

A PROPOSED CURRICULUM OF CACAO-BASED AGROECOLOGICAL PRACTICES FOR THE PHILIPPINES

This curriculum is developed based on a series of trainings that Kennemer Foods International Inc. (KFI), Department of Trade and Industry's RAPID Growth project, Provincial and Municipal Agricultural Office, and the Sustainable Farming in Tropical Asian Landscapes (SFITAL) project have been providing or plan to provide to smallholder farmers and cooperatives especially in Davao de Oro province. SFITAL is a five-year joint initiative between World Agroforestry (ICRAF), Rainforest Alliance, MARS, and International Fund for Agricultural Development (IFAD).

The curriculum consists of four themes, and each can be completed within approximately two days through training both in class and field. There is no need to complete the four themes in, for example, eight consecutive days. There can be a time interval between the previous and the next theme, but not too long to allow the trainees to still easily link the previous and next theme. However, the suggested order the training should still be followed: the complete training should start with theme 1 and end with theme 4, should be respected. Below is the list of subjects covered by each theme with potential trainers from KFI, DTI-RAPID, PAGRO and MAGRO, and ICRAF. Possible trainees are smallholder farmers and cooperatives, and agricultural extension workers. This curriculum can be applied for training of trainers (TOT) or training of farmers (TOF).

THEME 1: CACAO FARM AGRIBUSINESS AND FINANCIAL LITERACY

The curriculum starts by introducing cacao farm agribusiness to trigger smallholder farmers and cooperatives to adopt cacao cultivation practices and increase their financial literacy.

Subjects

- 1 **Introduction of the training and pretest**
 - 2 **Cacao farming as a business**
Element of farm business, key dimension of successful farm business, understanding prices changes in agricultural commodities, supply and demand, qualities of successful business minded farmers.
 - 3 **How to optimize cacao farm profitability**
Need of record keeping, money in-money out, how to increase revenues, how to reduce production cost.
 - 4 **Financial literacy and human resource management**
Strategic planning, credit management, entrepreneurship development, business model canvas, organizational development and record management, financial analysis and overview of financial statement preparation, human resource management.
 - 5 **Reflection of activities, post-test, closing activities**
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THEME 2: CACAO-BASED AGROECOLOGICAL PRACTICES AND POTENTIALLY GENERATED ECOSYSTEM SERVICES

Theme 2 is to infuse good agricultural practices and link with ecosystem services.

Subjects

- 1 Introduction of the training and pretest**
 - 2 Principles of cacao-based agroecological practices**
 - Principles and potential benefits of cacao-based agroecological practices. Key principles include recycling of organic materials, chemical input reduction, secure and enhance soil health, maintain, or increase agrobiodiversity, synergy among elements of agroecological practices, economic diversification, and co-creation of knowledge.
 - Four categories of agroecological practices: which relate to farm planning and design, to soil health and fertility management, to soil and water conservation, and to pest and disease control.
 - 3 Practical exercise on how to design a cacao-based agroecological practice**

Identify main issues that smallholder farmers have been facing in cultivating cacao, what are preferred crop species to combine with cacao and why, recommended spacing and spatial and temporal arrangement. How to integrate agroecological practices into the design.
 - 4 Potentially generated ecosystem services and agrobiodiversity**

Four types of ecosystem services, factors reducing the services, and how to improve the services. Importance of maintaining or enhancing agrobiodiversity.
 - 5 Reflection of activities, post-test, closing activities**
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THEME 3: DEVELOP A BUSINESS PLAN OF CACAO-BASED AGROECOLOGICAL PRACTICES

Following the first two themes, participants are guided to develop a business plan of cacao-based agroecological practices.

Subjects

- 1 Introduction of the training and pretest**
 - 2 Possible co-investment for establishing cacao-based agroecological practices**
Possible supports for establishing and maintaining the farm and marketing the cacao products, provided by local enablers both from private and public institutions¹.
 - 3 How to develop a business plan for cacao-based agroecological practices**
Elements of a business plan and help-tools for cost-benefit analysis, identify farm's inputs and outputs across time and related costs, identify risk and measures to reduce the risks.
 - 4 Practical exercise of cost-benefit analysis**
The trainees either individually or in group use the design of cacao-based agroecological practices that they developed in the previous theme for cost-benefit analysis.
 - 5 Reflection of activities, post-test, closing activities**
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¹Such supports have been informed and compiled through the Cacao Stakeholder's Forum organized by the SFITAL project on 24 October 2023.

THEME 4: POST HARVESTING TECHNIQUE AND PACKAGING

This theme includes fermentation process.

Subjects

- 1 Introduction of the training and pretest**
 - 2 Post-harvest processing and fermentation**
Fermentation process and traceability, training on volume requirements (Goal, Reality, Opportunity & Will or GROW model) and time management matrix, bean quality and specification: proper harvesting, pods storage, bean segregation; and training on cacao by-product (tableya/chocolate/choco spread/cacao butter)
 - 3 Manufacturing practice and product packaging**
Good manufacturing practices: proper hygiene, product handling; FDA-LTO/CPR/HALAL; product packaging, labelling, and branding.
 - 4 Reflection of activities, post-test, closing activities**
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