

TRAINING REPORT

No.: /85.../NAMCSSTC/XI/2022

5 DAY COCONUT REPLANTING PROGRAMME

October 11 – 15, 2022

Viqueque District – Timor-Leste

October 2022, The Government of the Republic of Indonesia contributed to the creation of this training report through the funding to Non-Aligned Movement Centre for South-South Technical Cooperation. The content of this report is solely the responsibility of the NAM CSSTC and does not represent the collective views of all the "Coconut Replanting Program" implementing agencies.

TABLE OF CONTENTS

I. BACKGROUND	1
II. TRAINING OBJECTIVES	1
III. PARTICIPANTS' PROFILE	2
IV. RESOURCE PERSONS' PROFILE	2
V. VENUE AND DATE	2
VI. PROCEEDINGS	3
SESSION I: PLANT BREEDING FOR COCONUTS	3
SESSION II: FIELD PRACTICE – INTRODUCTION OF COCONUT VARIETIES	3
SESSION III: FIELD PRACTICE - COCONUT CULTIVATION TECHNOLOGY	3
SESSION IV: FIELD PRACTICE – TECHNOLOGY TO CONTROL MAJOR PEST AND	
DISEASES OF COCONUT	4
SESSION V: THEORY AND FIELD PRACTICE - COCONUT CULTIVATION TECHNOLO	
SESSION VI: THEORY AND FIELD PRACTICE – TECHNOLOGY TO CONTROL MAJOR PEST AND DISEASES OF COCONUT	
EVALUATION	
CERTIFICATE DISTRIBUTION	5
VII. TRAINING EVALUATION	5
TRAINING EVALUATION:	5
EVALUATION FOR NAM CSSTC AND EXPERTS:	6
VIII. LESSONS LEARNT AND BEST PRACTICES	7
IX. RECOMMENDATIONS	8
ANNEXEC	0

I. BACKGROUND

NAM CSSTC organised a five-day training titled "Coconut Replanting Programme" in collaboration with the Government of the Republic of Indonesia, Dem. Rep. Timor-Leste, the International Coconut Community (ICC), and the Embassy of the Republic of Indonesia (KBRI) in Dili, hosted in Viqueque District, Timor-Leste, from October 11 to 15, 2022. This training was attended by 44 people from various institutions (see attachment list of organisations).

The following are the results of this training:

- a. Increased coconut production from Timor-Leste to meet the global market;
- b. More detailed and routine record in Timor-Leste coconut farm business operation;
- c. Participants' ability to train youth in order to pique their interest in the coconut sector;
- d. Preservation and plantation of elite coconut varieties in Timor-Leste.

The training methodology is interactive, with the trainers attempting to ensure that knowledge is disseminated as well as accurately received and understood by the participants. To that end, the organisers and trainers are doing the following:

- a. Theoretical and practical session on coconut planting principles; (1) Strategies for Replanting Senile palms with Improved Varieties; 2) Selection of coconut farms; 3) Sourcing and selection of planting materials / elite coconut varieties; GAP, IPM;
- b. Theoretical and practical session on farm & palm management;
- c. Theoretical and practical session related to coconut hybrid;
- d. Evaluation to collect feedbacks submitted to the organisers.

II. TRAINING OBJECTIVES

This training has the following goals:

- a. Participants understand the economic, social, and environmental benefits of coconut, as well as the need to increase coconut production to meet the growing demand for coconut-based products;
- b. Develop practical skills and the ability to replant old/unproductive coconut palms with improved varieties;
- c. Participants understand the contribution of Southeast Asian countries to the global coconut market;
- d. Participants understand the importance of records in coconut farm business operation;
- e. Participants can identify the type of coconut fruits that meet market expectations;

- f. Participants can compare the economic and socio-environmental benefits of coconut farming to other farming;
- g. Participants can survey and identify elite coconut varieties in farmers' fields.
- h. Participants know concept and practical aspects of Good Agricultural Practices (GAP)
- i. Encourage the Timor-Leste's government to prioritise coconut as a national priority programme.

III. PARTICIPANTS' PROFILE

Participants in the training include representatives from the government of Rep. Dem. Timor-Leste, extension workers, cooperative actors, and coconut farmers. The total number of participants from Timor-Leste institutions was 44.

IV. RESOURCE PERSONS' PROFILE

The session was facilitated by a team of experts comprised of two members of the National Research and Innovation Agency and one member of the Indonesian Ministry of Agriculture. The trainers and the sessions they each supervise are described in the table below.

#	Name	Designation	Session Title
1	Dr. Meldy Leonardy Anderson Hosang	Senior Researcher National Research and Innovation Agency	Technology to control major pest and diseases of coconut
2	Dr. Ir. Ismail Maskromo, M.Si	Associate Scientist National Research and Innovation Agency	 Plant breeding for coconuts Introduction of coconut varieties
3	Yulianus Rompah Matana, SP, M.Si	Junior Scientist Indonesia Palm Crops Research Institute	Coconut cultivation technology

V. VENUE AND DATE

The training took place in the Viqueque District from October 11 to 15, 2022.

VI. PROCEEDINGS

DAY 01

SESSION I: PLANT BREEDING FOR COCONUTS

Participants in this session were given an overview of coconut plant breeding. Experts and participants discussed general issues in coconut cultivation as well as the productivity characteristics of each coconut variety. The discussion was interactive because the experts used various instant questions delivered orally to test the participants' knowledge of coconut cultivation. Participants also asked questions about aspects of coconut plant breeding that still require more in-depth explanation.

DAY 02

SESSION II: FIELD PRACTICE – INTRODUCTION OF COCONUT VARIETIES

The learning location was changed in this session to a plantation owned by a Timorese citizen. The participants were divided into four groups by experts. Each group was asked to find a number of coconut trees in the plantation that met the initial criteria for being designated as parent trees. Each group was successful in identifying the trees that produce the most fruit based on the criteria for the parent tree, but because the number of productive trees in the plantations used as objects did not meet the requirements, the results of participant identification indicated that the plantations were not suitable for plantationing locations, source of seeds.

There are more unproductive trees because the spacing is too close, causing one tree's need for sunlight and other nutrients to be taken up by another.

SESSION III: FIELD PRACTICE - COCONUT CULTIVATION TECHNOLOGY

This session remains on the same plantation as session 2. Nursery techniques are demonstrated by experts using practical tools brought from Indonesia, such as modified sack covers and spray tools for nurseries. Experts emphasise the importance of discipline in the nursery process, including time commitment, both in terms of routine spraying of sprays or protection of coconut flowers from pests entering the sack cover, one of which is ensuring that the sack has no holes in it.

SESSION IV: FIELD PRACTICE – TECHNOLOGY TO CONTROL MAJOR PEST AND DISEASES OF COCONUT

This session is still being held on the same plantation. Experts lead focused discussions to assist participants in identifying common plant pest and disease issues in Timor-Leste's coconut plantations. Participants identified rats as the most serious threat, and experts provided advice on how to control rat pests. Furthermore, experts provide recommendations for controlling pests and other coconut plant diseases that can attack and disrupt coconut plant productivity.

DAY 03

SESSION V: THEORY AND FIELD PRACTICE - COCONUT CULTIVATION TECHNOLOGY

The learning method is applied partially in theory and partially in field practise during this session. The experts provided insight into coconut cultivation technology after giving a demonstration on day 2. Participants and experts collaborate to prepare nursery sites, which include cultivating activities, nursery construction, and security. Following that, nursery activities were carried out.

SESSION VI: THEORY AND FIELD PRACTICE – TECHNOLOGY TO CONTROL MAJOR PEST AND DISEASES OF COCONUT

Participants first received a more in-depth theory on the control of pests and diseases in coconut plants. The discussion includes the introduction of various types of coconut pests, identification of how most plant pests found in Indonesia are also found in Timor-Leste, how they reproduce, and what the symptoms of plants attacked by these pests are. In terms of the practical session, demonstrations were given on how to install various tools that can be used as pest control methods, such as pheromone traps.

DAY 04

EVALUATION

Participants are asked to complete an evaluation form developed by NAM CSSTC in order to assess the effectiveness and efficiency of the training implementation. The evaluation sheet consists of 24 questions with a rating scale of 0-4, and 41 people participated in the evaluation until October 14, 2022, out of a total of 44 people.

DAY 05

CERTIFICATE DISTRIBUTION

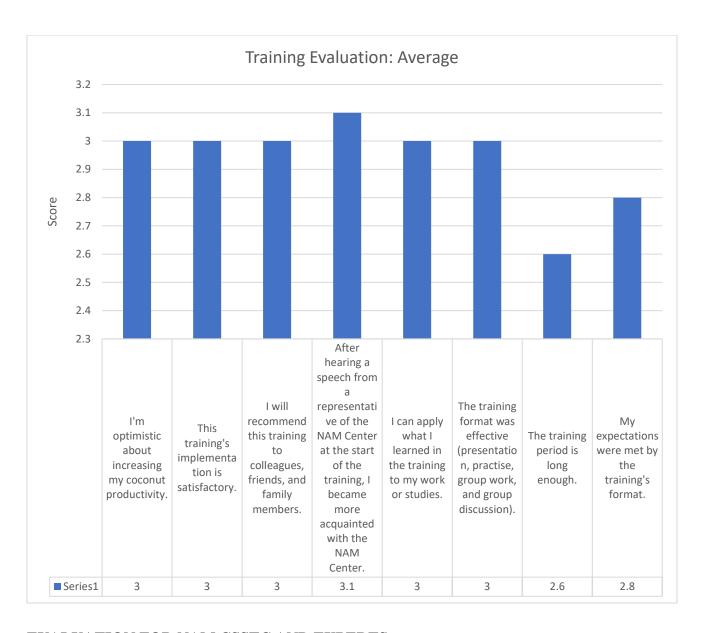
On the fifth day, physical certificates with participant names are distributed. There are 41 physical certificates available. Certificates were given in digital form to three participants who did not participate in the evaluation session.

VII. TRAINING EVALUATION

To facilitate the data processing process, evaluation is done electronically. The aspects that were evaluated were related to the training's implementation and the role of the NAM CSSTC in the training.

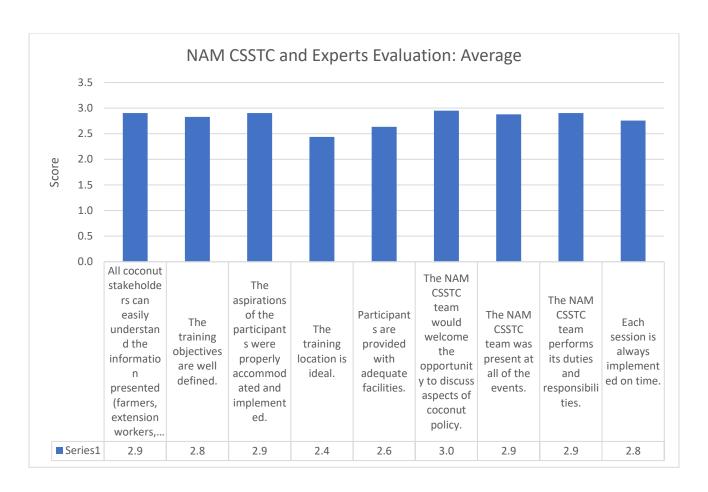
TRAINING EVALUATION:

On a questionnaire, participants were asked to rate each question on an 0-4 scale. In general, it can be stated that 84 percent of participants gave a score of 4.0. According to the questionnaire, the highest average (3.1) was obtained in relation to how the training increased participants' familiarity with Non-Aligned Movement (NAM). This is followed by other indicators with an average of three, which are participants' optimism in increasing coconut productivity after participating in the training, satisfaction with the training's implementation, desire to recommend training to relevant stakeholders, confidence in being able to apply the material learned, and the effectiveness of the training format.



EVALUATION FOR NAM CSSTC AND EXPERTS:

In general, it can be stated that 77 percent of participants gave a score of 4.0. The highest average score (3.0) is given for the NAM CSSTC's openness in discussions about coconut policy, followed by an average score (2.9) for indicators such as the ease with which information can be absorbed by participants from various backgrounds, the level of accommodating to participants' aspirations, the presence of the NAM CSSTC team throughout the activity, and the NAM CSSTC team's integrity in carrying out their duties and responsibilities.



VIII. LESSONS LEARNT AND BEST PRACTICES

- The training's opening session serves an important purpose in helping participants connect with the organisers more closely, so the content of the opening text can influence how participants feel about the organizers.
- Open discussions in training increase participants' interest and engagement, one of which is to keep participants focused, so that participants gain different perspectives on the topics discussed through deeper thinking.
- The duration of the training has a significant impact on the success of achieving the learning objectives; therefore, it is critical to adhere to the general guidelines for the duration of the training, which is a minimum of 5 days in length and packed with theoretical and practical sessions every day; if a special day is required for the evaluation and distribution of certificates, the total duration should be at least 7 days.
- The location of the plantation where the field practise is located is an important concern for experts and participants, as the plantation that is the location for field practise does not yet have the potential as a seed plantation; thus, in order to prevent similar incidents in the future, it is necessary to have intense communication with the local committee regarding general and specific criteria for the location of the field practice. Another option is to conduct the training in Indonesia, where

several pilot plantations have been identified under the supervision of the Indonesian Ministry of Agriculture.

IX. RECOMMENDATIONS

The majority of participants suggested additional training, specifically training on tissue culture techniques for coconut plants.

ANNEXES

ANNEX I: LIST OF PARTICIPANTS' ORGANISATIONS

- 1. AICAT;
- 2. Kementerian Pertanian dan Perikanan Timor Leste;
- 3. Koperativa CCTM;
- 4. Servisu Municipal Agricultura Viqueque;
- 5. Individuals.

ANNEX II: PARTICIPANTS' LIST

Organisers of "Coconut Replanting Programme"

FINAL PARTICIPANT LIST

Date 11-15 October 2022

Viqueque District, Timor-

Organisation	Full Name	Position
AICAT	Jorge Luis Fernandes Soares	Cordenador locao
AICAT-TL	Miguel da Costa	Meneger Program
Asosiasaun Alumni AICAT	Jonelio Albino da Cruz	Xefi Divizaun Pekuaria
Asosisasi Alumni AICAT Timor Leste	Bartolomeu dos Reis SOARES	Teknik Profesional
Ass.Alumi AICAT	Leopodina Sarmento	Tec.professional
Ass.Alummi AICAT	Martianus Soares Amaral	Teknik
Ass.Alumni AICAT	Faviola gama gusmao	Sekretaris
Assosiasaun Alumi AICAT Timor Leste	Angelina Gusmao Gomes	Teknik profesional
Assosiasaun Alumi AICAT Timor Leste	Moises Amaral	Kordenador Lokal
Assosiasaun Alumi AICAT Timor-leste	Elvia Cai-Butin pereira	Vice divizaun hortikultura

FINAL PARTICIPANT LIST

Date 11-15 October 2022

Viqueque District, Timor-

Organisation	Full Name	Position
Assosiasaun Alumni Aicat	Delfi Sila	Teknik profesional
Assosiasaun Alumni AICAT - Timor Lorosa'e	Baltazar Costa da Cunha Soares	President Assosiasaun
Assosiasaun Alumni AICAT Timor Leste	Jaime Almeida Amaral	Chefy Divizaun Frutas
Assosiasaun Alumni AICAT-TL	Ananias Zacarias dos Santos	Wakil president of Ass.AAICAT-TL
David	David Soares	Staff Agribisnis
Draiver Assosiasaun Alumi AlCAT	Salvador soares	Draiver
Francisco Viana	Francisco viana	Extensionista
Kementerian Pertanian dan Perikanan Timor Leste	Joao Rui Pinto	Chief department
Kementerian Pertanian Dan Perikanan, Direktorat Nasional Penelitian Dan Statistik, Timor Leste.	Inacio Savio Pereira	Staff (Breeder Kacang Hijau)
Kementrian Pertanian dan Perikan Timor Leste	Marcos Correia Vidal	Peneliti

FINAL PARTICIPANT LIST

Date 11-15 October 2022

Viqueque District, Timor-

Organisation	Full Name	Position
Koperativa CCTM	Jelaurina Nunes fernandes	Directora
Kordenador Alumi AICAT Timor Leste	Juliao Baptista	Kordenador Local
МАР	Bendita Xavier Moniz	Staff Agri Business
MAP	Evodia Fernandes Quintão	Staf Agribisnis
МАР	Luis Pereira, M. Sc	KEPALA DEPARTMENT
MAP	Erlinda da Costa	Staf
MAP	Domingos Maia de Araujo	Staff Agribisnis
MAP	Adelina Soares	Extensionista
MAP VIQUEQUE	Manuel da Cruz de Jesus	Tekniko polantas industrias
MAP Viqueque	Helena Soares	Teknik plantas Industrais
MAP Viqueque	Emilio Gomes	Extensionista

FINAL PARTICIPANT LIST

Date 11-15 October 2022

Viqueque District, Timor-

Organisation	Full Name	Position
Ministeiro agricultura e pescas	Domingos do carmo pinto	Extensionista
Minister of Agriculture	Antonio da Silva Pereira	Agribisnis Staff
Minister of Agriculture and Fisheries	Manuel Maria dos Santos	Staff Agribisnis
Ministerio Agricultura e pescas (MAP)	Daniel Amaral	Teknik lapangan
Ministerio da Agricultural e Pescas	Rui Amaral Pereira	Kepala bagian pendidikan dan Pelatihan Directorate Nasional Penyuluhan Pertanianal
Ministeriu Agrikultura no peskas	Angela Joana Maria Gomes	Staf
Servisu Municipal Agricultura Viqueque	LEANTU GOMES	Extensionista
SMAP Viqueque	Jeronimo de Carvalho	Extensionista
SMAP Viqueque	Aniceto Gusmao	Senior Extensionista
Xavier Brito	Pedro Xavier Brito	Ketua Hortikultur AICAT

FINAL PARTICIPANT LIST

Date 11-15 October 2022

Viqueque District, Timor-

Organisation	Full Name	Position
	Jose da Costa Xinenes	
	JOÃO RUI PINTO	
	HERCIO A.B de ARAUJO	

ANNEX III: AGENDA

Coconut Replanting Program in Timor Leste

Agenda 11 - 15 October 2022

TIMETABLE OF ACTIVITIES		
Tuesday	11 October 2022	
09.00-11.00	Inauguration	
09.00-09.10	Welcome Speech-Ambassador of Indonesia, Acting Director of NAM CSSTC, ED-ICC	
09.10-09.20	Opening Speech-Vice Minister (and symbolic award)	
09.20-09.50	Introductory Speech-Executive Director ICC, Global Scenario of Sustainable, Resilient and Highly Competitive Coconut Industry	
09.50-10.10	Introduction of Resource person & participants:	
10.10-10.30	Coffee Break	
10.30-10.50	Objective & Rational of Training -	
10.50-11.00	Group Photos	
11.00-16.00	Pemuliaan Tanaman Kelapa: Dr. Ismail Maskromo	
11.00-11.30	Introduction of Coconut Varieties	
11.30-12.00	Selection of plant material for replanting: Evaluation of High Yielding Blocks and Selection of Selected Mother Trees of Coconut	
12.00 -13.00	Lunch	
13.00-14.30	Hybridization Technique to produce Hybrid Coconut Seed	
14.30-15.00	Coffee Break	
15.00-16.00	Coconut Mother Plantation Development Strategy	
Wednesday	12 October 2022	

Coconut Replanting Program in Timor Leste

Agenda 11 - 15 October 2022

TIMETABLE OF ACTIVITIES		
	**Departure of ED-ICC and Acting Director NAM CSSTC to Dili	
08.30-09.30	Journey to the field	
09.30-12.00	Field Practice-Introduction of Coconut Varieties: Dr. Ismail Maskromo	
09.30-10.20	Selection of plant material for replanting: Evaluation of High Yielding Blocks and Selection of Selected Mother Trees of Coconut	
10.20-11.10	Hybridization Technique to produce Hybrid Coconut Seed	
11.10-12.00	Coconut Mother Plantation Development Strategy	
12.00 -13.00	Lunch	
13.00-14.30	Coconut Cultivation Technology: Julianus Matana, SP., M.Si.	
	Field Practice-Coconut Cultivation Technology	
14.30-16.00	Technology to Control Major Pest and Diseases of Coconut: Prof. Dr. Meldy L.A. Hosang, MS	
	Field Practice-Coconut Cultivation Technology	
Thursday	13 October 2022	
08.30-10.15	Coconut Cultivation Technology: Julianus Matana, SP. M.Si	
	Presentation Coconut Cultivation Technology	
10.15-12.00	Technology to Control Major Pest and Desiases of Coconut: Prof. Dr. Meldy L.A. Hosang, MS	
	Presentation Technology to Control Major Pest and Desiases of Coconut	
12.00 -13.00	Lunch	

Coconut Replanting Program in Timor Leste

Agenda 11 - 15 October 2022

TIMETABLE OF ACTIVITIES		
13.00 -15.00	(Continued) Field Practice- Coconut Cultivation Technology	
15.00-16.00	Closing Ceremony	
15.00-15.10	Closing Speech-Representative of Local Committee	
15.10-15.20	Closing Speech-Dr. Ismail Maskromo (Representative of Experts)	
15.20-15.30	Testimony by Representative of Participants	
15.45-16.00	Group Photos	
Friday	14 October 2022	
08.30-16.00	Evaluation	
Saturday	15 October 2022	
08.30-16.00	Certificates Distribution for Experts and Participants	

PHOTO DOCUMENTATION COCONUT REPLANTING PROGRAMME



