Concept Note

AGRICULTURE TRAINING ASSISTANCE FOR COUNTRIES IN THE ASIA-PACIFIC REGION PROJECT

NON-ALIGNED MOVEMENT

CENTRE FOR SOUTH-SOUTH TECHNICAL COOPERATION

Summary	
Country:	**Fiji; Kiribati; Nauru; New Caledonia; Papua New Guinea; Solomon Islands; Timor-Leste; Tuvalu**
Implementing Partners:	**Ministry of Agriculture – Republic of Indonesia; Ministry of Foreign Affairs – Republic of Indonesia.**
Project Title:	**Agriculture Training Assistance for Countries in the Asia-Pacific Region**
Sector:	**Agriculture**
Objective:	▪ **To study recent advances in labelling and packaging for manufactured agricultural products, horticulture seed propagation with tissue culture, cultivation of vegetables with a hydroponic system as well as integrated pest and disease management in the tropics;** ▪ **To share experiences with the application of the labelling and packaging to the agricultural processed commodity, tissue culture seed propagation for horticulture, vegetable cultivation with a hydroponic system and integrated pest and disease control in the tropics;** ▪ **To recognise problems, challenges and opportunities for applying the label and packaging for the processed agricultural product, tissues culture horticulture seed propagation, hydroponic system cultivation, and integrated management of pests and diseases in the tropics.**
Beneficiaries:	**Government officials, farmers and stakeholders with a minimum of three years' experience in agriculture field.**
Estimated Project Duration:	**Five days (cumulatively) – from March until December 2021**

A. Context

1. Pests and diseases constitute biotic stresses that can reduce yields and cause cultivation failure. Wider food supply can be affected. Efforts to control pests and diseases are therefore important to achieve maximum returns in crops growing.

2. Different organ systems in plants may experience plant pests and diseases. This condition can be caused by genetic defects. Genetic defects can occur due to conventional propagation methods. Conventional propagation methods require many drawbacks, namely that it requires a lot of planting material with low yields and weather dependent. Conventionally propagated-borne seeds tend to not be disease-free, especially fungi and bacteria transmitted via parental plants that cause production to decrease. In the meantime, it takes a long time to grow the seeds. Therefore, with conventional propagation methods, the mass processing of higher seeds in relative short time is difficult to accomplish.

3. Since genetic defects contribute to the risk to diseases and pests of plants, millions of superior seed is demanded by annually for agricultural crops.

4. An alternative for the development of superior plant seeds, with limited planting material, without seasonal certainty, and free of the diseases, is tissue culture technologies.

5. In addition to improving plant seed quality, there are other measures to avoid plant pests and diseases. Efforts have been made to handle plant pests by developing farming methods, the use of resistant crops, the use of pesticides and the use of biocontrol agents such as antagonists, parasitoids and predators.

6. Integrated Pest Management (IPM) is a control strategy that takes ecological control into account, so that control is not unnecessarily perturbed and causes no great losses.

7. Another method of avoiding plant diseases and pests is focus on planting techniques. Hydroponics are an alternative for vegetable plants.

8. Hydroponic work is very easy, requires little capital, effort and time. Pests and diseases are easier to manage, as the plants are profound controllable plant. Hydroponic work can also be nearly fully mechanised and automated. The use of fertilisers and water is safer and more effective, because the nutrient solution is supplied. If dead plants remain, new plants can be substituted easily.

9. Hydroponic crops are better and healthy when grown in an environmentally sustainable way. Plants can develop more quickly and produce results with intensive care.

10. Hydroponic vegetable production can be greater in quantity and quality guaranteed. After harvest losses are smaller than conventional agriculture. It serves as a solution to property and land issues.

11. Hydroponic crops can be more easily prevented from erosion or dryness. In areas difficult to plant, as in the climate change, it is also possible to plant hydroponic crops.

12. The post-harvest aspect is also no less important than farming activities. At present, non-sensory attributes of food product are essential to ensure that a food product is embraced by the public. The packaging and the information on the package (label) which influence consumer decision to purchase a product is one of the non-sensory attributes.

13. In this case, packaging not only acts as a container, but also as a product identification, which offers product information to customers, becomes an appeal to sales marketing tool which can influence purchasing interests of consumers so that promotions can be minimised in the end.

14. Most common packaging information regulation specifying that at least product names, ingredients, weight net, manufacturer names and address, and expiry dates, are on food product labels.

15. Agricultural training assistance for countries in the Asia-Pacific Region is available to help countries fulfil the annual demand of millions of superior seeds for agricultural crops. In this project, the Non-Aligned Movement Centre for South-South Technical Cooperation (NAM CSSTC), the Ministry of Agriculture of the Republic of Indonesia and the Ministry of Foreign Affairs of the Republic of Indonesia also focus on the methods of farming and post-harvest aspects.

16. We expect government officials, farmers and stakeholders with a minimum of three years' experience in agriculture field to participate in this project.

B. Objectives

To Study Recent Advances

New technical knowledge on how to increase production volumes and increase efficiency in production costs is crucial to resolve problems preventing the achievement of food security and the competitiveness of farm products.

To Share Experience

Sharing of experiences could foster a solidarity of experiences and become a platform to formulate joint ideas for solutions about agricultural issues.

To Recognise Problems, Challenges and Opportunities

The capacity to recognise problems, challenges and opportunities is the first step towards a systematic technical work approach.

C. Activities

1. Online Training Course on Horticulture Seed Propagation with Tissue Culture;
2. Online Training Course on Principals and Application of Integrated Pest and Disease Management in the Tropics;
3. Online Training Course on Vegetables Cultivation with a Hydroponic Technology;
4. Online Training Course on Labelling and Packaging for Processed Agricultural Products.

D. Outcomes

1. Guidelines for labelling and packaging for manufactured agricultural products, horticulture seed propagation with tissue culture, cultivation of vegetables with a hydroponic system as well as integrated pest and disease management in the tropics;
2. Well-allocated resource in the application of the labelling and packaging to the agricultural processed commodity, tissue culture seed propagation for horticulture, vegetable cultivation with a hydroponic system and integrated pest and disease control in the tropics;
3. Systematic approach for applying the label and packaging for the processed agricultural product, tissue culture horticulture seed propagation, hydroponic system cultivation, and integrated management of pests and diseases in the tropics.

E. Implementation Arrangements

Ministry of Agriculture of the Republic of Indonesia (MoA)

The functions of MoA in this project are as follows:

1. In specific, assigning tasks and promoting and monitoring the work of lecturers and evaluators;
2. Promoting and assisting the members of the committee in different lecture approaches;
3. Ensuring that lecturers and evaluators know time schedules;
4. Assign participants during the course(s).

Ministry of Foreign Affairs of the Republic of Indonesia (MoFA)

In this project, the function of MoFA is:

1. Liaising with the participant on technical support in collaboration with NAM CSSTC;
2. Ensuring that accessibility concerns (including grammatical checks in the material provided to participants) and any adaptations to agricultural development in all countries involved are considered;
3. Ensuring, along with the NAM CSSTC, that the course(s) and resources, including the course(s) manual, are generated and distributed.

NAM CSSTC

The functions of NAM CSSTC in this project are:

1. Verify the assignment of sufficient lecturers to deliver the course(s) and inform their roles and responsibilities in respect of the course(s);
2. Ensure that committee members know about their responsibilities and that there are proper lines of communication; and chair the committee members' meetings;
3. Connect with the MoA and the MoFA;
4. Liaise with the participant on technical support, in collaboration with the MoFA;
5. Ensure that online lecture platforms are available;
6. Ensure that the funds needed to run and coordinate the course(s) are available;
7. Ensure along with the MoFA that the course(s) documents, including the course(s) manual are distributed.

F. Expected Schedule

1. Online Training Course on Horticulture Seed Propagation with Tissue Culture (One day)
2. Online Training Course on Principals and Application of Integrated Pest and Disease Management in the Tropics (Two days)
3. Online Training Course on Vegetables Cultivation with a Hydroponic Technology (One day)
4. Online Training Course on Labelling and Packaging for Processed Agricultural Products (One day).

A series of activities in this project will be carried out every month from March until December 2021.

An agenda which contains information on the subjects lectured during every course will be sent through email of prospective participants who register on a link: bit.ly/namattar.