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Programme Activity Report: Coconut Cultivation Online Training, $31^{\rm st}$ of May, 2021

<u>List of Indonesian Palmae Crops Research Institute Trainers/Facilitators (sort alphabetically):</u>

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Beneficiary Country:

Timor-Leste.

Distribution of Participants' Background

No	Background	Percentage
1.	Government	31.25%
2.	Farmers	31.25%
3.	Entrepreneurs	37.5%

Programme Activity Report

Coconut Cultivation Online Training, 31st of May, 2021

Background

On 31st of May 2021, in cooperation with Indonesian Palmae Crops Research Institute (IPCRI) as part of the Ministry of Agriculture of the Republic of Indonesia, the Non-Aligned Movement Centre for South-South Technical Cooperation (NAM CSSTC) held the "Coconut Cultivation Online Training" (the Training).

The training discussed all aspects of coconut cultivation which are not limited to superior coconut seed, coconut plantings, technology and improvements, coconut pest management and coconut diseases, but also coconut products diversification and commercialisation, especially in Timor-Leste.

At the virtual training, experts from IPCRI were present. A range of digital techniques have been employed, including interactive communication with the trainers, e-learning and video materials.

A number of governmental officers and entrepreneurs as well as Timor-Leste coconut producers attended the programme.

Topics of the discussion were: 1) The selection and seeding of good coconuts seeds; 2) the treatment of coconut pests and diseases; and 3) the maximisation of the diversification of products and marketing of coconuts in Timor-Leste.

Discussion

Figuring Out what Coconuts Being Developed

The best technique to discover the most yielding and climate-adaptive seeds are to select the best coconut seeds. Despite the weather or various habitats, especially in Timor-Leste, outstanding seeds and potential for cultivation are always present. Furthermore, farmers can count the exact amount of seeds per hectare when applying a diagonal and triangle or rectangle shape.

If farmers are difficult to figure out what coconuts are now being developed, farmers can focus exclusively on the qualities (the size, length, etc.). In addition, farmers need to concentrate on growing the possible coconut variety, because not all seeds can grow well their regions. The coconut seeds should be incised before they are sowed to ensure that the coconuts well thrive. This method is necessary to make it easier to water sprouted grains from the coconut seeds.

Normal and abnormal sprouts can be simply identified. Leaves with spotted or pest-cut leaves are plainly noticeable morphologically. The seed is not good to continue cultivation or does not generate even large and good coconuts if this signal is observed.

Treatment for Diseases

Since coconut is mainly grown in the lower lands in the mountains, humidity is a significant component in coconut disease. High moisture will promote the development of diseases. One of the often-occurring diseases are "urine" diseases (a disease that rapidly multiplies in unhygienic sites, such as animal stalk, wood cutting, or dead plants). Dead coconut plants usually contain a lot of pests or diseases because dead trees affect healthy trees.

Farmers should therefore ensure that their garden is clear of dead or sick plants.

Coconut disease treatment can be performed in various methods. Cutting old stems is a strategy for farmers to prevent coconut disease. Furthermore, pruning old stems offers a perfect breeding site for young coconut trees. Physical treatment for diseases in coconut plants is also the cutting or removal of dead coconuts. In addition, the use of various forms of *Trichoderma* to combat coconut diseases through carbonic changes/biological control. Then, the last method many farmers utilise is chemical treatment, i.e. systemic fungicides.

Opportunity for Bilateral Cooperation

Apart from coconut products generally, shell coconut carbon and coir utilisation in coco peat and coco fiber are capable of meeting global requirements. Indonesian and Timor-Leste coconut charcoal meets over 700,000 tonnes, and coconut goods also meet 3 percent of the global need. The figure is significantly greater than other exporters of coconut, such as Sri Lanka. As a marketing strategy, Timor-Leste also enriched its coconut marketing by expanding the potential of human resources (young, millennial and old farmers).

Evaluation

By the end of the event, 16 random participants attended survey by the organisers. Survey results are as follows (*vide* Chart 1):

- 96.25% of respondents said the training comply with the country's policies;
- 93.75% of respondents said the training was relevant with the current's development issues;
- 95% of respondents said the training was significant for their works;
- 91.25% of respondents said the training met their expectation;
- 77.5% of respondents said the contents were well arranged and easy to follow;
- 97.5% of respondents said the training was interesting.

- 96.25% of respondents said the training's goals was fulfilled;
- 93.75% of respondents said their level of knowledge were growing up;
- 90% of respondents said the trainers were keeping them engaged and interested;
- 95% of respondents said the training time allocation was enough; and
- 70% of respondents said the management of the Zoom Webinar was convenient.

Based on the above results, 90% respondents found that the training was very impressive.

Conclusion

The organisers make the following findings throughout the training organisation:

- Participants acquired knowledge and skills in selection and sowing of good coconut seeds; in coconut disease and pest treatment; in Timor-Leste product diversification and marketing.
- The coconut seeds, independent of their location on lowland or highland, can be distinguished through their exceptional high yields and weather-adaptive seeds.
- The physical, chemical or specific combination of bacteria can be processed to treat problems in coconut plants.
- The coconuts of Timor-Leste could be exported to such regions, in particular Australia and New Zealand. It is necessary to build capacity to ensure the quality of human resources and the good products.

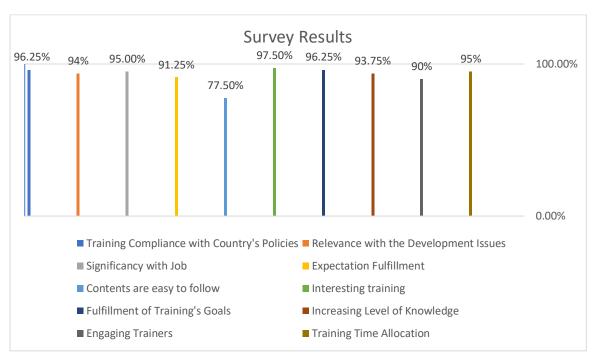


Chart 1. Survey Results

PHOTO DOCUMENTATION

