



Supported by:

Federal Ministry  
for the Environment, Nature Conservation,  
Nuclear Safety and Consumer Protection



based on a decision of  
the German Bundestag

# Agro-Silvo-Fishery

## Supporting Food Security and Climate Change Adaptation Strategies

*Subekti Rahayu, Nurhayatun Nafsiyah, Linda Novianti, Happy Hendrawan, Iman Sumantri*

### Introduction

Sungai Radak Dua Village in Terentang Subdistrict, Kubu Raya District, West Kalimantan is migrant village since 1984 for supporting crop yield in the area. However, frequent flooding over the past decade has changed the community's livelihood options, shifting from annual crops to oil palm cultivation or leaving the land abandoned as bare ground.

The women's group uses home gardens to cultivate vegetables, but only for their own use due to the lack of suitable land. Following a series of data collection and analysis, ICRAF, through the Peat-IMPACTS Project, selected this village as a pilot village for developing an agro-silvo-fishery business model in collaboration with the community.



*Training activities at farmer level and audience with local government and private sectors*

### Main activities

A series of discussions with multiple stakeholders, including local governments and private sectors, were conducted as part of the implementation process to get their support. A series of farmer training sessions related to the business model were conducted for farmers, covering good agricultural practices for fruit trees, annual crops, fish farming, business processes, and marketing. A 0.5-hectare demoplot of agro-silvo-fishery with durian as main tree crop, annual crops of vegetables and local fish was developed in the bare land area with support by village government. The systems includes ponds and dikes to regulate water levels in peatland area.

### Adoption process

The success of the 0.5-hectare agro-silvo-fishery demonstration plot, the village government interested in the system and expanded it to 40 hectares. The village head allocated village funds to support the development of agro-silvo-fishery to community. A farmer group will manage about 2-hectares for cultivating fruit trees, annual crops, and fish.

### Steps forward

Adopting the system is the first step; still many steps to meet the targets, such as getting the government support, enhancing human resource capacity for managing the area, and improving production processes and marketing once the products are ready.



*Planting systems in demoplot, trees and crop cultivate on the dikes, while fish rear in the ponds*



*A 15-hectares of 40-hectares are developed for agro-silvo-fishery*

