



Livestock

## Development of a biosecure market-driven beef production system in Lao PDR



### Overview

**Smallholder cattle and buffalo farmers in Laos are increasingly gaining access to improved domestic and international beef markets in the Greater Mekong Subregion (GMS).**

Although there is growing recognition that this opportunity could improve rural livelihoods and alleviate poverty, the supply of beef animals is increasingly under stress due to disease, poor productivity and reproductive performance, and undeveloped markets.

Addressing these issues would allow Lao smallholders to supply and promote beef animals to the developing market chain and expanding consumer markets of Luang Prabang, Vientiane, Savannakhet, northern Vietnam (Hanoi) and southern China. Efforts to address local, national and regional biosecurity that minimise disease risks to this trade would also be enhanced.

Limited access to regional markets for smallholder farmers has constrained the adoption of improved cattle management technologies and practices, including biosecurity. Knowledge gaps have been identified around large ruminant husbandry, health and marketing practices, but there is little understanding of how to address these issues.

Improved production and marketing systems are recognised as crucial in managing livestock transboundary disease and alleviating poverty.

### KEY FACTS

**ACIAR Project No.** AH/2012/068

**Duration:** February 2015 to July 2019 (4.5 years)

**Target areas:** Lao PDR

**Budget:** A\$1,970,009

#### Project Leader

Russell Bush, University of Sydney

#### Key partners

- Ministry of Agriculture and Forestry, Lao PDR
- National Agricultural and Forestry Research Institute, Lao PDR
- University of Laos (NUOL)
- Savannakhet University, Lao PDR

#### ACIAR Research Program Manager

Dr Anna Okello

## Objective

**The project's overall aim was to support the development of a beef industry in Laos in response to new market opportunities in the GMS.**

**The project's three main objectives were to:**

- Improve the competitiveness of the beef value chain.
- Encourage the development of a biosecure market-driven production approach.
- Support improved buffalo and cattle (ruminant) reproduction.

## Scientific results

- Understanding how the linkages between smallholder producers and traders of beef animals can be improved to move from the current 'informal' market (with limited information and knowledge available to the stakeholders and wider public) to one with clear and objective 'product' descriptions.
- Development of techniques for analysis of trade risks, enabling interventions to deliver improved biosecurity applicable to beef marketing systems across the GMS.
- Evidence that stakeholder learning supports improvements in disease risk-free market chains.
- Identification of strategies that best address the key constraints to large ruminant reproduction and breeding management, leading to development of sustainable interventions and improved policy support for increasing national beef production in Laos.

## Outcomes

- An effective pathway for improved health, production, biosecurity and marketing based on group management of beef animals.
- Establishment of a price information mechanism and a pilot 'quality assurance' system to enhance the market chain.
- An understanding of how smallholder farmers can apply appropriate health and productivity interventions to achieve intensification and greater access to new and existing beef markets.
- Institutional understanding of the most appropriate reproduction and breeding management interventions to increase the supply of beef animals and meat products from smallholder intensive production systems.
- Increased livestock trader incomes due to sale of higher quality animals, reduced risk of disease, and greater market awareness and stakeholder engagement.
- Increased smallholder household incomes.
- Policy developments to facilitate improved transboundary animal trade practices and create national economic impacts.
- Investment in alternative livestock enterprises, other employment opportunities and lifestyle improvements.

