Agribusiness

Enhancing smallholder livelihoods in the Central Highlands of Vietnam through improving the sustainability of coffee and black pepper farming systems and value chains.

Vietnam

Overview

The rapid expansion of coffee and pepper in the Central Highlands has secured Vietnam as the world's largest producers of Robusta coffee and black pepper in the world. These two crops support more than 1 million livelihoods. Yet, the Central Highlands remains the second poorest region of Vietnam and home to more than 40 marginalised ethnic groups.

The region is suffering from water shortages due to El Nino along with the impacts of climate change. The unmanaged expansion of coffee and pepper has resulted in deforestation and farmers establishing production areas on unsuitable land. The misuse of fertilisers, irrigation water and synthetic pesticides contributes to the Central Highlands being now one of the most degraded areas in the country.

Improving farmers' livelihoods and reducing environmental degradation requires a systemic approach which includes decreasing the use of fertilisers and irrigation, improving soil health and soil fertility through intercropping/agroforestry, preventing further environmental decline, improving food safety, leveraging opportunities in value chains and integrating with other processes of rural change.

KEY FACTS

ACIAR Project No. AGB/2018/175
Duration: February 2021 to October 2024
(3 years and 9 months)
Target areas: Vietnam
Budget: A$3,460,000

Project Leader
Dr Estelle Bienabe, World Agroforestry Centre (ICRAF)

Key partners
- Deakin University
- French Centre of International Research on Agriculture for Development (CIRAD)
- Institute of Agricultural Planning and Design (NIAPP)
- Institute of Policy and Strategy for Agriculture and Rural development (IPSARD)
- International Center for Tropical Agriculture (CIAT)
- Tay Nguyen University (TNU)
- The University of Sydney
- Western Highlands Agriculture and Forestry Science Institute (WASI)
- World Agroforestry Centre (ICRAF)

ACIAR Research Program Manager
Howard Hall

Objective

The project aims to enhance smallholder livelihoods in the Central Highlands, including vulnerable populations, through improving the sustainability of coffee and black pepper farming systems and value chains.

This includes:

- Inducing changes at farm, market and policy environment levels.
- Producing a range of improved technologies and guidelines and encouraging adoption by coffee and pepper farmers.
- Developing methodologies on participatory value-chain and business model upgrading.
- Piloting value chain innovations to help smallholder farmers shift their practices towards more sustainable and cost-effective approaches.
- Developing and deploying soil-borne pest detection technology and soil remediation strategies.
- Designing integrated farming systems that simultaneously address multiple long-term sustainability issues.
- Improving suitability mapping for coffee and pepper and designing adaptability maps under forecasted climate data.

Expected scientific results

- Increasing knowledge on crop requirements and contextualised good farming practices under current and forecasted climate changes.
- Increasing knowledge on soil-borne pests and diseases and improved methodology to measure their prevalence.
- Improving crop models.
- Integrating multidisciplinary methods towards Integrated Farming Systems and targeted scaling.
- Increasing understanding of agrarian change in the Central Highlands.
- Increasing knowledge on private sector engagement and application of sustainability approaches

Expected impact/outcomes

- Establishing nutrient recycling, resource use analysis, and developing crop models.
- Enhancing the capacity of nurseries to produce healthy coffee and pepper seedlings.
- Developing training materials and guidelines on good farming practices for key stakeholders, including water use and fertilisers recommendations.
- Providing guidelines on intercropping and agroforestry systems.
- Strengthening the public-private sector dialogue and informing policymaking with robust evidence.

Australian Aid

ACIAR
aciar.gov.au