

REPORT ON

TRAINING OF MASTER TRAINERS ON

AGRONOMY AND TRC



DATE: 7-11th OCTOBER 2019

VENUE: SAMETI, MEDZIPHEMA.

CONTENTS

MAJOR ABBREVIATIONS.....	1
1.INTRODUCTION	
1.1 Objectives Of The Training.....	2
1.2 Training Methods.....	2
1.3 Training Tools.....	2
2.SESSIONS:	
2.1 Inauguration Session.....	2
2.2 Technical Session.....	2-3
3. OBSERVATIONS AND RECOMMENDATIONS.....	3
ANNEXURE	
ANNEX 1 TRAINING SCHEDULE.....	3-6
ANNEX 2: LIST OF PARTICIPANTS.....	6-7
PHOTO GALLERY.....	7-8
THE OUTLINE OF THE TRAINING MANUAL.....	8-9

MAJOR ABBREVIATION:

ATMA: Agriculture Technology Management Agency

CSS: Centrally Sponsored Scheme

DLIC: District Level Implementing Committee

FOCUS: Fostering of Climate Resilient Upland Farming System in North east India

FIG: Farmers Interest group

IFAD: International Fund for Agriculture Development

TRC: Terrace Rice Cultivation

STL: Soil Testing Lab

PIT: Project Implementing Team

VLIC: Village Level Implementing Committee

1.1 OBJECTIVES OF THE TRAINING

The objectives of training are:

- 1) To train the Master Trainers on how to improve the rural livelihoods of 13700 farming Households.
- 2) To let the Master Trainers gain the knowledge on importance and how best possible way to tackle climate change.
- 3) Increasing the Jhum Cycle to atleast 3 years and to reduce slashing and burning every year.
- 4) To train the Master Trainers on the best technical ways to improve in Jhum and TRC using both scientific and traditional ways.
- 5) Identifying the functions and roles of Master Trainers of establishing the farmer's cooperatives at block level and village level.

1.2 TRAINING METHODS

Interactive and participatory training methods with discussion have been applied in the Five-days training workshop

- 1) Lecture and powerpoint presentation were delivered by the trainers.

The major training contents prepared by the trainer's team were presented by trainers through using PPT. Before the FC training a Training Manual has been developed by FAO trainers and distributed to participants as reference.

- 2) Visit to State Laboratories.

Participants were taken for a laboratories visit to State Bio Control lab and Bio Fertilizer Lab.

- 3) Group Discussion

Purpose of the group discussion is to give participants chance to review the problems and challenges faced by the field functionaries and to work out the possible solutions for improving.

1.3 Training Tools: Laptop, Projector, Camera, white board, Training manual, Pen, Notebook and file.

2.1 INNUGURATION SESSION:

The 5 days training programme was successfully conducted at SAMETI Conference Hall Medziphema. The innugural programme was held on 7th October 2019 at 10:00 AM, with, I. Lipokonon Jamir PIT, FOCUS as the chairperson where he welcomed all the delegates and participants. He also presented the overview of the FOCUS project. Dr. Alemla Director, SAMETI and Vice principle IETC was the Chairman. Ms S. Tianiu Jt. Secretary and SPD FOCUS, Dr. Thakuria, FAO National consultant, delivered Short speeches where they thanked all the participants and highlighted the importance of the training programme. All together there were 22 participants from ATMA, IETC and State Agriculture Department attended the training programme with four resource persons Prof. Dr. Thakuria, Prof. Dr. Thongpang Longkumer, Mr. Ruokuosietuo and Ms. Imtimongla and two members from PMU-FOCUS, Mr. Lipokonon PIT-FOCUS and Mr. Rukuosietuo Kuotsu, Manager-KM.

2.2 TECHNICAL SESSION:

The Technical session was for five days with high participation from the participants in discussion and interaction to gain knowledge from the highly qualified, knowledgeable and experienced

resource who came for the technical session. There was laboratory visit to State Bio Control lab and Bio-Fertilizer lab. The training scheduled and topics are given in ANNEXTURE-1.

2.3 VALEDICTORY AND THANKSGIVING: The training programme ended with distribution of evaluation sheet where the trainers gave their understanding and the knowledge they have learned. Dr. Amenla Director SAMETI and Vice principal IETC in her valedictory speech encouraged all the master trainers to disseminate the knowledge to the farmers what they have gained from this training. Lastly, Mr. Rukuosietuo Kuotsu delivered the vote of thanks.

3. MAJOR OBSERVATIONS MADE BY FAO TEAM.

While conducting the five-day training workshop for master trainers on Agronomy and TRC, the FAO team also made some observations on the training atmosphere and reaction of the participants:

- 1) All participants from all 8 districts were participated actively in the whole discussion process till the last day and were enthusiastic to learn more how they can give solution to their farmers.
- 2) Facilitation by trainers and visualization tools, such as photographs, videos, papers, etc., can greatly encourage the participation of the trainees, especially the trainees from the village level.
- 3) Through the interactive participation in the group case study and practice, trainees could think about all related issues about their own field functionalities and obtained some agreement by discussion with other trainees;
- 4) With the presentation, both trainees and trainers have a clear picture about importance of Agronomy and TRC in this project.
- 5) They were also clear about the role and importance of FAO in FOCUS project.

ANNEXURE 1:

Registration: 30 Minutes prior to commencement of training program

Duration	Time	Topics	Method	Trainer
DAY 01				
30 minutes	10.00 to 10.30	Inauguration		
60 minutes	10.30 to 11.30	Diversity on Jhum practices and jhumming philosophy	Lecture and interaction	Dr. D. Thakuria Presentation
15 minutes	11.30 to 11.45	Tea break		
75 minutes	11.45 to 13.00	Soil sampling procedure, soil health analysis, interpretations and recommendations	Lecture and interaction	Dr. D. Thakuria Presentation and demonstration
60 minutes	13.00 to 14.00	Lunch break		
60 minutes	14.00 to 15.00	Knowhow about enriched composting technology	Lecture and interaction	Dr. D. Thakuria Presentation and demonstration
15 minutes	15.00 to 15.15	Tea break		
45 minutes	15.15 to 16.00	Cultivation practices of leguminous hedgerow crops	Lecture and interaction	Dr. Longkumar Presentations and discussion

		and their utilization as green manures		
60 Minutes	16.00 to 17.00	Nutrient Management through Azolla and other green manuring plants	Lecture and interaction	Dr. Jurisandha Barik Presentations and discussion

DAY 02				
30 minutes	10.00 to 10.30	Recap/feedback by selected participants	5 minutes per participant	Dr. D. Thakuria
60 minutes	10.30 to 11.30	Introduction of organic farming principles in jhum farming	Lecture and interaction	Dr. D. Thakuria Presentations
15 minutes	11.30 to 11.45	Tea Break		
75 minutes	11.45 to 13.00	Soil management principles in organic jhum farming: carbon and nutrient management	Lecture and interaction	Dr. D. Thakuria Presentations by trainer; Open house discussions on indigenous practices
60 minutes	13.00 to 14.00	Lunch break		
45 minutes	14.00 to 14.45	Types of biofertilizers and its applications (seed and root treatment and foliar application)	Lecture and interaction	Dr. D. Thakuria Lecture and method demonstration
15 minutes	14.45 to 15.00	Tea Break		
150 minutes	15.00 to 17.30	Types of biofertilizers and its applications (seed and root treatment and foliar application)	Lecture and interaction	Dr. D. Thakuria Lecture cum method demonstration

DAY 03				
30 minutes	10.00 to 10.30	Recap/feedback by selected participants	5 minutes per participant	Dr. D. Thakuria
60 minutes	10.30 to 11.30	Biopesticides and its application methods	Lecture and interaction	Dr. D. Thakuria Presentations and demonstration
15 minutes	11.30 to 11.45	Tea Break		
75 minutes	11.45 to 13.00	Enriched compost and vermicompost preparation method demonstration	Interaction	Dr. Lahar Bordoloi <i>In-situ</i> demonstration
60 minutes	13.00 to 14.00	Lunch break		
60 minutes	14.00 to 15.00	Improved crop cultivation practices of upland rice, maize and millets (Package of practices)	Lecture and interaction	Dr. Longkumar Tong Presentations and discussions on indigenous practices
15 minutes	15.00 to 15.15	Tea Break		
45 minutes	15.15 to 16.00	Site Selection for vegetables and spices nursery, land and nursery bed preparation,	Lecture and interaction	Dr. Longkumar Tong

		Sourcing of planting materials, seed/seedling treatment and sowing/planting		Presentations and discussions on indigenous practices
60 minutes	16.00 to 17.00	Improved weed management practices suitable to organic farming mode	Lecture and interaction	Dr. Long kumar Tong Presentation and discussions on indigenous practices

DAY 04				
30 minutes	10.00 to 10.30	Recap/feedback by selected participants	5 minutes per participant	Dr. D. Thakuria
60 minutes	10.30 to 11.30	Integrated Pest and Disease Management (IPDM)	Lecture and interaction	Dr. D. Thakuria Lecture and Discussion
15 minutes	11.30 to 11.45	Tea Break		
75 minutes	11.45 to 13.00	Post-harvest management		Invited Expert Presentation and discussions on low-cost traditional storage practices
60 minutes	13.00 to 14.00	Lunch break		
60 minutes	14.00 to 15.00	Marketing of organic jhum produce	Interaction with market players	Invited Expert Presentation and discussions
15 minutes	15.00 to 15.15	Tea Break		
45 minutes	15.15 to 16.00	Agro-forestry principles of Jhum fallow management (basis of selection of fruit trees, medicinal plant garden, fast growing timber trees, etc.)	Lecture and interaction	Dr. Imtimongla Presentation
60 minutes	16.00 to 17.00	Agro-forestry principles of Jhum fallow management (basis of selection of fruit trees, medicinal plant garden, fast growing timber trees, etc.)	Lecture and interaction	Dr. Imtimongla Presentation and discussions on indigenous practices

DAY 05				
30 minutes	10.00 to 10.30	Recap	5 minutes feedback by selected participants	Dr. D. Thakuria
60 minutes	10.30 to 11.30	Earning income from fallow phase and biodiversity conservation	Lecture and interaction	Dr. D. Thakuria Presentation and discussion

15 minutes	11.30 to 11.45	Tea Break		
75 minutes	11.45 to 13.00	Improved terrace rice cultivation (varieties, seed bed preparation and management, seedling treatment, intercultural operations, soil management and harvesting)	Lecture and Interaction	Dr. Longkumar Tong Presentation and discussions on indigenous practices
60 minutes	13.00 to 14.00	Lunch break		
60 minutes	14.00 to 15.00	Improved terrace rice cultivation (varieties, seed bed preparation and management, seedling treatment, intercultural operations, soil management and harvesting)	Lecture and interaction	Dr. Longkumar Tong Presentation and discussions on indigenous practices
15 minutes	15.00 to 15.15	Tea Break		
75 minutes	15.15 to 16.30	Small implements and tools suitable to hill agriculture	Lecture and interaction	Dr. D. Thakuria Presentations and discussions on indigenous items
30 minutes	16.00 to 17.00	Valediction and evaluation		

ANNEXURE-2

LIST OF PARTICIPANTS			
Sl. No	Name of participants	Designation and Address	Contact Number
1	Imtimongla	FAO-National Consultant	9862141679
2	Prof. Dr. D. Thakuria	FAO-National Consultant	8787343877
3	Phrumalia	SDAO Kiphire	9862930430
4	Rokuotuonuo Phria	ATM-ATMA Kohima	9862733579
5	Selila	A.I-DAO, Kiphire	9612885395
6	Toshirenla T. Longkumer	ATM-ATMA Mokokchung	8730016135
7	C. Amei Phom	A.O-DAO Longleng	8837355183
8	Tracy Mozluri	ATM Wokha	9402016017
9	Neikieto Tsukru	AI-Chephobozou, Kohima	8249023498
10	Mhasikhotuo Mere	A.O-Kohima	7005856368
11	Kakiho. H	ATM-Zunheboto	7085180244
12	N. Chingin	AO-SDAO Tizit	8729874162
13	Daniel Konyak	AO-DAO Mon	9612756497
14	Limasunep Jamir	AI-DAO Zunheboto	7005381478
15	Langnyei Amen	ATM-ATMA Mon	8787396230
16	Bendangkumzuk Walling	ATM-ATMA, Longleng	8837015950
17	Thechano T. Ezung	AFA-DAO, Wokha	9862815926
18	Kevizhalhou Kuotsu	AO, IETC	9862674119
19	Imsu Jamir	AO-Tuli	7085104483

20	Imtitemsu	AO-DAO, Mokokchung	8413094731
21	I. Lipokonen Jamir	PIT	9436076786
22	Rukuosietuo Kuotsu	Manager-KM	8794432301
23	Bongkam Phom	AO-DAO, Longleng	8730887239
24	Zuthonglo	AI-DAO Wokha	7005735829
25	Benoto Kiba	AO-DAO Zunheboto	8837447622
26	Alex Meyase	AO-SDAO Pfutsero	8729877144
27	Jacob	AO-SDAO Chuzuba	9774001954

4. PHOTO GALLERY



During Photo session and Training hall at SAMETI Medziphema



State Laboratory visit at BIO-CONTROL Lab at Medziphema



Technical session and Valedictory Photograph

5. THE OUTLINE OF THE TRAINING MANUAL

i) Innovation of different cropping pattern practices of shifting cultivation in Nagaland.

Dwipendra Thakuria and Sapu Changkija

ii) Cultivation Practices of Leguminous Hedgerow Crops and their Utilization as Green Manures.
Dr. L. Tongpang Longkumer, Professor Dept. of Agronomy, NU: SASRD.

iii) Knowhow about enriched composting technology. *Dwipendra Thakuria and Laharjyoti Bordoloi.*

iv) Soil sampling procedure, soil health card, its interpretations and recommendations. *Dwipendra Thakuria*

v) Cultivation of Millets. Prof. (Dr.) L. Tongpang Longkumer Dept. of Agronomy NU: SASRD

vi) Weed Management Practices In Organic Farming. Dr. L. Tongpang Longkumer Dept. of Agronomy, NU: SASRD

vii) Liquid biofertilizers for mixed crops of *Jhum* fields. *Dwipendra Thakuria*

viii) Azolla and other green manuring crops as a way of carbon and nutrient management in terrace rice fields. *Dwipendra Thakuria and Jurisandha Barik Bordoloi*

ix) Seedling root-dip method of nutrition management in rice-vegetable rotation on terrace rice fields. *Dwipendra Thakuria*

x) Improved Cultivation of Maize (*Zea Mays L*) Dr. L. Tongpang Longkumer, Professor Dept. of Agronomy, NU: SASRD.

xi) An Introduction to Agro-Forestry Principles of *Jhum* Fallow Management. Ms Imtimongla

xii) Nursery Management. *Dr. L. Tongpang Longkumer, Professor Dept. of Agronomy, NU: SASRD*

xiii) Biofertilizers and its applications. *Dwipendra Thakuria*

xiv) Upland Rice Cultivation Technology *Dr. L. Tongpang Longkumer, Professor Dept. of Agronomy, NU: SASRD*

xv) *Biocontrol of plant disease under organic farming. Dwipendra Thakuria*

xvi) *On farm production of entomopathogenic fungi. Dwipendra Thakuria*

xvii) Information on Important Tree Species. *Ms. Imtimongla*

xviii) *Post Harvest Management of Organic Produce. Dr. L. Tongpang Longkumer, Professor Dept. of Agronomy, NU: SASRD*

xix) *Farm Mechanization in Shifting cultivation. Dwipendra Thakuria.*