



Australian Government

Australian Centre for  
International Agricultural Research

Livestock

# Intensification of beef cattle production in upland cropping systems in Northwest Vietnam

## Overview

Vietnam's north-west is one of the country's poorest regions, with 80% of households deriving their income from Agriculture and Forestry. Livestock production is regarded as a pathway out of poverty for ethnic minority smallholders.

Increased production in the region is constrained by feed and forage availability and animal exposure through long cold winters. Also, current grazing-based livestock systems compete for land with the expanding crop production on the hill slopes. Increased production of crops such as maize and cassava has increased soil erosion and sedimentation of waterways, making the current crop-livestock system unsustainable.

Current cattle husbandry practices and sale of animals are linked to culture, ethnicities and the isolation of communities. This isolation is often synonymous with poor linkages to urban markets, misunderstanding of market demand/supply dynamics and limited information exchange up and down the beef cattle value chain. Smallholder farmers in these regions are not capitalising on increased domestic demand for beef.

Increased beef cattle production in the highlands of Vietnam is seen as a priority to alleviate poverty and address environmental issues of intensified cropping, such as erosion.



## KEY FACTS

**ACIAR Project No.** LPS/2015/037

**Duration:** October 2018 to June 2021 (3 years)

**Target areas:** Vietnam

**Budget:** A\$1,724,225

### Project Leader

Stephen Ives, University of Tasmania

### Key partners

- University of Queensland
- National Institute of Animal Science, Vietnam
- Hanoi University of Agriculture
- Thai Nguyen University of Agriculture and Forestry, Vietnam
- Tay Bac University, Vietnam
- Department of Agriculture and Rural Development (DARD), Dien Bien
- Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD)

### ACIAR Research Program Manager

Dr Anna Okello

## Objective

**The project's overall aim is to improve the income of smallholder cattle producers through intensification of beef cattle production and increased market linkages in mountainous crop-livestock systems in the north-west of Vietnam.**

### The project's specific objectives are to:

- Understand the transition from extensive to more intensive beef cattle production.
- Develop production technologies and practices that support more intensive, integrated crop-livestock systems.
- Improve farmers' linkages to urban beef markets.
- Build capacity of beef value chain stakeholders to support and out-scale sustainable cattle production systems in the north-west highlands.

## Expected scientific results

- Increased understanding of the complexities in changing from extensive to intensive cattle production, particularly with cultural, social and economic dynamics, trade-offs and market linkages.
- Strengthened understanding of the interface between livelihood practices of ethnic minority smallholders and scientific production and market development practices.
- Integration of forages in cropping systems on hill slopes and year round feed supply options for mixed crop-livestock farm systems in areas with increasing competition for land resources.

## Expected outcomes

- Adoption of innovative practices by farmers.
- Increased growth and reproduction of cattle, and increased sales will improve household incomes by at least 32%.
- Improved market understanding and linkages between farmers and traders.
- Profitable cattle feeding systems, integrated with cropping.
- Improved environmental sustainability as farmers transition to a more intensive, market-oriented beef production system
- Improved gender equity and reallocation of farming tasks, with time available for non-farming activities for women and education for children.
- Increased market access and understanding of market demand and opportunities resulting in more market-oriented production and greater cash income from beef cattle production.
- Improved information exchange between stakeholders leading to a resilient beef value chain that meets changing market demands and conditions.
- Increased technical knowledge among farmers on integrating cropping and livestock, forage and feed production and animal management.

