder, pursuant to ITB 40.4, the Chief Secretary shall notify the concerning Public Entity to furnish its procurement proceedings, pursuant to ITB 40.3.			
	40.7 Within three (3) days of receipt of the notification pursuant to ITB 40.6, the Public Entity shall furnish the copy of the related documents to the Review Committee.			
	40.8 The Review Committee, after inquiring from the Bidder and the Public Entity, if needed, shall give its decision within one (1) month of the receipt of the application filed by the Bidder, pursuant to ITB 40.4.			
	40.9 The Bidder, filing application pursuant to ITB 40.4, shall have to furnish a cash amount or Bank guarantee from "A" class commercial bank equivalent to the amount stated in the BDS with the validity period of at least ninety (90) days from the date of the filing of application pursuant to			

ITB 40.4.
40.10 If the claim made by the Bidder pursuant to ITB 40.4 is justified, the Review Committee shall have to return the security deposit to the applicant, pursuant to ITB 40.9, within seven (7) days of such decision made.

SECTION – II: Bid Data Sheet

A. General		
ITB 1.1	The number of the Invitation for Bids is :	
ITB 1.1	The Employer is:	
ITB 1.1	The number and identification of lots comprising this bidding process is:	
ITB 2.1	The name of the Project is: The Donor is: International Fund for Agriculture Development (IFAD) The implementing agency is: GoN Funded or IFAD Funded: IFAD Funded	
ITB 4.1 (a)	Maximum number of partner in a joint venture shall be : 2 (two)	
ITB 4.2	Eligible countries : all countries	
	B. Bidding Document	
ITB 7.1	For clarification purposes only, the Employer's address is: Attention: Address: Facsimile number: Electronic mail address:	
ITB 7.4	Pre-Bid Meeting will Take place at the following date, time and place: Date: Time: Place: A site visit shall not be organized by the Employer.	
ITB 7.5	Time for request: Requests for clarification should be received by the Employer no later than 10 days prior to the deadline for submission of bids.	
C. Preparation of Bids		
ITB 10.1	The language of the bid is: English	
ITB 11.1 (b)	In accordance with ITB 12 and ITB 14, the schedules shall be submitted with the bid, including the priced Bill of Quantities.	
ITB 11.1 (i)	The Bidder shall submit with its bid the following additional documents: None	
ITB 13.1	Alternative bids shall not be permitted.	

ITB 13.2	Alternative times for completion shall not be permitted.	
ITB 13.4	Alternative technical solutions shall not be permitted.	
ITB 14.6	The prices quoted by the Bidder shall not be subject to adjustment during the performance of the Contract.	
ITB 18.1	The bid validity period shall be: 90 (Ninety) days for NCB	
ITB 19.1	The Bidder shall furnish a bid security, from public sector/private sector commercial bank with a minimum of INRs. xxxx (xxxx only), which shall be valid for 30 days beyond the validity period of the bid.	
	Note: <u>Bid Security document shall be compulsorly submitted according to</u> the format provided in the bid document, otherwise the bid shall be excluded from the bid evaluation process.	
ITB 19.2 (b)	Account Name:	
	Bank Name:	
	Bank Address:	
	Account Number:	
ITB 20.1	In addition to the original of the bid, the number of copy is: 1 copies	
ITB 20.2	The written confirmation of authorization to sign on behalf of the Bidder shall	
	indicate:	
	 (a) The name and description of the documentation required to demonstrate the authority of the signatory to sign the Bid such as a Power of Attorney; and 	
	(b) In the case of Bids submitted by an existing or intended JV, an undertaking signed by all parties (i) stating that all parties shall be jointly and severally liable, and (ii) nominating a Representative who shall have the authority to conduct all business for and on behalf of any and all the parties of the JV during the bidding process and, in the event the JV is awarded the Contract, during contract execution.	
D. Submission and Opening of Bids		
ITB 21.1	Bidders shall have the option of submitting their bids electronically. No	
ITB 22.1	For bid submission purposes only, the Employer's address is :	
	Attention :	
	Address :	

ITB 25.1	The bid opening shall take place at : Address :
	Date :
	Time :
	E. Evaluation and Comparison of Bids
ITB 32.5	If the bid price of the successful bidder is up to 15 (fifteen) percent less than the cost estimate, the performance security amount shall be 5 (five) percent of the bid price. If the bid price of the successful bidder is less than 15 percent of the cost estimate, the performance security amount shall be determined as follows: Performance Security Amount = (0.85 x Cost Estimate –Bid Price) x 0.5 + 5% of Bid Price. The Bid Price and Cost Estimate shall be inclusive of all Taxes.
ITB 40.4	The minimum amount shall be <i>(insert amount)</i>
ITB 40.9	Zero point one five percent (0.15%) of its quoted Bid amount

SECTION – III: Evaluation and Qualification Criteria

This Section contains all the criteria that the Employer shall use to evaluate bids and qualify Bidders by post-qualification exercise. GoN/IFAD requires bidders to be qualified by meeting predefined, precise minimum requirements. The method sets pass-fail criteria, which, if not met by the bidder, results in disqualification. In accordance with ITB 32 and ITB 34, no other methods, criteria and factors shall be used. The Bidder shall provide all the information requested in the forms included in Section IV (Bidding Forms).

1. Evaluation

In addition to the criteria listed in ITB 32.2 (a) - (e) the following criteria shall apply:

1.1 Adequacy of Technical Proposal - NA

Evaluation of the Bidder's Technical Proposal will include an assessment of the Bidder's technical capacity, to mobilize key equipment and personnel for the contract consistent with its proposal regarding work methods, scheduling, and material sourcing in sufficient detail and fully in accordance with the requirements stipulated in Section V (Works Requirements). **This shall not apply.**

1.2 Multiple Contracts

Pursuant to Sub-Clause 32.4 of the Instructions to Bidders, if Works are grouped in multiple contracts, evaluation will be as follows: **NA**

1.3 Completion Time

NA

1.4 Alternative Technical Solutions Alternative technical solutions shall not be permitted

1.5 Quantifiable Nonconformities, Errors and Omissions

The evaluated amount of quantifiable nonconformities, errors and/or omissions shall be determined by ascertaining the price of such effect on an equal basis by adjusting the same to the quoted price of the bid. A bid having minor deviations and having no material deviation to cause any serious effect upon the scope, quality, characteristics, terms and conditions, performance or any other requirements stated in the bidding documents and acceptable to the Employer can be considered to be substantially responsive.

1.6 If the Employer has not undertaken prequalification of potential bidders, all bidders shall include the following information and documents with their bids in Section 2:

- (a) copies of original documents defining the constitution or legal status, place of registration, and principal place of business; written power of attorney of the signatory of the Bid to commit the Bidder;
- (b) total monetary value of construction work performed for each of the last five years;

- (c) experience in works of a similar nature and size for each of the last five years, and details of works under way or contractually committed; and clients who may be contacted for further information on those contracts;
- (d) major items of construction equipment proposed to carry out the Contract;
- (e) qualifications and experience of key site management and technical personnel proposed for the Contract;
- (f) reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past five years; **NA**
- (g) evidence of adequacy of working capital for this contract (access to line (s) of credit and availability of other financial resources);
- (h) information regarding any litigation or arbitration resulting from contracts executed by the Bidder in the last five years or currently under execution. The information shall include the names of the parties concerned, the disputed amount, cause of litigation, and matter in dispute; NA
- (i) proposals for subcontracting components of the Works which in aggregate add to more than 20 percent of the Bid Price (for each, the qualifications and experience of the identified sub-contractor in the relevant field should be annexed. No vertical splitting of the work for sub-contracting is acceptable); and NA
- (j) Specific experience executed in any one year.- NA

SN	Description	
2.1	Average annual turnover for last three years	Should be minimum Rs. 5 million
2.2	Specific experience	At least one similar work of same nature and volume
2.3	Key personnel	One Diploma in civil engineering and one site supervisor minimum 3 years of experience for each
2.4	Minimum Equipment	 no excavator (owned or to be hired) no Back Hoe no concrete mixture no tipper
2.5	Working capital	20% of the bid value
2.6	Constitution of Legal status	Firm Registration Certificate/Licenses and tax clearance certificate. VAT and PAN Registration certificate

2. Qualification

For works having duration less than one year the annual volume of construction work (Turnover) requirement shall be equal to the estimated value of the work put to tender.

SECTION – IV: Bidding Forms

This Section contains the forms which are to be completed by the Bidder and submitted as part of its Bid.

Forms for Qualification

Form 2.1: Average Annual Turnover

Bidder's Legal Name:		Date:	Date:		
Annual turnove	r data (construction only)				
Year	Amount and Currency		Amount Rs		
			·		
*Average					
Annual					
Construction					
Turnover					

*Average annual turnover calculated as total certified payments received for work in progress or

completed during the last three years

"The figure for turnover will be updated to current price level by adding 5% per year."

Form EXP – 2.2: Specific Experience

Bidder's Legal Name:	Date:	
Similar Contract Number: [insert specific number] of[insert total number	Information	
Contract Identification		
Award date		
Completion date		
Total contract amount	Rs	
Employer's Name:		
Address:		
Telephone/fax number:		
E-mail:		

Form 2.3: Proposed Personnel

Bidders should provide the names of suitably qualified personnel to meet the specified requirements for each of the positions listed in Section III (Evaluation and Qualification Criteria). The data on their experience should be supplied using the Form below for each candidate.

1.	Title of position
	Name
2.	Title of position
	Name
3.	Title of position
	Name

2.4 Form Equipment

SN	Equipment	Owned/hired	nos
1	Excavator		
2	Backhoe		
3	Tipper		
4	Concrete mixture		

Form FIN 2.5: Financial Resources

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract or contracts as indicated in Section III (Evaluation and Qualification Criteria)

Source of financing	Amount (Rs)
1.	
2.	
3.	
4.	

Form 2.6: Bidder Information Sheet

Date:

Bidding No.: _____

Invitation for Bid No.: _____

1. Bidder's Legal Name

2. Bidder's actual or intended Country of Registration:

3. Bidder's Year of Registration:

4. Bidder's Legal Address in Country of Registration:

5. Bidder's Authorized Representative Information

Name:

Address:

Telephone/Fax numbers:

Email Address:

Letter of Bid

The Bidder must prepare the Letter of Bid on stationery with its letterhead clearly showing the Bidder's complete name and address.

Date: _____ Bidding No.: _____ Invitation for Bid No.: _____

To:

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB) Clause 8;
- (b) We offer to execute in conformity with the Bidding Documents the following Works:
- (c) The total price of our Bid, excluding any discounts offered in item (d) below is:
- (d) The discounts offered and the methodology for their application are: _____;
- (e) Our bid shall be valid for a period of _____ [insert validity period as specified in ITB 18.1.] days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (f) If price adjustment provisions apply, the Table(s) of Adjustment Data shall be considered part of this Bid;⁵¹
- (g) If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Document;
- (h) Our firm, including any subcontractors or suppliers for any part of the Contract, have nationalities from eligible countries;
- (i) We, including any subcontractors or suppliers for any part of the contract, do not have any conflict of interest in accordance with ITB 4.3;
- We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process in accordance with ITB 4.3, other than alternative offers submitted in accordance with ITB 13;
- (k) Our firm, its affiliates or subsidiaries, including any Subcontractors or Suppliers for any part of the contract, has not been declared ineligible by the RGoB and ORIO or by an act of compliance with a decision of the United Nations Security Council;

⁵¹ Include if price adjustment provisions apply in the Contract in accordance with PCC Sub-Clause **13.8 Adjustments for Changes in Cost**.

- We are not a government owned entity / We are a government owned entity but meet the requirements of ITB 4.5; 52 (I)
- We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract: 53 (m)

	Name of Recipier	nt Address	Reason	Amount
(n)	We understand the notification of awar prepared and exect	at this bid, together with rd, shall constitute a bind cuted;	your written acceptance th ling contract between us, ur	ereof included in your ntil a formal contract is
(0)	We understand the	at you are not bound to	accept the lowest evaluate	d bid or any other bid
(p)	If awarded the cor	ntract, the person name	d below shall act as Contra	actor's Representative:
	Name:			
	In the capacity of:			
	Signed:			
Duly the Bi	v authorized to sign d for and on behalf of:			
	Date:			

⁵² Use one of the two options as appropriate. ⁵³ If none has been paid or is to be paid, indicate "none".

Bid Security

Bank Guarantee

Bank's Name, and Address of Issuing Branch or Office (On Letter head of the 'A' class Commercial Bank)

Beneficiary:name and address of Employer Date: Bid Security No.:

We have been informed that	.[insert name of the Bidder]	(hereinafter called "the Bidder")
intends to submit its bid (hereinafter cal	led "the Bid") to you for the e	execution of name of
Contract under Invitation fo	r Bids No ("th	e IFB").

Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee.

- (a) has withdrawn or modifies its Bid during the period of bid validity specified by the Bidder in the Form of Bid; or
- (b) does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB"); or
- (c) having been notified of the acceptance of its Bid by the Employer during the period of bid validity,
 (i) fails or refuses to execute the Contract Agreement, or (ii) fails or refuses to furnish the performance security, in accordance with the ITB.
- (d) is involved in fraud and corruption in accordance with the ITB

This guarantee will remain in force up to and including the datenumber......days after the deadline for submission of Bids as such deadline is stated in the instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this guarantee should reach the Bank not letter than the above date.

This Bank guarantee shall not be withdrawn or released merely upon return of the original guarantee by the Bidder unless notified by you for the release of the guarantee.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758.

...Bank's seal and authorized signature(s) ...

Bidder's Information Format

Part - II REQUIREMENTs

Table of Clauses

Section - V Works Requirements	69
Scope of Work	70
Specifications	71
Notes on the Specifications	72
Sample Clause: Equivalency of Standards and Codes	
Drawings	91
Supplementary Information	92
Section - VI Bill of Quantities	93
Notes for Unit Rate Contracts	93
Preamble of Bill of Quantities9	95
General	95
Day work Schedule	
Provisional Sums	97
Bill of Quantities	8

SECTION – V: Works Requirements

This Section contains the Specification, the Drawings, and supplementary information that describe the Works to be procured.

Scope of Work

The work consists of a Construction Work of xxxx. The site is located at xxxxxx.

Specifications

G. Technical Specification

1. INTERPRETATION OF TERMS

Whenever the words "selected", "as directed", "as required" or words of similar meaning are used in the Bill of Quantities, it is to be understood that the selection, director or requirements of the Engineer are intended. Similarly the words "approved" or "satisfactory" or other synonyms, shall mean "approved by" or "satisfactory to" the Engineer's approval must first be obtained before the materials ordered, or the works to which the works refer are put in hand.

2. PROPRIETARY MATERIALS

- Where proprietary materials are specified hereafter, the contractor may propose the use of materials of other manufacture but equal quality for approval of the contract administrator "the Engineer".
- The Engineer reserves the right to sample, inspect and test the material throughout the concerned period. All materials which are found to be unsatisfactory at the time of use will be rejected whether in place or not. They shall be removed immediately from the site unless otherwise permitted by the Engineer. Upon failure of contractor to comply promptly with any order of Engineer given under the clause the Engineer shall have the authority to cause the removal and replacement of rejected materials and to deduct the cost thereof from any amount as per the contract.
- Water: Water shall be clean and free from oil, waste, acids or other organic matters in solution or suspension. Water shall be from municipal main supply, tank or well water. The contractor shall work his own arrangement for the supply of water.

3. Applicable specifications

The Technical specifications of **PWD**, **PMGSY and relevant IRC** for rural road shall be used. These specifications cover the construction of the Works, as shown on the Drawings, in the Bill of Quantities and in the General Conditions of Contract, and shall be read in conjunction with all other contract and tender documents. In the event of any discrepancy or assumed discrepancy being found between them, the Contractor shall immediately inform the Project Manager of the matter in writing and the Project Manager will issue his instructions in the matter in accordance with the Conditions of Contract.

4. SCOPE OF WORKS

The work to be carried out under the Contract shall consist of the various items as generally described in the Tender Documents as well as in the Bill of Quantities furnished in the Tender Documents which includes but not limited to the following:

Earthwork Structures including bridges Permanent works Base course Black top Bio-engineering works Slope Protection & stabilization works

All works shall be undertaken on the basis of an item rate contract.

5. QUALITY OF MARERIALS AND WORKMANSHIP

The materials and workmanship shall be of the best of their respective kinds and shall be to the approval of the Project Coordinator or his representative on Site, the Project Manager. In reading these Specifications, the words to the approval of the Project Manager shall be deemed to be included in the description of all materials incorporated in the works, whether manufactured or natural, and in the description of all operations for the due execution of the works.

All works or parts thereof shall be in accordance with the latest edition of the Indian Standards (IS), or International Standards Organisation (ISO) Specification.

6. EQUIVALENCY OF STANDARDS AND CODES

Wherever reference is made in the Contract to specific standards and codes to be met by the goods and materials to be furnished and work performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national, or relate to a particular country or region, other authoritative standards that ensure a substantially equal or higher quality than the standards and codes specified will be accepted subject to the Project Manager prior review and written consent. Differences between the standards specified and the proposed alternative standards shall be fully described in writing by the Contractor and submitted to the Project Manager at least 28 days prior to the date when the Contractor desires the Project Manager consent. In the event of the Project Manager determines that such proposed deviations do not ensure substantially equal or higher quality, the Contractor shall comply with the standards specified in the documents.

All materials shall be of approved manufacture and origin, equal to sample and delivered to the site a sufficient period before they are required to be used in the works to enable the Contractor to take such samples as the Project Manager may require for testing or approval, and the Contractor shall provide any information required by the Project Manager as to the quality, weight, strength, constituents, description, etc. of the materials.

No materials of any description shall be used without prior approval by the Project Manager and any condemned as unfit for use in the works, shall be removed immediately from the site by, and without recommendation to, the Contractor.

Where specification for a particular item of work is not available, the relevant specification for that item from the current Specification of PWD and the PMGSY shall be used. If these specification do not cover these items then the relevant IS codes and latest edition of IRC specifications shall be applicable. Where no reference is found in the above specifications for an item of work then sound engineering practice as decided by the Project Manager shall be applicable and the decision of the Project Manager in respect to all such matters relating to specifications shall be final and binding on the contractor.

7. CONTRACT DRAWINGS

The Contract Drawings provided for tendering purposes shall be as contained in the Tender Documents and shall be used as a reference only. The Contractor should visualize the nature and type of work contemplated and to ensure that the rates and prices quoted by him in the Bill of Quantities have due consideration of the qualitative and quantitative variations, as may be found at the site and complexities of work involved during actual execution/construction.

Examination and/or approval by the Project Manager of any drawings or other documents submitted by the Contractor shall not relieve the Contractor of his responsibilities or liabilities under the Contract.

8. ATTENDANCE ON SUB-CONTRACTORS

The terms "attendance" shall be deemed to include the provision the following services by the contractor, free of charge, to the nominated sub-contractor executing work on site:

• Affording and providing welfare facilities: sanitary arrangements, office accommodation, storage for tools and plants, power supply, water supply, necessary scaffolding, handling installation, operation of hoisting apparatus, programming and site clearance. Welfare should be read as all possible assistance for safety and un-delayed execution.

9. MATERIALS AND WORKMANSHIP

Trade descriptions of materials and workmanship hereafter apply to the relevant items contained in the Bill of Quantities and rates shall include for complying therewith. **10. Administrative Information**

A) Bidding Drawings

The drawings provided in ANNEX – B folder of the Bidding Documents shows the general features of the construction works. Additional drawings (if necessary) may be delivered to the Contractor prior to the commencement of the assigned works.

B) "As-Built" Drawings

The Contractor shall submit whole sets of "As-Built" Drawings of the completed Works, clearly printed drawings along with two sets of CD, to the Employer before the payment of final bills. **NA** The "As-Built" Drawings shall clearly show the lines and dimensions of the permanent construction actually made based on the original design and/or change of design from time to time ordered by the Engineer or proposed by the Contractor and approved by the Engineer. **NA**

C) Measurement and Payment

No separate and additional payment shall be made for preparation of all construction drawings, reinforcement drawings, working drawings and shop drawings, etc., to be prepared by the Contractor and submitted to the Engineer and/or the Employer in accordance with the provisions of the Contract.

D) Monthly Report

The Contractor shall furnish to the Engineer, at the Contractor's own costs, at regular monthly interval and in a form and number of copies determined by the Engineer, with the followings:

- physical progress for the preceding month and estimated progress for the report month;
- completion schedules (target and actual) based on the approved Construction Programme.
- estimated expenditures for the report month;
- inventory of construction equipment and materials on which an advance was made by the Employer as provided in the Conditions of contract;
- a tabulation of construction equipment, listing the major items and pieces of equipment which were utilised for performance of the Works during the preceding month;
- a tabulation of employees, showing the supervisory staff and the numbers of several classes of labourers employed by the Contractor in the preceding month;
- purchase and expenditure report covering the Plant and materials furnished by the Contractor for the Works; and
- any report which may be specifically requested by the Employer and/or the Engineer.

Drawings

As attached in ANNEX

Supplementary Information
SECTION – VI: Bill of Quantities⁵⁴

Preamble of Bill of Quantities

A. General

- 1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, General and Special Conditions of Contract, Technical Specifications, and Drawings.
- 2. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Project Manager and valued at the rates and prices bid in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Project Manager may fix within the terms of the Contract.
- 3. For any item for which measurement is based on records made before or during construction the records shall be prepared and agreed between the Engineer and the Contractor. Should the Contractor carry out such work without the prior agreement of the Engineer, the Engineer may request the Contractor to carry out investigations to confirm the extent of the work and the quantity of work certified for payment shall be solely at the Engineer's discretion. The cost of any such investigation shall be borne by the Contractor.
- 4. The rates and prices bid in the priced Bill of Quantities shall, except as otherwise provided under the Contract, include all construction equipment, labor, supervision, materials, erection, maintenance, insurance, profit, taxes, and duties, together with all general risks, liabilities, and obligations set out or implied in the Contract.
- 5. A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
- 6. The whole cost of complying with the provisions of the Contract shall be included in the Items provided in the priced Bill of Quantities, and where no Items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work.
- 7. General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering prices against each item in the priced Bill of Quantities. The Specification Clause references where given in the item description of the Bills of Quantities are for the convenience of bidders and generally refer to the principal relevant-specification clause but do not necessarily represent the whole of the specification requirements for the work required within the item. The presence of a Specification clause reference shall not in any way reduce the Bidders obligation to complete work in accordance with all the requirements of the Specification.
- 8. Provisional Sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Project Manager in accordance with the Conditions of Contract.

⁵⁴ In lump sum contracts, delete "Bill of Quantities" and replace with "Schedule of Activities" throughout this section.

- 9. The method of measurement of completed work for payment shall be in accordance with the Specifications.
- 10. The abbreviations and symbols used in this Bill of Quantities are:

[Insert as applicable]

B. Day work Schedule

a) General

1. Work shall not be executed on a day work basis except by written order of the Project Manager. Bidders shall enter basic rates for day work items in the Schedules. These rates shall apply to any quantity of day work ordered by the Project Manager. Nominal quantities have been indicated against each item of day work, and the extended total for day work shall, be carried forward as a Provisional Sum to the Summary Total Bid Amount. Unless otherwise adjusted, payments for day work shall be subject to price adjustment in accordance with the provisions in the Conditions of Contract.

b) Day work Labor

- 1. In calculating payments due to the Contractor for the execution of day works, the hours for labor will be reckoned from the time of arrival of the labor at the job site to execute the particular item of day work to the time of departure from the job site, but excluding meal breaks and rest periods. Only the time of classes of labor directly doing work ordered by the Project Manager and are competent to perform such work will be measured. The time of gangers (charge hands) actually doing work with the gangs will also be measured but not the time of foremen or other supervisory personnel.
- 2. The Contractor shall be entitled to payment in respect of the total time that labor is employed on day work, calculated at the basis rates entered by it in the "SCHEDULE OF DAY WORK RATES: 1. LABOR". The rates for labor shall be deemed to cover all costs to the Contractor including (but not limited to) i) the amount of wages paid to such labor, transportation time, overtime, subsistence allowances, ii) any sums paid to or on behalf of such labor for social benefits in accordance with Nagaland law, iii) Contractor's profit, overheads, superintendence, liabilities and insurance and iv) charges incidental to the foregoing.

c) Day work Equipment

- 1. The Contractor shall be entitled to payments in respect of Constructional Plant already on site and employed on day work at the basis rental rates entered by him in the "SCHEDULE OF DAY WORK RATES:2 EQUIPMENT". The said rates shall be deemed to include due and complete allowance for depreciation, interest, indemnity and insurance, repairs, maintenance, supplies, fuel, lubricant, and other consumables and all overhead, profit and administrative costs related to the use of such equipment. The cost of drivers, operators and assistants also shall be included in the rate of the equipment and no separately payment shall be made for it.
- 2. In calculating the payment due to the Contractor for Constructional Plant employed on day work, only the actual number of working hours will be eligible for payment, except that where applicable and agreed with the Project Manager, the travelling time from the part of the Site where the Construction Plant was located when ordered by the Project Manager to be employed on day work and the time for return journey there to shall be included for payment.

d) Day work Materials

- The Contractor shall be entitled to payment in respect of materials used for day work (except for materials for which the cost is included in the percentage addition to labor costs as detailed heretofore), at the rates entered by him in the "SCHEDULE OF DAY WORK RATES: 3 MATERIALS" and shall be deemed to include overhead charges and profit as follows;
 - (i) the rates for materials shall be calculated on the basis of the invoiced price, freight, insurance, handling expenses, damage, losses, etc. and shall provide for delivery to store for stockpiling at

the Site.

(ii) the cost of hauling materials for use on work ordered to be carried out as day work, from the store or stockpile on the Site to the place where it is to be used also shall be include in the same rate.

Provisional Sums

A general provision for physical contingencies (quantity overruns) may be made by including a provisional sum in the Summary Bill of Quantities. Similarly, a contingency allowance for possible price increases should be provided as a provisional sum in the Summary Bill of Quantities. The inclusion of such provisional sums often facilitates budgetary approval by avoiding the need to request periodic supplementary approvals as the future need arises. Where such provisional sums or contingency allowances are used, the SCC should state the manner in which they will be used, and under whose authority (usually the Project Manager's).

The estimated cost of specialized work to be carried out, or of special goods to be supplied, by other contractors should be indicated in the relevant part of the Bill of Quantities as a particular provisional sum with an appropriate brief description. A separate procurement procedure is normally carried out by the Employer to select such specialized contractors. To provide an element of competition among the Bidders in respect of any facilities, amenities, attendance, etc., to be provided by the successful Bidder as prime Contractor for the use and convenience of the specialist contractors, each related provisional sum should be followed by an item in the Bill of Quantities inviting the Bidder to quote a sum for such amenities, facilities, attendance, etc.

SN	SoR Ref.	Description	Unit	Qty	Rate	Amt. INR
BILL NO.1: GENERAL ITEMS						
1.1						
1.2						
1.3						
		SUB TOTAL FOR BILL NO. 1				
BILL N	IO. 2: DISMAN	LING ITEMS				
2.1						
2.2						
2.3						
		SUB TOTAL FOR BILL NO. 1				
Etc						

BoQ Format

Part - III CONDITIONS OF CONTRACT AND CONTRACT FORMS

Table of Contents

SECTIO	ON – VII: General Conditions of Contract	
А.	General392	
1.	Definitions	
2.	Interpretation	
3.	Language and Law	
4.	Project Manager's Decisions	
5.	Delegation	
6.	Communications	
7.	Subcontracting	
8.	Other Contractors	
9.	Personnel and Equipment	
10.	Employer's and Contractor's Risk	
11.	Employer's Risks	
12.	Contractor's Risks	
13.	Insurance	
14.	Site Investigation Reports	
15.	Contractor to Construct the Works	
16.	The Works to Be Completed within intended Completion Date	
17.	Design by contractor and Approval by the Project Manager	
18.	Safety, Security and Protection of the Environment	
19.	Discoveries	398
20.	Possession of the Site	398
21.	Access to the Site	
22.	Instructions, Inspections and Audits	
23.	Dispute Settlement	
24.	Appointment of the Adjudicator/ DRC Members	
25.	Procedures for Disputes	
B.	Time Control 399	
26.	Program	
27.	Extension of the Intended Completion Date	
28.	Acceleration	
29.	Delays Ordered by the Project Manager	400
30.	Management Meetings	400
31.	Early Warning	400
C	Quality Control 400	
32	Identifying Defects	400
33	Teete	400
34	Correction of Defects	400
35.	Uncorrected Defects	401
D.	Cost Control 401	
36.	Contract Price	401
37.	Changes in the Contract Price	401
38.	Variations	401
39.	Cash Flow Forecasts	402
40.	Payment Certificates	402
41.	Payments	402

42.	Compensation Events	
43.	Tax	
44.	Currency	
45.	Price Adjustment	
46.	Retention	
47.	Liquidated Damages	406
48.	Bonus	406
49.	Advance Payment	406
50.	Securities	407
51.	Day works	407
52.	Cost of Repairs	
E. F	inishing the Contract 407	
53.	Completion	407
54.	Taking Over	407
55.	Final Account	407
56.	Operating and Maintenance Manuals	407
57.	Termination	
58.	Fraud and Corruption	409
59.	Black Listing	409
60.	Payment upon Termination	409
61.	Property	
62.	Release from Performance	
63.	Suspension of IFAD Loan/Credit/Grant	
64.	Project Manager's Duties and Authorities	
65.	Quarries and Spoil Dumps	
66.	Local Taxation	
67.	Value Added Tax	
68.	Income Taxes on Staff	412
69.	Duties, Taxes and Royalties	412
70.	Member of Government, etc, not Personally Liable	
71.	Approval of Use of Explosives	412
72.	Compliance with Regulations for Explosives	
73.	Permission for Blasting	
74.	Records of Explosives	
75.	Traffic Diversion	
SECTION	I – VIII: Special Conditions of Contract	414
Special	Conditions of Contract 415	
SECTION	I – IX: Contract Forms	

SECTION – VII: General Conditions of Contract

CONSTRUCTION OF XXXXX

Contract No.:xxxxxx

	A. General
1.1 Boldface type is used to identify defined terms.	
	(a) The Accepted Contract Amount means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.
	(b) The Activity Schedule is a schedule of the activities comprising the construction, installation, testing, and commissioning of the Works in a lump sum contract. It includes a lump sum price for each activity, which is used for valuations and for assessing the effects of Variations and Compensation Events.
	(c) The Adjudicator is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in GCC 23.2 hereunder.
	(d) Bill of Quantities means the priced and completed Bill of Quantities forming part of the Bid.
	(e) Compensation Events are those defined in GCC 42 hereunder.
	(f) The Completion Date is the date of completion of the Works as certified by the Project Manager, in accordance with GCC 53.1.
	(g) The Contract is the Contract between the Employer and the Contractor to execute, complete, and maintain the Works.
	It consists of the documents listed in GCC 2.3 below.
	(h) The Contractor is the party whose Bid to carry out the Works has been accepted by the Employer.
	 (i) The Contractor's Bid is the completed bidding document submitted by the Contractor to the Employer.
	(j) The Contract Price is the Accepted Contract Amount stated in the Letter of Acceptance and thereafter as adjusted in accordance with the Contract.
	(k) Days are calendar days; months are calendar-months.
	(I) Day works are varied work inputs subject to payment on a time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant.
	(m) A Defect is any part of the Works not completed in accordance with the Contract.
	(n) The Defects Liability Certificate is the certificate issued by Project Manager upon correction of defects by the Contractor.
	(o) The Defects Liability Period is the period calculated from the Completion Date where the Contractor remains responsible for remedying defects.
	(p) Drawings include calculations and other information provided or approved by the Project Manager for the execution of the Contract.

(q)	The Employer is the party who employs the Contractor to carry out the Works, as specified in the SCC.
(r)	Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.
(s)	Force Majeure means an exceptional event or circumstance: which is beyond a Party's control; which such Party could not reasonably have provided against before entering into the Contract; which, having arisen, such Party could not reasonably have avoided or overcome; and, which is not substantially attributable to the other Party.
(t)	The Initial Contract Price is the Contract Price listed in the Employer's Letter of Acceptance.
(u)	The Intended Completion Date is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the SCC. The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time or an acceleration order.
(v)	Letter of Acceptance means the formal acceptance by the Employer of the Bid and denotes the formation of the contract at the date of acceptance.
(w)	Materials are all supplies, including consumables, used by the Contractor for incorporation in the Works.
(x)	Party means the Employer or the Contractor, as the context requires.
(y)	SCC means Special Conditions of Contract
(z)	Plant is any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.
(aa) The Project Manager is the person named in the SCC (or any other competent person appointed by the Employer and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract.
(bb) Retention Money means the aggregate of all monies retained by the Employer pursuant to GCC 46.1.
(cc)) The Site is the area defined as such in the SCC.
(dd) Site Investigation Reports are those that were included in the bidding documents and are factual and interpretative reports about the surface and subsurface conditions at the Site.

	(ee) Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.
	(ff) The Start Date is given in the SCC. It is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.
	(gg) A Subcontractor is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site.
	(hh) Temporary Works are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.
	 (ii) A Variation is an instruction given by the Project Manager which varies the Works.
	(jj) The Works are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the SCC.
2. Interpretation	2.1 In interpreting these GCC, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager shall provide instructions clarifying queries about these GCC.
	2.2 If sectional completion is specified in the SCC, references in the GCC to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).
	2.3 The documents forming the Contract shall be interpreted in the following order of priority:
	(a) Contract Agreement,
	(b) Letter of Acceptance,
	(c) Letter of Bid,
	(d) Special Conditions of Contract,
	(e) General Conditions of Contract,
	(f) Specifications,
	(g) Drawings,
	 (h) Bill of Quantities (or Schedules of Prices for lump sum contracts), and
	(i) Any other document listed in the SCC as forming part of the Contract.

3. Language and Law	3.1 The language of the Contract and the law governing the Contract are stated in the SCC.
4. Project Manager's Decisions	4.1 Except where otherwise specifically stated, the Project Manager shall decide contractual matters between the Employer and the Contractor in the role representing the Employer.
5. Delegation	5.1 The Project Manager may delegate any of his duties and responsibilities to other people, except to the Adjudicator, after notifying the Contractor, and may cancel any delegation after notifying the Contractor.
6. Communications	6.1 Communications between parties that are referred to in the Conditions shall be effective only when in writing. A notice shall be effective only when it is delivered.
7. Subcontracting	7.1 Not Allowed
8. Other Contractors	8.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Contractors, as referred to in the SCC. The Contractor shall also provide facilities and services for them as described in the Schedule. The Employer may modify the Schedule of Other Contractors, and shall notify the Contractor of any such modification.
9. Personnel and Equipment	9.1 The Contractor shall employ the key personnel and use the equipment identified in its Bid to carry out the Works, or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of key personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.
	9.2 If the Project Manager asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.
10. Employer's and Contractor's Risk	10.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.
11. Employer's Risks	11.1 From the Start Date until the Defects Liability Certificate has been issued, the following are Employer's risks:
	(a) The risk of personal injury, death, or loss of or damage
	to property (excluding the Works, Plant, Materials, and Equipment), which are due to
	 (i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works or
	(ii) negligence, breach of statutory duty, or interference with any legal right by the Employer or by any person

	employed by or contracted to him except the Contractor.
	(b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Employer or in the Employer's design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.
	11.2 From the Completion Date until the Defects Liability Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is an Employer's risk except loss or damage due to
	(a) a Defect which existed on the Completion Date,
	 (b) an event occurring before the Completion Date, which was not itself an Employer's risk, or
	(c) the activities of the Contractor on the Site after the Completion Date.
12. Contractor's Risks	12.1 From the Starting Date until the Defects Liability Certificate has been issued, the risks of personal injury, death, and loss of or damage to property (including, without limitation, the Works, Plant, Materials, and Equipment) which are not Employer's risks are Contractor's risks.
13. Insurance	13.1 The Contractor shall provide insurance in the joint names of the Employer and the Contractor from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the SCC for the following events which are due to the Contractor's risks:
	(a) loss of or damage to the Works, Plant, and Materials;
	(b) loss of or damage to Equipment;
	(c) loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract; and
	(d) Personal injury or death.
	13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager's approval before the Start Date. All such insurance shall provide for compensation to be payable in the proportions of Indian Rupees required to rectify the loss or damage incurred.
	13.3 If the Contractor does not provide any of the policies and certificates required, the Employer may affect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.
	13.4 Alterations to the terms of insurance shall not be made without the approval of the Project Manager.
	13.5 Both parties shall comply with any conditions of the insurance policies.

14. Site Investigation Reports	14.1 The Contractor, in preparing the Bid, shall rely on any Site Investigation Reports referred to in the SCC, supplemented by any information available to the Bidder.		
15. Contractor to Construct the Works	15.1 The Contractor shall construct and install the Works in accordance with the Specifications and Drawings.		
16. The Works to Be Completed within intended Completion Date	16.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Program submitted by the Contractor, as updated with the approval of the Project Manager, and complete them within the intended Completion Date.		
17. Design by contractor and	17.1 The contractor shall be responsible for the design of permanent works as specified in SCC.		
Approval by the Project Manager	17.2 Contractor shall be responsible for design of the Temporary Works. The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, for his approval.		
	17.3 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, shall be subject to prior approval by the Project Manager before their use.		
	17.4 The Project Manager's approval shall not alter the Contractor's responsibility for design of temporary works.		
18. Safety, Security and Protection of the	18.1 The Contractor shall, throughout the execution, and completion of the works and remedying of any defects therein:		
18. Safety, Security and Protection of the Environment	18.1 The Contractor shall, throughout the execution, and completion of the works and remedying of any defects therein:a. Have full regard for the safety of all persons entitled to be upon the site and keep the site (so as the same is under his control) and the works (so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons.		
18. Safety, Security and Protection of the Environment	 18.1 The Contractor shall, throughout the execution, and completion of the works and remedying of any defects therein: a. Have full regard for the safety of all persons entitled to be upon the site and keep the site (so as the same is under his control) and the works (so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons. b. Provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when necessary or required by the Project Manager or by any duly constituted authority, for the protection of the Works of for the safety and convenience of the public or others. 		
18. Safety, Security and Protection of the Environment	 18.1 The Contractor shall, throughout the execution, and completion of the works and remedying of any defects therein: a. Have full regard for the safety of all persons entitled to be upon the site and keep the site (so as the same is under his control) and the works (so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons. b. Provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when necessary or required by the Project Manager or by any duly constituted authority, for the protection of the Works of for the safety and convenience of the public or others. c. Take all reasonable steps to protect the environment on and off the site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation. 		
18. Safety, Security and Protection of the Environment	 18.1 The Contractor shall, throughout the execution, and completion of the works and remedying of any defects therein: a. Have full regard for the safety of all persons entitled to be upon the site and keep the site (so as the same is under his control) and the works (so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons. b. Provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when necessary or required by the Project Manager or by any duly constituted authority, for the protection of the Works of for the safety and convenience of the public or others. c. Take all reasonable steps to protect the environment on and off the site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation. d. Ensure that any cut or fill slopes are planted in grass or other plant cover as soon as possible to protect them from erosion. 		
18. Safety, Security and Protection of the Environment	 18.1 The Contractor shall, throughout the execution, and completion of the works and remedying of any defects therein: a. Have full regard for the safety of all persons entitled to be upon the site and keep the site (so as the same is under his control) and the works (so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons. b. Provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when necessary or required by the Project Manager or by any duly constituted authority, for the protection of the Works of for the safety and convenience of the public or others. c. Take all reasonable steps to protect the environment on and off the site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation. d. Ensure that any cut or fill slopes are planted in grass or other plant cover as soon as possible to protect them from erosion. e. Any spoil or material removed from drains shall be disposed off to designated stable tipping areas as directed by the Project Manager. 		

	works.
	g. The Project Manager shall have the power to disallow any working practice or activity of the Contractor or direct that such practices or activities be modified should the Project Manager consider, on the advice of the relevant Government Departments, that the practices or activities will be harmful to wildlife.
	h. Provide on the Site such life saving apparatus as may be appropriate and an adequate and easily accessible first aid outfit or such outfits as may be required by any government ordinance, factory act, etc., subsequently published and amended from time to time.
19. Discoveries	19.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Project Manager of such discoveries and carry out the Project Manager's instructions for dealing with them.
20. Possession of the Site	20.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the SCC, the Employer shall be deemed to have delayed the start of the relevant activities, and this shall be a Compensation Event.
21. Access to the Site	21.1 The Contractor shall allow the Project Manager and any person authorized by the Project Manager access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.
22. Instructions, Inspections and Audits	22.1 The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.
	22.2 The Contractor shall permit the GoN/IFAD and/or persons appointed by the GoN/IFAD to inspect the Site and/or the accounts and records of the Contractor and its sub-contractors relating to the performance of the Contract, and to have such accounts and records audited by auditors appointed by the GoN/IFAD if required by the GoN/IFAD. The Contractor's attention is drawn to Sub-Clause 58.2 which provides, inter alia, that acts intended to materially impede the exercise of the GoN's/IFAD's inspection and audit rights provided for under this Sub-Clause constitute a obstructive practice subject to contract termination.
23. Dispute Settlement	23.1 The Employer and the Contractor shall attempt to settle amicably by direct negotiation any disagreement or dispute arising between them under or in connection with the Contract.
	23.2 Any dispute between the Parties as to matters arising pursuant to this Contract which cannot be settled amicably within thirty (30) days after receipt by one Party of the other Party's request for such amicable settlement may be referred to Arbitration within 30 days after the expiration of amicable settlement period.
24. Appointment of the	Not Applicable

Adjudicator/ DRC Members			
25. Procedures for Disputes		25.1 In case of arbitration, the arbitration shall be conducted in accordance with the arbitration procedures under relevant Act at the place given in the SCC.	
		B. Time Control	
26. Program 26. Acc Pro the the		I Within the time stated in the SCC, after the date of the Letter of eptance, the Contractor shall submit to the Project Manager for approval a gram showing the general methods, arrangements, order, and timing for all activities in the Works. In the case of a lump sum contract, the activities in Program shall be consistent with those in the Activity Schedule.	
	26.2 proo the the a	6.2 An update of the Program shall be a program showing the actual rogress achieved on each activity and the effect of the progress achieved on he timing of the remaining work, including any changes to the sequence of the activities.	
	26.3 upda the Proj payn payn the Activ	5.3 The Contractor shall submit to the Project Manager for approval an odated Program at intervals no longer than the period stated in the SCC. If e Contractor does not submit an updated Program within this period, the oject Manager may withhold the amount stated in the SCC from the next ayment certificate and continue to withhold this amount until the next ayment after the date on which the overdue Program has been submitted. In e case of a lump sum contract, the Contractor shall Provide an updated ctivity Schedule within 15 days of being instructed to by the Project Manager.	
	26.4 Con to th effe	4 The Project Manager's approval of the Program shall not alter the ntractor's obligations. The Contractor may revise the Program and submit it the Project Manager again at any time. A revised Program shall show the ect of Variations and Compensation Events.	
27. Extension of the Intended Completion Date	27.1 Cor imp Dat whie	The Project Manager shall extend the Intended Completion Date if a npensation Event occurs or a Variation is issued which makes it ossible for Completion to be achieved by the Intended Completion e without the Contractor taking steps to accelerate the remaining work, ch would cause the Contractor to incur additional cost.	
	27.2 exte ask Cor at le to g dela Inte	2 The Project Manager shall decide whether and by how much to end the Intended Completion Date within 21 days of the Contractor ing the Project Manager for a decision upon the effect of a mpensation Event or Variation and submitting full supporting information east 7 days prior to the intended completion date. If the Contractor has failed live early warning of a delay or has failed to cooperate in dealing with a ay, the delay by this failure shall not be considered in assessing the new inded Completion Date.	
28. Acceleration	28.7 Cor ach acc acc 28.2	1 When the Employer wants the Contractor to finish before the Intended npletion Date, the Project Manager shall obtain priced proposals for ieving the necessary acceleration from the Contractor. If the Employer epts these proposals, the Intended Completion Date shall be adjusted ordingly and confirmed by both the Employer and the Contractor. 2 If the Contractor's priced proposals for acceleration are accepted by the	

	Employer, they are incorporated in the Contract Price and treated as a Variation.		
29. Delays Ordered by the Project Manager	29.1 The Project Manager may instruct the Contractor to delay the start or progress of any activity within the Works.		
30. Management Meetings	30.1 Either the Project Manager or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.		
	30.2 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.		
31. Early Warning	31.1 The Contractor shall warn the Project Manager at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price, or delay the execution of the Works. The Project Manager may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible.		
	31.2 The Contractor shall cooperate with the Project Manager in making and considering proposals for how the effect of such an event or circumstance can be avoided		
	or reduced by anyone involved in the work and in carrying out any resulting instruction of the Project Manager.		
	C. Quality Control		
32. Identifying Defects	32.1 The Project Manager shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Project Manager may instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect.		
33. Tests	33.1 If the Project Manager instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect, the test shall be a Compensation Event.		
34. Correction of Defects	34.1 The Project Manager shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the SCC. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.		
	34.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Project Manager's notice.		

35. Uncorrected Defects	35.1 If the Contractor has not corrected a Defect within the time specified in the Project Manager's notice, the Project Manager shall assess the cost of having the Defect corrected, and the Contractor shall pay this amount.
	D. Cost Control
36. Contract Price	36.1 In the case of a Unit Rate contract, the Bill of Quantities shall contain priced items for the Works to be performed by the Contractor. The Bill of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work accomplished at the rate in the Bill of Quantities for each item.
	36.2 In the case of a lump sum contract, the Activity Schedule shall contain the priced activities for the Works to be performed by the Contractor. The Activity Schedule is used to monitor and control the performance of activities on which basis the Contractor will be paid. If payment for Materials on Site shall be made separately, the Contractor shall show delivery of Materials to the Site separately on the Activity Schedule.
27 Changes in the	37.1 In the case of an Unit Rate contract:
37. Changes in the Contract Price	 (a) If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 2 percent of the Initial Contract Price, the Project Manager shall adjust the rate to allow for the change.
	(b) The Project Manager shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 10 percent, except with the prior approval of the Employer.
	 (c) If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bill of Quantities.
	37.2 In the case of a lump sum contract, the Activity Schedule shall be amended by the Contractor to accommodate changes of Program or method of working made at the Contractor's own discretion. Prices in the Activity Schedule shall not be altered when the Contractor makes such changes to the Activity Schedule.
38. Variations	38.1 All Variations shall be included in updated Programs, and, in the case of a lump sum contract, also in the Activity Schedule, produced by the Contractor.
	38.2 The Contractor shall provide the Project Manager with a quotation for carrying out the Variation when requested to do so by the Project Manager. The Project Manager shall assess the quotation, which shall be given within seven (7) days of the request or within any longer period stated by the Project Manager and before the Variation is ordered.
	38.3 If the Contractor's quotation is unreasonable, the Project Manager may order the Variation and make a change to the Contract Price, which shall be based on the Project Manager's own forecast of the effects of the Variation on the Contractor's costs.
	38.4 If the Project Manager decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a

	Compensation Event.
	38.5 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.
	38.6 In the case of an Unit Rate contract, if the work in the Variation corresponds to an item description in the Bill of Quantities and if, in the opinion of the Project Manager, the quantity of work above the limit stated in GCC 37.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of work.
39. Cash Flow Forecasts	39.1 When the Program, or, in the case of a lump sum contract, the Activity Schedule, is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast.
40. Payment Certificates	40.1 The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.
	40.2 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor within 30 days of submission by contractor.
	40.3 The value of work executed shall be determined by the Project Manager.
	40.4 The value of work executed shall comprise:
	(a) In the case of an Unit Rate contract, the value of the quantities of work in the Bill of Quantities that have been completed; or
	(b) In the case of a lump sum contract, the value of work executed shall comprise the value of completed activities in the Activity Schedule.
	40.5 The value of work executed shall include the valuation of Variations and Compensation Events.
	40.6 The Project Manager may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
41. Payments	41.1 Payments shall be adjusted for deductions for advance payments and retention. The Employer shall pay the Contractor the amounts certified by the Project Manager within 30 days of the date of each certificate. If the Employer makes a late payment, the Contractor shall be paid interest as indicated in the SCC on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made.
	41.2 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would

	have been certified in the absence of dispute.
	41.3 Items of the Works for which no rate or price has been entered in BOQ shall not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.
42 Compensation	42.1 The following shall be Compensation Events:
Events	(a) The Employer does not give access to a part of the Site by the Site Possession Date pursuant to GCC 20.1.
	(b) The Employer modifies the Schedule of Other Contractors in a way that affects the work of the Contractor under the Contract.
	(c) The Project Manager orders a delay or does not issue Drawings, Specifications, or instructions required for execution of the Works on time.
	(d) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects.
	(e) The Project Manager unreasonably does not approve a subcontract to be let.
	(f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.
	(g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
	(h) Other contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
	(i) The advance payment is delayed.
	(j) The effects on the Contractor of any of the Employer's Risks.
	 (k) The Project Manager unreasonably delays issuing a Certificate of Completion.
	(I) Force majeure events as determined by the Project Manager.
	42.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.
	42.3 As soon as information demonstrating effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager shall assume that the Contractor shall react competently and promptly to the event.

	42.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor's not having given early warning or not having cooperated with the Project Manager.
43. Tax	43.1 The Project Manager shall adjust the Contract Price if taxes, duties, and other levies are changed between the date 30 days before the submission of bids for the Contract and the date of the last Completion certificate. The adjustment shall be the change in the amount of tax payable by the Contractor, provided such changes are not already reflected in the Contract Price or are a result of GCC 45.
44. Currency	44.1 The currency of Contracts shall be Indian Rupees.
45. Price Adjustment	45.1 Prices shall be adjusted for fluctuations in the cost of inputs only if provided for in the SCC. If so provided, the amounts certified in each payment certificate, before deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due.
	45.2 Adjustment Formulate ⁵⁵ : "The adjustment to the Interim Payment Certificates in respect of changes in cost and legislation shall be determined from separate formulae for each of the types of construction work to be performed and Plant to be supplied. The formulae will be of the following general type: $Ln \qquad Mn \qquad En$
	$pn = A + b{Lo} + c{Mo} + d{Eo} + etc.$
	Where:
	pn is a price adjustment factor to be applied to the amount for the payment of the work carried out in the subject month, determined in accordance with Sub-Clause 41;
	A is a constant, specified in the Bidding Forms- Table of Price Adjustment data, representing the nonadjustable portion in contractual payments; ⁵⁶
	b, c, d, etc., coefficients representing the estimated proportion of each cost element (labor, materials, equipment usage, etc.) in the Works or sections thereof, net of Provisional Sums, as specified in the SCC;
	Ln, Mn, En, etc., are the current cost indices or reference prices of the cost elements for month "n," determined pursuant to Sub-Clause 45.4, applicable to each cost element; and
	Lo, Mo, Eo, etc., are the base cost indices or reference prices corresponding to the above cost elements at the date specified in Sub-Clause 45.4
	45.3 Sources of Indices and Weightings: The sources of indices shall be those listed in the Bidding Forms- Table of Price Adjustment data, as approved by the Project Manager and stated in SCC. Indices shall be appropriate for their purpose and shall relate to the Contractor's proposed source of supply of inputs on the basis of which his Contract shall have been computed. As the proposed basis for price adjustment, the Contractor shall have submitted with his bid the tabulation of Weightings and Source of Indices in the Bidding Forms, which shall be subject to approval by the Project Manager.

⁵⁵ For complex Works involving several types of construction work with different inputs, a family of Formulae will be necessary. The 56

various items of Day work may also require different formulae, depending on the nature and source of the inputs Insert a figure for factor A only where there is a part of the Contractors' expenditures which will not be subject to fluctuation in cost or to compensate for the unreliability of some indices. A should normally be 0.15. The sum of A, b, c, d, etc., should be one.

45.4 B ase, Current and Provisional Indices: The base cost indices or prices shall be those prevailing on the day 30 days prior to the latest date for submission of bids. Current indices or prices shall be those prevailing on the day 30 days prior to the last day of the period to which a particular Interim Payment Certificate is related. If at any time the current indices are not available, provisional indices as determined by the Project Manager will be used, subject to subsequent correction of the amounts paid to the Contractor when the current indices become available.
45.5 Weightings: The weightings for each of the factors of cost given in the Bidding Forms shall be adjusted if, in the opinion of the Project Manager, they have been rendered unreasonable, unbalanced or inapplicable as a result of varied or additional work already executed or instructed under Clause 38 or for any other reason.
45.6 Subsequent Legislation: If, after the date 30 days prior to the latest date for submission of bids for the Contract, there occur changes to any National Statute, Ordinance, Decree, or other Law or any regulation or by-law of any local or other duly constituted authority, or the introduction of any such Statute, Ordinance, Decree, Law, regulation or by-law which causes additional or reduced cost to the Contractor, other than under the preceding sub-clauses of this clause, in the execution of the Contract, such additional or reduced cost shall, after due consultation with the Employer and the Contractor, be determined by the Project Manager and shall be added to or deducted from the Contract Price and the Project Manager shall notify the Contractor accordingly, with a copy to the Employer. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same shall already have taken into account in the indexing of any inputs to the Price Adjustment Formulae in accordance with the provisions of Sub-Clauses 45.2
45.7 Where, price adjustment provision is not applicable pursuant to Sub- clause 45.1 then the Contract is subject to price adjustment only for construction material in accordance with this clause. If the prices of the construction materials stated in the contract is increased or decreased in an unexpected manner in excess of ten (10%) percent in comparison to the base price construction material stated in Section –IV, Bidding Forms- Table of Price Adjustment Data, then the price adjustment for the increase or decrease of price of the construction material beyond 10% shall be made by applying the following formulas:
For unexpected increase in price
$P = [R_1 - (R_0 \times 1.10)] \times Q$
For unexpected decrease in price P
$= [R_1 - (R_0 \times 0.90)] \times Q$
Where:
"P" is price adjustment amount
"R ₁ " is the present price of the construction material (Source of indices shall be those listed in the Bidding forms)
" R_0 " is the base price of the construction material
"Q" is quantity of the construction material consumed in construction during the period of price adjustment consideration
If the Base price and source is to be proposed by the Bidder as per the provision made in Section –IV, Bidding Forms-Table of Price Adjustment Data then the Base price and source filled by Bidder for the construction material

	stated in the Bidding Form shall be subject to the approval of the Project manager and shall be as stated in SCC
	45.8 The Price Adjustment amount shall be limited to a maximum of the initial Contract Amount as specified in the SCC.
	45.10 The Price Adjustment provision shall not be applicable for delayed period if the contract is not completed in time due to the delay caused by the contractor or the contract is a Lump sum Contract or a Fixed Budget Contract.
46. Retention	46.1 The Employer shall retain from each payment due to the Contractor the proportion stated in the SCC until Completion of the whole of the Works.
	46.2 Upon the issue of a Defects Liability Certificate by the Project Manager, in accordance with GCC 55.1, half the total amount retained shall be repaid to the Contractor and half when the Contractor has submitted the Tax evidence document issued by the concerned Internal Revenue Office that the contractor has submitted his Income Returns . On completion of the whole works, the Contractor may substitute retention money with an "on demand" bank guarantee.
47. Liquidated Damages	47.1 The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the SCC for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount defined in the SCC. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.
	47.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in GCC.41
48. Bonus	48.1 The Contractor shall be paid a Bonus calculated at the rate per calendar day stated in the SCC for each day (less any days for which the Contractor is paid for acceleration) that the Completion is earlier than the Intended Completion Date. The Project Manager shall certify that the Works are complete, although they may not be due to be complete.
49. Advance Payment	49.1 The Employer shall make advance payment to the Contractor of the amounts stated in the SCC by the date stated in the SCC, against provision by the Contractor of an unconditional bank guarantee from 'A' class commercial Bank in a form and by a bank acceptable to the Employer in amounts equal to the advance payment. The guarantee shall remain effective until the advance payment has been repaid, but the amount of the guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest shall not be charged on the advance payment.
	49.2 The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager.
	 49.2 The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager. 49.3 The advance payment shall be repaid by deducting proportionate

	amounts, as stated in SCC, from payments otherwise due Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, Bonuses, or Liquidated Damages.
50. Securities	50.1 The Performance Security shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount specified in the SCC, by a 'A' class commercial bank acceptable to the Employer, and denominated in Indian Rupees. The Performance Security shall be valid until a date 30 days from the date of issue of the Defect Liability Certificate in the case of a bank guarantee.
	50.2 The performance security issued by any foreign Bank outside Nagaland must be counter guaranteed by an "A" class commercial Bank in Nagaland.
51. Day works	51.1 If applicable, the Day works rates in the Contractor's Bid shall be used for small additional amounts of work only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.
	51.2 All work to be paid for as Day works shall be recorded by the Contractor on forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the work being done.
	51.3 The Contractor shall be paid for Day works subject to obtaining signed Day works forms.
52. Cost of Repairs	52.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.
52. Cost of Repairs	52.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions. E. Finishing the Contract
52. Cost of Repairs 53. Completion	 52.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions. E. Finishing the Contract 53.1 The Contractor shall request the Project Manager to issue a certificate of Completion of the Works, and the Project Manager shall do so upon deciding that the work is completed.
52. Cost of Repairs 53. Completion 54. Taking Over	 52.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions. E. Finishing the Contract 53.1 The Contractor shall request the Project Manager to issue a certificate of Completion of the Works, and the Project Manager shall do so upon deciding that the work is completed. 54.1 The Employer shall take over the Site and the Works within seven days of the Project Manager's issuing a certificate of Completion.
52. Cost of Repairs 53. Completion 54. Taking Over 55. Final Account	 52.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions. E. Finishing the Contract 53.1 The Contractor shall request the Project Manager to issue a certificate of Completion of the Works, and the Project Manager shall do so upon deciding that the work is completed. 54.1 The Employer shall take over the Site and the Works within seven days of the Project Manager's issuing a certificate of Completion. 55.1 The Contractor shall supply the Project Manager with a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 60 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 60 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a payment certificate.

Manuals	56.2 If the Contractor does not supply the Drawings and/or manuals by the dates stated in the SCC pursuant to GCC 56.1, or they do not receive the Project Manager's approval, the Project Manager shall withhold the amount stated in the SCC from payments due to the Contractor.
57. Termination	57.1 In no case, the Contractor shall terminate the Contract unilaterally without duly notifying the Employer.
	57.2 The Employer may terminate the Contract at any time if the contractor;
	a. does not commence the work as per the Contract,b. abandons the work without completing,c. fails to achieve progress as per the Contract.
	57.3 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
	57.4 Fundamental breaches of Contract shall include, but shall not be limited to the following:
	(a) The Contractor uses the advance payment for matters other than the contractual obligations,
	 (b) the Contractor stops work for 30 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Project Manager;
	(c) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 30 days;
	(d) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation.
	 (e) a payment certified by the Project Manager is not paid by the Employer to the Contractor within 90 days of the date of the Project Manager's certificate;
	 (f) the Project Manager gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager;
	(g) the Contractor does not maintain a Security, which is required; and
	(h) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as defined in the SCC.
	 (i) If the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the Contract, pursuant to GCC 58.1.
	57.5 When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under GCC 57.2 above, the Project Manager shall decide whether the breach is fundamental or not.
	57.6 Notwithstanding the above, the Employer may terminate the Contract for convenience.
	57.7 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.

58. Fraud and Corruption	58.1 If the Employer determines that the Contractor has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, then the Employer may, after giving 15 days notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from the Site.
	58.2 Should any employee of the Contractor be determined to have engaged in corrupt, fraudulent, collusive, coercive, or obstructive practice during the execution of the Works, then that employee shall be removed in accordance with Clause 9.
	For the purposes of this Sub-Clause;
	 (i) "corrupt practice" is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party.
	 (ii) "fraudulent practice"⁵ is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
	(iii) "collusive practice" ⁶ is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
	 (iv) "coercive practice"⁷ is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
	(v) "obstructive practice" is
	(aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
	(bb) acts intended to materially impede the exercise of the GON's/IFAD's inspection and audit rights provided for under Sub-Clause 22.2.
59. Black Listing	59.1 Without prejudice to any other rights of the Employer under this Contract, GoN, , on the recommendation of procuring entity, may blacklist a Bidder for its conduct for a period of one (1) to three (3) years on the following grounds and seriousness of the act committed by the bidder.
	(a) if it is established that the Contractor has committed substantial defect in implementation of the contract or has not substantially fulfilled its obligations under the contract or the completed work is not of the specified quality as per the contract.
60. Payment upon Termination	60.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the work done and Materials ordered less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as indicated in the SCC. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor, the

difference shall be a debt payable to the Employer.
60.2 If the Contract is terminated because of fundamental breach of Contract or for any other fault by the Contractor, The Employer shall withhold further payments to the Contractor until the costs of execution, completion and remedying of any defects, damages for delay in completion (if any), and all other costs incurred by the Employer, have been established, and/or recover from the Contractor any losses and damages incurred by the Employer from the payment due to the contractor and/or from the performance security. After recovering any such losses, damages and extra costs, the Employer shall pay any balance to the Contractor.
60.3 The Employer shall not make a claim under the Performance Security, except for amounts to which the Employer is entitled under the Contract.

- 5 a "party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution.
- 6 "parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non-competitive levels.
- 7 a "party" refers to a participant in the procurement process or contract execution.

61. Property	 61.1 If the contract is terminated due to the default of the contractor, after termination, the Employer may complete the Works and/or arrange for any other entities to do so. The Employer and these entities may then use any Goods, Contractor's Documents and other design documents made by or on behalf of the Contractor. 61.2 The Employer shall then give notice that the Contractor's Equipment and Temporary Works will be released to the Contractor at or near the Site. The Contractor shall promptly arrange their removal, at the risk and cost of the Contractor. However, if the Contractor has failed to make a payment due to the Employer, these items may be sold by the Employer in order to recover this payment. Any balance of the proceeds shall then be paid to the Contractor.
62. Release from Performance	62.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.
63. Suspension of IFAD Loan/Credit/Gr ant	63.1 In the event that the Donor Agency suspends the loan/ credit/grant to the Employer from which part of the payments to the Contractor are being made:a. the Employer is obligated to notify the Contractor of such suspension within 7 days of having received the Donor Agency's
	 b. if the Contractor has not received sums due him within the 30 days for payment provided for in Sub-Clause 41.1, the Contractor may immediately issue a 15-day termination notice.
	64.1 The Project Manager's duties and authorities are restricted to the system.
64. Project Manager's Duties and Authorities	as stated in the SCC.
 64. Project Manager's Duties and Authorities 65. Quarries and Spoil Dumps 	65.1 Any quarry operated as part of this Contract shall be maintained and left in a stable condition without steep slopes and be either refilled or drained and be landscaped by appropriate planting. Rock or gravel taken from a river shall be removed over some distance so as to limit the depth of material removed at any one location, not disrupt the river flow or damage or undermine the river banks. The Contractor shall not deposit excavated material on land in Government or private ownership except as directed by the Project Manager in writing or by permission in writing of the authority responsible for such land in Government ownership, or of the owner or responsible representative of the owner of such land in private ownership, and only then in those places and under such conditions as the authority, owner or responsible representative may prescribe.
 64. Project Manager's Duties and Authorities 65. Quarries and Spoil Dumps 66. Local Taxation 	 65.1 Any quarry operated as part of this Contract shall be maintained and left in a stable condition without steep slopes and be either refilled or drained and be landscaped by appropriate planting. Rock or gravel taken from a river shall be removed over some distance so as to limit the depth of material removed at any one location, not disrupt the river flow or damage or undermine the river banks. The Contractor shall not deposit excavated material on land in Government or private ownership except as directed by the Project Manager in writing or by permission in writing of the authority responsible for such land in Government ownership, or of the owner or responsible representative of the owner of such land in private ownership, and only then in those places and under such conditions as the authority, owner or responsible representative may prescribe. 66.1 The prices tendered by the Contractor shall include all taxes that may be levied in accordance to the laws and regulations in being in Nagaland on the date 30 days prior to the closing date for submissions of Bids on the Contractor's equipment, plant and materials acquired for the purpose of the Contract shall relieve the Contractor from his responsibility to pay any tax that may be levied in Nagaland on profits made by him in respect of the Contract.

Тах	
68. Income Taxes on Staff	68.1 The Contractor's staff, personnel and labor will be liable to pay personal income taxes in respect of their salaries and wages, as are chargeable under the laws and regulations for the time being in force, and the Contractor shall perform such duties in regard to such deductions as may be imposed on him by such laws and regulations.
69. Duties, Taxes and Royalties	69.1 Any element of royalty, duty or tax in the price of any goods including fuel oil, and lubricating oil, cement, timber, iron and iron goods locally procured by the Contractor for the works shall be included in the Contract rates and prices and no reimbursement or payment in that respect shall be made to the Contractor.
	69.2 The Contractor shall familiarize himself with GON the rules and regulations with regard to customs, duties, taxes, clearing of goods and equipment, immigration and the like, and it will be necessary for him to follow the required procedures regardless of the assistance as may be provided by the Employer wherever possible.
	69.3 The Contractor shall pay and shall not be entitled to the reimbursement of cost of extracting construction materials such as sand, stone/boulder, gravel, etc. from the river beds or quarries. Such prices will be levied by the local administrative bodies as may be in force at the time. The Contractor, sub-contractor(s) employed directly by him and for whom he is responsible, will not be exempted from payment of royalties, taxes or other kinds of surcharges on these construction materials so extracted and paid for to the local administrative bodies.
70. Member of Government, etc, not Personally Liable	70.1 No member or officer of GoN or the Employer or the Project Manager or any of their respective employees shall be in any way personally bound or liable for the act or obligations of the Employer under the Contract or answerable for any default or omission in the observance or performance of any of act, matter or thing which are herein contained.
71. Approval of Use of Explosives	71.1 No explosives of any kind shall be used by the Contractor without the prior consent of the Employer in writing and the Contractor shall provide, store and handle these and all other items of every kind whatsoever required for blasting operations, all at his own expense in a manner approved in writing by the Employer.
72. Compliance with Regulations for Explosives	72.1 The Contractor shall comply with all relevant ordinances, instructions and regulations which the Government, or other person or persons having due authority, may issue from time to time regarding the handling, transportation, storage and use of explosives.
73. Permission for Blasting	73.1 The Contractor shall at all times maintain full liaison with and inform well in advance, and obtain such permission as is required from all Government authorities, public bodies and private parties whatsoever concerned or affected, or likely to be concerned or affected by blasting operation.
74. Records of Explosives	74.1 Before the beginning of the Defects Liability Period, the Contractor shall account to the satisfaction of the Project Manager for all explosives brought on to the Site during the execution of the Contract and the Contractor shall remove all unused explosives from the Site on completion of works when ordered by the Project Manager.
75. Traffic	75.1 The Contractor shall include the necessary safety procedures regarding and

Diversion	pedestrian traffic diversion that is needed in execution of the works. The Contractor shall include in his costing of works, any temporary works or diversion
	that are needed during the construction period. All traffic diversion should be designed for the safety of both the motoring public and the men at work. It shall ensure the uninterrupted flow of traffic and minimum inconvenience to the public during the period concerned. As such adequate warping signs flagmen
	and other relevant safety precautionary measures shall be provided to warn motorists and pedestrians well ahead of the intended diversion as directed by the Project Manager. All traffic devices used shall be designed in accordance with the instruction of Project Manager.

SECTION – VIII: Special Conditions of Contract

The following Special Conditions of Contract shall supplement the GCC. Whenever there is a conflict, the provisions herein shall prevail over those in the GCC

Special Conditions of Contract

A. General		
GCC 1.1 (q)	The Employer is	
GCC 1.1 (u)	The Intended Completion Date for the whole of the Works shall be: xxx days from agreement date.	
GCCs 1.1	The Project Manager is xxx.	
(aa) & 4.1		
GCC 1.1 (cc)	The Site is located at xxx and is defined in drawings as attached in ANNEX	
GCC 1.1 (ff)	The Start Date shall be Not later than 7 days from the issuance of work order and agreement	
GCC 1.1 (jj)	The Works mainly consist of Civil Works, xxxx.	
GCC 2.2	Sectional Completions are: N/A	
GCC 2.3(i)	The following documents also form part of the Contract: As listed in the form of Contract Agreement	
	PMGSY and PWD Specifications	
GCC 3.1	The language of the contract is ENGLISH	
	The law that applies to the Contract is the law of India	
GCC 8.1	Schedule of other contractors: NA	
GCC 13.1	The minimum insurance amounts and deductibles shall be:	
	The minimum insurance amounts shall be:	
	(a) Minimum cover for loss of or damage to the Works, Plant and Materials is 110 percent of the Contract Amount.	
	(b) The maximum deductible for insurance of Works, Plant, and Materials is Rs. xxx xxxx)	
	(c) Minimum cover for personal injury or death	
	i. for the contractor's employees is as specified in the Labor Act of India.	
GCC 14.1	Site Investigation Reports are: N/A	
GCC 15	Add the following:	
	The Contractor shall set out the Works in relation to original points, lines and levels of reference specified in the Contract or notified by the Engineer. The Contractor shall be responsible for the correct positioning of all parts of the Works, and shall rectify any error in the positions, levels, dimensions or alignment of the Works.	
	The contractor shall verify the accuracy of the referenced items and/or	

	drawings before they are used.		
GCC 17.1	The following shall be designed by the Contractor: NA		
GCC 20.1	The Site Possession Date(s) shall be: Within 7 days after contract Agreement		
GCC 25.4	The place of arbitration shall be: xxxx		
B. Time Control			
GCC 26.1	The Contractor shall submit for approval a Program for the Works within 7 (Seven) days from the date of the Letter of Acceptance.		
GCC 26.3	The period between Program updates is 30 days.		
	The amount to be withheld for late submission of an updated Program is xxxx		
	C. Quality Control		
GCC 34.1	The Defects Liability Period is: 365 days. From the date of hand over of the Project.		
GCC 37	Add the following: Method of Measurement: measurement shall be made of the net actual quantity of each item of the Permanent Works, and the method of measurement shall be in accordance with the Bill of Quantities or other applicable Schedules.		
	D. Cost Control		
GCC 41.1	Interest rate is: 10 % per annum		
GCC 45.1	The Contract <i>is not</i> subject to price adjustment, and the following information regarding coefficients <i>does not</i> apply.		
	(OR)		
	The contract is subject to price adjustment then the clause below shall apply:		
	If during the contract, there is an increase or decrease in the cost of materials and labour as reflected by the Material Index Numbers published by the Indian labour journal for wholesale price index, a corresponding increase or decrease in the payment to the contractor or recoverable from the Contractor shall be effected on the basis of the following formulae, such calculation being done for every successive period of 3 months after the 18th month of the Contract duration: Adjustment for variation of material prices: $V = Wx0.80x0.75 \times (M-M0)/M0$		
	V = amount of variation for materials payable to/recoverable from the contractor for the period under review; W = value of the work done during the period under review minus (amount of secured advance recovered in the same period + value of works executed under		
	variations for which the variations are paid in the new rate); M0 = Material Index for the month in which the tender was submitted; M = the average value of the above Index Number for the 3 months period under review:		
	Link: <u>http://www.eaindustry.nic.in/home.asp</u> Adjustment for variation in labour wages: V = Wx0.80x0.25 x (L-L0)/L0		
	v = amount of variation for Labour payable to/recoverable from the contractor for the period under review:		

	 W = value of the work done during the period under review minus (amount of secured advance recovered in the same period + value of works executed under variations for which price adjustments will be worked separately based on terms mutually agreed between the Project Engineer and the Contractor); L0 = Labour Index for the month in which the tender was submitted; L = the average value of the above Index Number for the three (3) months period under review; Link: <u>http://labourbureaunew.gov.in/LBO_Press_Release.htm</u> 47.2 For the applications of the above formulae, the appropriate Index Numbers
	published by the Indian labour journal shall be adopted. 47.2 To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other clauses in the contract, the unit rates and prices included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.
GCC 45.7	Base Price of Construction Materials applicable for price adjustment shall be as per the Table of Adjustment Data submitted by Bidder together with the Letter of Bid which is approved by the Project manager and attached as Annex. NA
GCC 45.8	<i>N/A</i>
GCC 46.1	The proportion of payments retained is: x (words) PERCENT
	On completion of the whole works, the Contractor may substitute retention money with a bank guarantee.
GCC 47.1	The liquidated damages for the whole of the Works are 0.05 PERCENT of the final Contract Price per day. The maximum amount of liquidated damages for the whole of the Works is 10 PERCENT of the final Contract Price.
GCC 48.1	N/A
GCC 49.1	The Advance Payments shall be up to 10% & shall be paid to the Contractor as per the following Schedule :
	10 % after signing of contract. 10 % after satisfactory mobilization of resources
	 The advance payment shall be deposited in separate account of the contractor opened for same propose.
	 The Contractor shall commence the work within 30 days of payment of advance payment.
	 The Contractor shall submit the updated expenditure report of the advance payment to the client.
	 Advance payment guarantee shall be forfeited if advance found to be utilized in works other than agreed work.
GCC 49.3	Deductions from Payment Certificates will commence in the first certificate in which the value of works executed exceeds 30% of the Contract Price. Deduction will be at the rate of 50% of the advance payment on each running bill until such time as the advance payment has been settled; provided that the advance payment shall be completely repaid prior to the end of 80% of the approved contract period.
GCC 50.1	The performance security amount is as follow: If the bid price of the successful bidder is up to 15 (fifteen) percent less than the cost estimate, the performance security amount shall be 5 (five) percent of the bid price. If the bid price of the successful bidder is less than 15 percent of the cost estimate, the performance

	security amount shall be determined as follows: Performance Security Amount = (0.85 x Cost Estimate –Bid Price) x 0.5 + 5% of Bid Price. The Bid Price and Cost Estimate shall be inclusive of Value Added Tax.			
E. Finishing the Contract				
GCC 56.1	The date by which operating and maintenance manuals are required is: N/A			
	The date by which "as built" drawings are required is : NA			
GCC 56.2	The amount to be withheld for failing to produce "as built" drawings and/or Operating and maintenance manuals is: NA			
GCC 57.4 (h)	The maximum number of days is: 20 0 days			
GCC 60.1	The percentage to apply to the value of the work not completed, representing the Employer's additional cost for completing the Works, is 20 <i>percentages.</i>			
GCC 64	The Project Manager has to obtain the specific approval of the Employer for taking any of the following actions :			
	 Approving subcontracting of any part of the works under General Conditions of Contract Clause 7; 			
	 b. Certifying additional costs determined under General Conditions of Contract Clause 42; 			
	c. Determining start date under General Conditions of Contract Clause 1;			
	 Determining the extension of the intended Completion Date under General Conditions of Contract Clause 27; 			
	e. Issuing a Variation under General Conditions of Contract Clause 1 and 38, except in an emergency situation, as reasonably determined by the Project Manager; emergency situation may be defined as the situation when protective measures must be taken for the safety of life or of the works or of adjoining property.			
	f. Adjustment of rates under General Conditions of Contract Clause 37;			

SECTION – IX: Contract Forms

This Section contains forms which, once completed, will form part of the Contract. The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful Bidder after contract award.

Letter of Intent [on letterhead paper of the Employer]

Date:

То:	name and address of the Contractor
Subject:	Issuance of letter of intent to award the contract

Authorized Signature:

Name:

Title:

CC:

[Insert name and address of all other Bidders, who submitted the bid]

[Notes on Letter of Intent

The issuance of Letter of Intent is the information of the selection of the bid of the successful bidder by

Employer and for providing information to other unsuccessful bidders who participated in the bid as regards to

the outcome of the procurement process. This standard form of Letter of Intent to Award should be filled in and cont to the successful Bidder only after evaluation and selection of substantially responsible lowest

sent to the successful Bidder only after evaluation and selection of substantially responsible lowest evaluated

bid.]
Letter of Acceptance [on letterhead paper of the Employer]

Date:

To:..... name and address of the Contractor

Subject: Notification of Award

You are hereby instructed to contact this office to sign the formal contract agreement within 15 days with Performance Security as specified in the SCC consisting of a Bank Guarantee in the format included in Section IX (Contract Forms) of this Bidding Document.

The Employer shall forfeit the bid security, in case you fail to furnish the Performance Security and to sign the contract within specified period.

Authorized Signature:

Name and Title of Signatory:

Contract Agreement

The Employer and the Contractor agree as follows:

- 1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
- 2. The following documents shall be deemed to form and be read and construed as part of this Agreement.
 - (a) the Letter of Acceptance;
 - (b) the Letter of Bid;
 - (c) the Addenda Nos insert addenda numbers if any
 - (d) the Special Conditions of Contract;
 - (e) the General Conditions of Contract;
 - (f) Bills of Quantities (BOQ);
 - (g) the Specification;
 - (h) the Drawings;
 - (i) the Activity Schedules; and
 - (j) Table of Price Adjustment Data
 - (k).....[Specify if there are any other document]
- 3. In consideration of the payments to be made by the Employer to the Contractor as indicated in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.
- 4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Nagaland on the day, month and year indicated above.

Signed by for and on behalf the Contractor in the presence of Signed by..... for and on behalf of the Employer in the presence of

Witness, Name Signature, Address, Date

Witness, Name, Signature, Address, Date

(On letterhead paper of the 'A' class commercial Bank)

...... Bank's Name, and Address of Issuing Branch or Office

Beneficiary: Name and Address of Employer Date:

Performance Guarantee No.:....

We have been informed that [insert name of the Contractor] (hereinafter called "the Contractor") has been notified by you to sign the Contract No. ... [insert reference number of the Contract] for the execution of [insert name of contract and brief description of Works] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

.....

Seal of Bank and Signature(s)

Note:

- * The Guarantor shall insert an amount representing the percentage of the Contract Price specified in the Contract inIndian Rupees.
- ** Insert the date thirty days after the date specified for the Defect Liability Period. The Employer should note that in the event of an extension of the time for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months], in response to the Employer's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee".

All italicized text is for guidance on how to prepare this demand guarantee and shall be deleted from the final document.

Advance Payment Security (On letterhead paper of the 'A' class commercial Bank)

Bank's Name, and Address of Issuing Branch or Office

Beneficiary

Date :

Advance payment guarantee number:

We have been informed that ...(name of the contractor).....has entered into a contract bearing numberdated with(Name of the employer)..... for the execution of name of contract and brief description of Works (hereinafter called "the Contract").

Furthermore, we understand that, according to the Conditions of the Contract, an advance payment in the sum. name of the currency and amount in figures*... . (... . amount in words) is to be made against an advance payment guarantee.

At the request of the Contractor, we name of the Bank hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of name of the currency and amount in figures*... . (... . amount in words) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor used the advance payment for purposes other than the costs of mobilization in respect of the Works.

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as indicated in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that eighty (80) percent of the Contract Price has been certified for payment, or on the day of**, whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

Seal of Bank and Signature(s)

Note:

- All italicized text is for guidance on how to prepare this demand guarantee and shall be deleted from the final document.
- * The Guarantor shall insert an amount representing the amount of the advance payment in Indian Rupees of the advance payment as specified in the Contract.

** Insert the date Thirty days after the expected completion date. The Employer should note that in the event of an extension of the time for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months], in response to the Employer's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee".

Annex 14.3: Format for bid evaluation



GOVERNMENT OF NAGALAND

Government of India

Fostering Climate Resilient Upland Farming Systems in the Northeast

EVALUATION REPORT FOR CIVIL WORK ON _____

1. Scope of contract and estimated cost:

The works covered under this bid is for the construction of ______ road (Km 00-000) under _____ District. The estimated cost of the work is **Rs** _____ **million**. The packaging of the work has been cleared by IFAD.

2. Bidding document:

The bidding document is as per the model cleared by the IFAD. Since the value of the work is more than the equivalent of US\$200,000 the bidding document along with the drawings, specifications was sent to IFAD for prior review and clearance. No objection to the bidding document was issued by IFAD on ______.

	Cullent points of blading document.	
1.	Stipulated period of completion	months including rainy reason and one month time
		for mobilization.
2.	Price adjustment	Price adjustment is not applicable since the period of
		completion of work is less than 12 months.
3.	Pre-bid meeting	Pre-bid meeting was held on

Salient points of bidding document:

3. Bid invitation process:

Bids were invited by the Director, Department of Agriculture, Kohima, Nagaland on _____, in State newspaper _____. A copy of the invitation to bid is enclosed at Annexure I. The bidding document is also made available on the website <u>www</u>.

The bidding documents were made available for sale from _____. The last date of bid submission was on _____ at ____ hrs and the opening was on _____ at ____ hrs. Thus, a minimum bidding period of 30 days was provided.

The following prospective bidders purchased the bidding document.

- (1) Bidder No. 1
- (2) Bidder No. 2
- (3) Bidder No. 3
- (4) Bidder No. 4
- (5) Bidder No. 5
- (6) Bidder No. 6

All the above firms are national.

Pre-bid conference was held on ______ as scheduled. The copy of the minutes of the pre-bid meeting and the addendum was sent immediately to all the bidders who had purchased the bidding document and was incorporated in the bidding documents as well as uploaded in the website. A copy of the minutes of pre-bid meeting and the copy of the addendum is enclosed in Annexure II.

4. Bid response:

In all, 6 bids were received. All are national except. Details are as follows:

In time:	6
Late:	0
Total	6

5. Bid opening:

The bids were opened on ______ in the Conference hall of the Department of Agriculture in the presence of the bidders and/or their authorized representatives. All the 6 bids received were opened one by one. The quoted bid price, bid securities furnished by the bidders and discounts offered by the bidders, certificates, license, work program and site visit reports were read out at the meeting. The minutes of the bid opening was prepared and a copy of the minutes is enclosed in Annexure III.

Table of Bid prices as read out at the time of bid opening is as follows:

SI. No.	Name of Company	Nationality	Bid Price (Rs.)	Remarks
1	Bidder No. 1	Indian	XXXX	
2	Bidder No.2	Indian	XXXX	
3	Bidder No. 3	Indian	XXXX	Bid price after accounting for X% discount offered by the firm
4	Bidder No. 4	Indian	XXXX	
5	Bidder No. 5	Indian	XXXX	
6	Bidder No. 6	Indian	XXXX	

6. Clarifications obtained:

No clarifications were required to be sought

7. Preliminary examination of bids:

7.1 <u>Arithmetical errors</u>:

Arithmetical errors were found in the bill of quantities of the bid submitted by the following companies: -

1. Bidder No. 4

There were addition errors in sub total permanent works and sub total base course. Therefore after correction of error, the total bid amount is Rs ______.

The concurrence of the bidders was requested in writing for the above corrections in accordance with Sub-Clause 27.2 of Instructions to Bidders. The concurrence of the bidder was received in writing.

7.2 <u>Completeness and Legal validity</u>:

All the bids are duly signed by the bidders or by persons holding proper power of attorney and hence are legally valid. They have quoted for all the items and are thus complete.

7.3 <u>Bid Validity</u>:

As per Clause 15.1 of Instructions to the Bidders the bids shall remain valid for a period not less than 90 days **after** the deadline for the submission/opening of the bid. The bids were submitted on _____ and hence the bids should be valid up to ______.

No condition has been given by any of the bidders nor have they stated specifically that their bid is valid for 90 days after the bid opening. Since they have signed the bidding document and not given any condition, it is taken that all these bids are valid for 90 days after the bid submission/opening i.e. valid up to _____.

7.4 Bid Security:

As per Clause 16 of the Instruction to Bidders, the bid security should be Rs. _____ in the form of Bank Guarantee or Demand Draft, which shall be valid for 28 days after the date of expiry of the validity of the bid i.e. up to _____. The bid security furnished by the various bidders are as follows:

SI.	Name of Company	Bid Security	Bid Security type &	Bid validity
No.		amount (Rs.)	issuing bank	
1	Bidder No. 1		Bank Guarantee	Valid
2	Bidder No.2		Bank Guarantee	Valid
3	Bidder No. 3		Bank Guarantee	Valid
4	Bidder No. 4		Bank Guarantee	Valid
5	Bidder No. 5		Bank Guarantee	Valid
6	Bidder No. 6		Bank Guarantee	Valid

Bank guarantees are in prescribed format and there are no additional remarks making them conditional.

7.5 <u>Responsiveness to commercial conditions</u>:

The bidders have not stipulated any condition. They have signed the contractor's bid form as well as bidding documents and hence it is taken that they are agreeable to the commercial conditions.

7.6 <u>Responsiveness to technical aspects</u>:

None of the bidders have stipulated any condition regarding the technical aspects.

8. Non-responsive bids:

All bids are responsive

The details of determination of responsiveness of the bids are furnished in Annexure IV.

9. Substantially responsive bids:

In view of the above the bids of the following bidders are determined as substantially responsive to the provisions of the bidding documents.

Bidder No. 1
Bidder No.2
Bidder No. 3
Bidder No. 4
Bidder No. 5
Bidder No. 6

10. Evaluation of the substantially responsive bids:

There are no conditions, which warrant loading of the bid prices. No other specific evaluation criteria has been stipulated in the bidding document. The loading of the prices is therefore NIL.

Rank	Name of Bidder	Bid Price (Rs.)	Remarks
I	Bidder No. 1		First lowest responsive bidder
II	Bidder No.2		Second lowest responsive bidder
	Bidder No. 3		Third lowest responsive bidder
IV	Bidder No. 4		Fourth lowest responsive bidder
V	Bidder No. 5		Fifth lowest responsive bidder
VI	Bidder No. 6		Sixth lowest responsive bidder

Evaluation table showing ranking of the bids :

Detailed item-wise comparative statement of the bids is furnished in Annexure V

The lowest evaluated responsive bid is that of **Bidder No.**_____. and the bid price is _____ which is _____% lower/above estimate.

11. Comments on the unbalanced items of the bid.

The following firms has quoted unbalanced prices in the BOQ for the following items:-

1. Bidder No.1

The quoted rates for the following items in the bid are found to be unbalanced: Items Nos. 1-5, 8, 11, 18-30, 32-38, 41, 43, 48-50, 57, 58, 61, 64, 65-68, 70-72, 74, and 93-104

The above bidders were requested to furnish the detailed estimate and breakdown of cost for these items. The information were received and scrutinized.

12. Post-qualification/verification of the lowest evaluated responsive bidder:

The qualification criteria to be satisfied for the award of this particular contract is stipulated in Clause 4.0 of the Instruction to Bidders. The following check is made for the post qualification of the responsive bidders.

SI.	Clause	Minimum qualification required	Qualification of the lowest	Biddr No. 1	Biddr No.	Biddr No.	Biddr No.	Biddr No.	Biddr
No.	Reference		Bidder		2	3	4	5	No. 6
1.	4.4(a)	Annual financial value of work done in any of the last 5 years: b) Rs million	Rs million during 2007- 2008.	Bidder satisfy this criteria.					
2.	4.4(b)	Satisfactory completion of two similar work (atleast 70% complete): Rsmillion	Bidder has executed 12 similar works, highest amount for two works are Rs million.	Bidder satisfy this criteria.					
3.	4.4(c)	Availability of critical equipment:(i)1 Excavators(PC100)(ii)1 Excavators(PC320)(iii)0Dozer(D4H)(iv)1 Road Roller(12 Ton)(v)1 Grader(135 HP)(vi)1 Portable Roller(vii)7 Jack Hammers(viii)7 Tipper trucks(ix)1 Concrete mixer(x)1 Concrete vibrator(xi)1 Air Compressor(45 HP)(xii)1 Theodolite	Available equipments with the firm. O H P T 1 - - 1 1 - - 1 1 - - 1 - - 1 - - - 1 1 - - 1 1 1 - - 1 - - 1 - 2 - - 2 3 - - 2 3 - - 1 2 - - 2 3 - - 2 1 - - 1 2 - - 2 1 - - 1	Bidder satisfies the requirement.					

4.	4.4(d)	Availability of 1 Project Manager with minimum 5 years experience and no less than 3 years as manager.	Available with 25 years general experience	Bidder fulfill the requirement		
5.	4.4(e)	Availability of 2 Project Engineer with minimum 5 years proven experience in works of an equivalent nature & volume.	Available 1 No. with 16 years experience	Bidder partially fulfill the requirement		
6.	4.4(f)	Availability of 3 Site Engineers with minimum 3 years proven experience in works of an equivalent nature & volume	Available 2 nos. with 3 & 8years experience	Bidder fulfill the requirement		
7.	4.4(g)	Liquid assets and/ or credit facilities. Rs million	BNB has issued the letter stating that the co. has revolving line of credit up to Rs million	Bidder satisfy the criteria		

Note:

O denotes Owned; H denotes Hired or leased and P denotes To be purchased out of Advance T denotes total.

13. Check for Bid capacity:

The assessed Bid capacity of the lowest responsive bidder is computed as follows:

Assessed available Bid Capacity = $(A^*N^*2 - B)$

- A = Maximum value of civil engineering works executed in any one of the last five years i.e. Rs. YYY million during 2015-2016;
- N = Number of years prescribed for the completion of works i.e. ZZ months;
- B = Value of existing commitments and on-going works to be completed in the next 2 years i.e. Rs XXX million

Assessed available Bid Capacity of M/s Bhutan Engineering Co. is = $YYY^*ZZ^*2 - XXX = Rs. 000$ million

The proposed contract value of the work is Rs. AAA million.

The assessed Bid Capacity is more than the proposed value of the contract to be awarded. Thus the lowest evaluated responsive bidder No. _____ satisfies the Bid Capacity criteria.

18. Recommendation:

Summary:

- 1. **Bidder No.** _____:- The Company meets all the requirement stated in the bidding document. And is also the lowest evaluated bidder.
- 2. **Bidder No____:-** The Company fails to meet the bid capacity. The supporting documents for annual financial value of work done in any of the last 5 years is not sufficient. The Company is second lowest evaluated bidder.

Therefore, the Department of Agriculture propose to award the contract for Construction of _____ (Km 000) to the lowest evaluated responsive bidder (name of bidder) under the condition that an additional X% performance security is provided for the contract. The bid amount is Rs. XXXX with the following important features:-

1. Mobilization ad	lvance	: 5% of Contract Price;
--------------------	--------	-------------------------

2. Stipulated period of completion : XX months inclusive of rainy season;

3. Bid validity

We seek the no-objection of IFAD for award of the Contract.

Signature of the Chairman Ministerial Level Tender Committee

:____

Director, Department of Agriculture

Representative:

Representative:

Appendix 2

Item	Description								
		1	2	3	4	5	6		
1		r –	1			1	1		
1.1	One Original and one Copy								
1.2	Form of Bid								
1.3	Price Schedules								
1.4	Bid security (amount and validity period)								
1.5		r —	1				1		
	(1) Forms of Personnel								
	(2) Resume of Personnel								
	(3) Forms for Equipment								
	(4) Bidder's Information Sheet								
	(5) Party to JV Information Sheet								
	(6) Historical Contract Non-Performance								
	(7) Current Contract Commitments / Works in Progress								
	(8) Historical Financial Performance								
	(9) Average Annual Turnover								
	(10) Financial Resources								
	(11) General Experience								
	(12) Specific Experience								
	(13) Eligible Countries								
1.6	Joint Venture Agreement or Formal Intent to Enter into an Agreement	Y	Y	Y	Y	Ρ	NA		
1.7	Bidder's Compliance Form								
1.8	Trade License								
2	Registration Certificate								
2.1	Tax Clearance Certificate								
2.2	constitution of legal status								
3	Propriety of Signature and Completeness*								
3.1	Power of Attorney		1						
3.2	Bid Form and Price Schedules, properly signed or not								
3.3	Completeness of Bids								
2.							1		

1. TABLE 2: EXAMINATION OF COMPLETENESS OF TECHNICAL BIDS

Y=Yes, P=Partial, N=No, NA=Not Applicable

Y=Yes, P=Partial, N=No, NA=Not Applicable
* - Managing Director/ Proprietor has signed the document.