## Republic of the Union of Myanmar Ministry of Natural Resources and Environmental Conservation Forest Department





"Training on Tree Seed Technology and Nursery Practices"

**Completion Report** 

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# "Training on Tree Seed Technology and Nursery Practices" Completion Report

#### Introduction

- 1. The Project title "Integrated forest ecosystem management and demonstration project in greater Mekong sub-region (Myanmar), Myanmar Component is being implemented by the Forest Research Institute, Forest Department and the Asia-Pacific Network for sustainable forest management and rehabilitation (APFNet) with five year plan. The three specific objectives are: (1) To conserve and improve forest germplasm resources through construction of Arboretum in FRI; (2) To demonstrate integrated watershed management practice in Paung Laung Watershed; and (3) To enhance the capacity and knowledge of local community, local government and staff through capacity building programs.
- 2. Total 14 times of training will be held during 5 years of project period. In accordance with the training activities: course on Seed technologies and nursery practices which was mainly focused on the capacity building and participation of local villagers of the project area for integrated watershed forest conservation. Therefore, this training was held to train the basic knowledge of tree seed handling methods, propagation and nursery management for the successful integrated watershed conservation processes.

#### **Objectives**

- 3. The objectives are as follows-
  - (1) To train the tree seed handling methods such as seed collection, seed extracting, cleaning, conditioning and seed storage.
  - (2) To provide a basic understanding of forest tree propagation and nursery management
  - (3) To enhance their knowledge on development of forest nursery and techniques involves in forest nursery management.

#### **Training Period**

4. Training was held during June 28, 2021 to July 1, 2021 for 4 days.

### **Training Place**

5. Training was held at Auditorium, Seed Laboratory and Nursery of Forest Research Station at the Forest Research Institute.

#### **Opening/ Closing Ceremony**

6. Opening/ closing ceremony will be attached in appendix (1-1) and (1-2).

#### **Invited Persons**

7. Invited persons will be attached in appendix 2.

#### **Training Courses**

- 8. Training time table will be attached in appendix (3) and training courses are as follows-
  - (1) Introduction on Seed Technologies (Lecture, Lab demonstration and practice)
  - (2) Brief on Seed and their treatments (Lecture, Lab demonstration and practice)
  - (3) Brief on Nursery Management and Plant Propagation (Lecture, Field demonstration and practice)
  - (4) Soil improvement & Fertilizer application (Lecture, Lab demonstration and practice)
  - (5) Brief on Pest Management (Lecture)

#### **Trainers**

9. The list of trainers and their respective subjects which lectured at the training are listed as follows;

No.	Subjects	Trainers
1.	Introduction on Tree Seed Technology	Dr. Mu Mu Aung, Research officer, Forest Research Institute
2.	Brief on Seed and their treatments	Daw Tin Tin Mu, Assistant Research officer, Forest Research Institute
3.	Brief on Nursery Management and Plant Propagation	Daw Swe Swe Win, Assistant Researcher, Forest Research Institute
6.	Soil improvement & Fertilizer application	Daw Swe Swe Htun, Assistant Research officer, Forest Research Institute
7.	Pest management	Daw Tin Tin Mu, Assistant Research officer, Forest Research Institute
8.	Practical demonstration and field work	Dr. Mu Mu Aung, Daw Tin Tin Mu and Daw Swe Swe Win and Daw Swe Swe Htun, Forest Research Institute

#### **List of Trainees**

10. 20 trainees: Local villagers from the project area where located at the Lainli village, Pinlaung Township, Shan State, attended in this training.

#### **Cost for Training**

11. Training cost was funded by the integrated forest ecosystem management and demonstration project in greater Mekong sub-region (Myanmar), APFNet.

#### **Invitation letters**

12. Invitation letters and confirmation letters were communicated by using telephone.

### **Preparing Ceremony**

13. Backdrop preparation, social distancing seating plan, setting up for COVID-19 prevention, video camera preparation and audio devices arrangement were prepared by the staffs of Forest Research Institute, Yezin. Backdrop sample will be attached in appendix (5).

### Hospitality

14. Hospitality including opening ceremony and closing ceremony were arranged by the staffs of Forest Research Institute, Yezin.

#### **Documentary**

- 15. Photo documentory and training records were taken by Project Assistant of FD- APFNet (IFEM) Project.
  - (1) Making name list. Group of recording name list was making the attendence of trainees and giving the update information of training.
  - (2) Documentary. Group of documentary was taking photos, note records and writing completion report.

#### Preparing for COVID- 19 Prevention

- 16. Prevention procedures are as follows-
  - Washing hands
  - Taking body temperature
  - Using face masks and wasting face masks systematically into the bin
  - Using face shields
  - If one of the trainees were ill, he/ she should take to nearest clinic or hospital and should be obey the procedures of COVID-19 prevention.
  - To stay social distancing about 6 feet from each to each.

#### **Teaching Topics**

- 17. In the training, trainers presented their lectures with power-point and provided training materials such as seed technologies manual book, practical equipment in order to get inclusively active participation from all trainees and well understanding on the subjects. During the training course, lecture, group discussions, lab practical and field work were conducted at the Seed Lab, Forest Nursery of Forest Research Station No. (4) Yezin and Arboretum at the Forest Research Institute Campus.
- 18. The emphasis in this course was focused on indigenous multipurpose tree species suited for watershed area management and conservation how to conduct and manage the systematic of matured seed collection, extraction, cleaning, storage and test of germination. The trainers gave the lecture to trainees to get experience of practical work for plant propagation methods, seedlings care and maintenance, and lecture on "Soil improvement & Fertilizer application" soil profile, forest soil types in Myanmar, types of soil erosion and drivers and, biological and engineering soil conservation measures and how to apply the fertilizer, how to control and manage the pests and diseases in the nursery. The training documentary photos will be attached in appendix (6).

### Conclusion

19. Integrated forest ecosystem management and demonstration project in greater Mekong sub-region (Myanmar), APFNet is targeting to encourage the local villagers of project area and local forest staffs of the knowledge of integrated watershed management. In this training, it is one of the project activities, **Training on Tree Seed Technology and Nursery Practices** by forest tree species which is the first and very important conservation activities for watershed areas, trained local community, some as they are, and others with some more practice, can undertake for the successful integrated watershed conservation processes.

# "Training on Tree Seed Technology and Nursery Practices"

## **Agenda for Opening Ceremony**

Date: 28.6.2021 (Monday)

Time: 08: 00- 08: 30 AM

Place: Auditorium, Forest Research Institute, Yezin

No.	Time	Agenda
1	08: 00- 08: 30	Agenda for Opening Ceremony
		(1) Announcement for opening ceremony
		(2) Opening speech delivered by Dr. Nyi Nyi Kyaw, Director General
		of Forest Department
		(3) Announcement of ending for opening ceremony
		(4) Photo Session
		(5) Refreshment

## Appendiz (1-2)

# "Training on Tree Seed Technology and Nursery Practices"

## **Agenda for Closing Ceremony**

Date: 1.7.2021 (Thursday)

Time: 15: 00- 15: 30 PM

Place: Auditorium, Forest Research Institute, Yezin

No.	Time	Agenda				
1	15: 00- 15: 30	Agenda for Closing Ceremony				
		(1) Announcement for opening ceremony				
		2) Closing Remarked by Dr. Nyi Nyi Kyaw, Director General of				
		Forest Department				
		(3) Awarding the certificates				
		(4) Announcement of ending for closing ceremony				
		(5) Refreshment				

# Appendix (2)

# "Training on Tree Seed Technology and Nursery Practices"

# **Invitated Persons**

	Name	Department	Number
1	Director General, Deputy Director General, Director, Deputy Directors, Assistant Directors	Forest Department and Forest Research Institute	16
2	Trainees	Local villagers, Lainli village, Pinloung Township, Shan State	20
	Total	36	

## Appendix (3)

# "Training on Tree Seed Technology and Nursery Practices Techniques"

# Training Courses and Time Table (28.6.2021 to 1.7.2021)

Date/Time	08:00-	09:00-09:50	10:00-10:50	11:00-11:50	13:00-13:50	14:00-14:50	15:00-17:00	18:30-
	08:30	09.00-09.30	10.00-10.30	11.00-11.30	13.00-13.30	14.00-14.50	13.00-17.00	19:30

Monday (28-6-2021)	Opening Ceremony	Introduction on Tree Seed Technology (Lecture) (Dr. Mu Mu Aung)		Brief on Seed and their treatments (Daw Tin Tin Mu & Daw Swe Swe Win)	
Tuesday (29-6-2021)	Seed Handling Techniques (Lab Demonstration) (Dr. Mu Mu Aung, Daw Tin Tin Mu & Daw Swe Swe Win)		Mu Mu Aung, Daw Tin Tin Mu & Daw Swe Swe Win)  (Lab Demonstration & Practical work) (Daw Tin Tin Mu & Daw Swe Swe Win)		Dinner
Wenesday (30-6-20210	Field Work & Nursery Practices (Dr. Mu Mu Aung, Daw Tin Tin Mu & Daw Swe Swe Win)		reak	Soil Improvement & Fertilizer Application (Lecture & Demonstration) (Daw Swe Swe Htun)	
Thursday (1-7-2021)	Field work & Pest Management (Lecture ) (Daw Tin Tin Mu & Daw Swe Swe Win)			Closing Ceremony	



# သယံဇာတနှင့်သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာန သစ်တောဦးစီးဌာန

# သင်တန်းဖွင့်ပွဲအခမ်းအနား ဖိတ်ကြားခြင်း

"သစ်မျိုးစေ့များ စနစ်တကျ စုဆောင်းခြင်း၊ သိုလှောင်ခြင်း၊ အညှောင့်ဖောက် ခြင်းနှင့်

ပျိုးပင်များ ပြုစုထိန်းသိမ်းခြင်းနည်းပညာ အထောက်အကူပြုသင်တန်း"

ဖွင့်ပွဲအခမ်းအနားကို အောက်ဖော်ပြပါ အစီအစဉ်အတိုင်း ကျင်းပပြုလုပ်မည်ဖြစ်ပါသဖြင့်

ကြွရောက်ချီးမြှင့်ပါရန် လေးစားစွာ ဖိတ်ကြားအပ်ပါသည်။

နေ့ရက် -၂၀၂၁ ခုနှစ်၊ ဇွန်လ၂၈ ရက် (တနင်္လာနေ့)

အချိန် - နံနက် (၀၈:၀၀) နာရီမှ (၀၈:၃၀) နာရီအထိ။

နေရာ - စုဝေးခန်းမ၊ သစ်တောသုတေသနဌာန၊ ရေဆင်း



# သယံဧာတနှင့်သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာန သစ်တောဦးစီးဌာန

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အချိန် - နေ့လည် (၁၅:၀၀) နာရီမှ (၁၅:၃၀) နာရီအထိ။

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၂၈-၆-၂၀၂၁ ရေဆင်း သစ်တောသုတေသနဌာန၊



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# သင်တန်းဆင်းပွဲအခမ်းအနား

၁-၃-၂၀၂၁

သစ်တောသုတေသနဌာန၊ ရေဆင်း



Opening speech delivered by Dr. Nyi Nyi Kyaw, Director General of Forest Department



**Invited Persons, Trainers and Trainees at the Opening Ceremony** 



Lecture by Dr. Mu Mu Aung



**Lecture by Daw Tin Tin Mu** 



**Lab Demonstration** 



**Lab Demonstration** 



**Practical Work** 



**Practical Work** 



Nursery Practice



Nursery Practice



Nursery Practice



Nursery Practice



Field work at Arboretum



Field work at Arboretum



Closing Remarked by Dr. Nyi Nyi Kyaw



**Invited Person, Trainers & Trainees** 



**Awarding Certificate** 



**Awarding Certificate** 





**Display at Closing Ceremony**