BUSINESS PARTNERSHIPS PLATFORM

Impact spotlight

Upland agroforestry for incomes and carbon sequestration in Vietnam

Partners: Greenfield Consulting & Development, the Forest Science Centre of Northwest Vietnam, the University of Queensland, ACOM, Son La's Department of Agriculture and Rural Development, the Co Noi Agroforestry Cooperative and the Australian Government

GFD | The University of Queensland Australia | ACOM | Forest Science of North-Western Vietnam | Co Noi Agroforestry Cooperative | Son La Department of Agriculture & Rural Development | Australian Government

Timeframe

CARBON MARKETS

November 2022 — June 2025

FUNDING

DFAT	Partners	TOTAL
$431,282	$403,500	$834,782

In Vietnam's Son La province, steep hills once dominated by maize and cassava are being transformed through a new agroforestry approach that restores landscapes and boosts rural incomes. From 2022 to 2025, a BPP partnership between Greenfield Consulting & Development, the Forest Science Centre of Northwest Vietnam, the University of Queensland, ACOM, Son La's Department of Agriculture and Rural Development, the Co Noi Agroforestry Cooperative and the Australian Government supported 492 farming households, mostly from ethnic-minority communities, to plant 140,000 timber and multipurpose trees across upland and coffee farms.

With tree survival rates of 85 to 90%, the project has proven both technically sound and locally viable. It is now preparing for registration through Rabobank's ACORN program, which aggregates smallholder agroforestry projects to sell verified carbon removals internationally. Under ACORN, 70% of carbon revenues return to farmers, providing a new income source alongside fruit, resin and timber harvests valued at an estimated US$10–12 million over 20 years.

A new digital app and web platform enable farmers to geo-tag and track trees, reducing verification costs and building confidence in carbon markets. Together, these innovations have laid the groundwork for one of Vietnam's first smallholder-led agroforestry carbon projects aligned with international standards.

Highlights

Tree planting at scale
140,000 timber and multi-purpose trees planted across upland and coffee plots, surpassing the original 100,000-tree target.

Farmer engagement
492 households supported to diversify livelihoods through timber, fruit, resin and carbon income streams.

Climate change contribution
Projected total carbon sequestration of 80,000-100,000 tCO_2e over 20 years, including both above-ground biomass and soil carbon improvements.

Capacity building
12 training courses for 500 farming households, plus 5 specialist trainings for more than 80 provincial and national staff.

Digital innovation
Launch of Vietnam's first smallholder-focused agroforestry carbon app, enabling geo-tagging and monitoring of trees.

Policy alignment
A national seminar and technical carbon standards review informed Vietnam's forestry carbon standard, embedding lessons into national frameworks.

Market access supported
Project has been supported to join Rabobank's ACORN program. Once registered, this program guarantees a minimum carbon price of €20/tCO_2e and ensure that 70% of carbon revenues flow directly to local communities.

Climate Impact

The partnership showed how upland agroforestry can deliver measurable climate gains while strengthening degraded landscapes. By combining farmer-led tree planting with international-standard carbon methodologies, it created one of Vietnam's first smallholder pathways into carbon markets.

- **140,000** trees planted across Son La province
- Survival rates of **85 to 90%**, ensuring strong carbon storage potential
- Potential to sequester up to **100,000** tCO_2e over 20 years
- **700+** hectares of cropland converted to agroforestry, reducing erosion and restoring soil health.

Socio-Economic Impact

The partnership introduced new income opportunities for smallholder farmers while building long-term capacity for agroforestry carbon projects in Son La. By exceeding its planting target and linking with Rabobank's ACORN program, it created a sustainable revenue model that farmers can rely on.

- **492** farming households engaged. The partnership prioritised ethnic minority inclusion, with **97.8%** of participants from Thai and other minority communities, using culturally appropriate training materials and integrating traditional knowledge with modern techniques.
- **500** households trained through **12** farmer courses in tree planting, care and monitoring
- **80+** provincial and national staff trained in forestry carbon standards and project design.

Gender Impact

Women played an active role in shaping and benefiting from the agroforestry model. Training schedules and digital tools were adapted to support participation and women took part in both household decision-making and community forest management.

- **30%** of all participants across households were women
- Women trained in tree planting, care and digital monitoring tools
- Greater involvement in land-use decisions, with opportunities for leadership in community forest management.

Catalytic Impact

This partnership set in motion the conditions for Vietnam to scale high-quality NbS carbon projects.

- Supported the development of Vietnam's first smallholder-focused agroforestry carbon project, which is now close to registration through the ACORN program
- Informed the development of Vietnam's national forestry carbon standards through a gap analysis and policy seminars.
- Established digital MRV tools and cooperative models that can be replicated in other upland regions.
- Launch of Vietnam's first smallholder-focused agroforestry carbon app (available at bpp.gfdapp.net and Google Play), enabling low-cost geo-tagging and monitoring that reduces verification costs and strengthens market confidence.

What's next?

The partners aim to:

- Complete ACORN/Plan Vivo registration and begin generating high-integrity carbon credits with guaranteed minimum pricing
- Expand tree planting and digital monitoring tools to new upland households and cooperatives in Son La and beyond
- Strengthen provincial and national capacity to align Vietnam's forestry carbon standards with international frameworks
- Mobilise new investment by connecting smallholder projects with domestic and international buyers.