**Introduction**

The Northern Regions Sustainable Livelihoods through Livestock Development Project (LDP), focuses on:

- 18 priority poor districts in 5 northern Lao provinces: Bokeo, Huaphanh, Luang Namtha, Luang Prabang, and Xiengkhouang
- Involves 314 villages, 12,000 households and 102,000 people
- 4,900 & 7,000 households will benefit from increased incomes from cattle/buffalo & goats/pigs/poultry respectively
- The LDP collaborates with ‘research for development’ projects including: Forages for Livestock Project, Best Practice Health and Husbandry of Cattle and Buffalo, Extension Approaches to Specific Livestock project & other projects in northern Lao PDR.

**Materials & Methods**

Key results and lesson learns from co-existing and collaborations between the LDP and research projects are:

1. **Local capacity building**
   - Local capacity through participatory applied research for development between the LDP and its collaborations has been improved as key lessons have been immediately utilized LDP project areas.

2. **Improving Animal Health and production**
   - Animal health interventions include: improved husbandry practices, forage plantation, vaccination & parasite treatments. Key lessons learned used to improve the project intervention activities.

**Results**

1. **Local capacity building**
   - Capacity building for livestock extension staff on animal health and extension is a priority activity to make sure the staff are well equipped to assist the targeting farmers.
   - Few of the impact-yielding systems can be ‘photocopied’ from one place to another. New farmers will always need to adapt the systems to their own realities.
   - Village learning activity and digital stories are simple ways of helping district staff develop a vision for extension processes that allow them to put this vision into practice within the context of smallholder livestock systems.
   - Other factors contributing to effective capacity building are to select enthusiastic staff, encourage teamwork, provide motivation through reward for all staff, enable opportunities for staff to share skills and ideas, and promote the link between theory and practice (i.e. enable school and college learning to be applied by in-the-field learning opportunities).

2. **Improving Animal Health and production**
   - Vaccination programs for FMD, HS, CSF & Newcastle Disease in 39 districts of 8 Northern provinces has been implemented as part of disease control strategies. Research results on the impact of vaccination in northern Lao PDR (Rast et al., 2010) plus field efficacy of FMD vaccination & FMD hotspot identification (Nampanya et al., 2012) utilized to improve the LDP’s vaccination interventions.
   - Expansion of forage & cassava plantations involving 7,274 farmers and 5,010 ha was built from key lessons learned with farmers, forage species preferences being: Ruizi, Guinea, Mulato, Stylo CIAT 184 and cassava. Lesson learns from the ACIAR AH 2006/159 on farmer knowledge gaps, internal parasite studies and bag & concrete silage-making also trialed in some LDP project sites.

**Discussion**

The co-location of the LDP & research project has benefited all projects. Staff training of more participants with greater exchange of knowledge & experience, plus research findings able to be immediately implemented (i.e. FMD vaccination, parasite treatment, forage establishment interventions) and on a much larger scale than in the project villages alone.

The project has been very successful, with positive impacts at farmer level, achieving the project goals and encouraging farmers to move from “livestock keepers” to “livestock producers”, although this takes time and requires further inputs.

Participatory applied research for development provides a powerful extension approach. The project has identified extension ‘entry points’ as multiple interventions, being:

- Vaccination program: for HS & FMD is a priority and brings farmers together for other project activities
- Forage establishment & silage: provides an opportunity for farmers to start fattening activities & protect against climate shock
- Treating neonatal calves for *Toxocara vitulorum* is easy & cheap to introduce, although messages are forgotten by farmers & hence requires regular farmers discussions.

**Acknowledgements**

This project is funded by the Asian Development Bank (ADB) and the Lao government, including a Special Fund loan, an Asian Development Fund (ADF) grant, and a Japan Fund for Poverty Reduction (JFPR) grant; a loan from the International Fund for Agricultural Development (IFAD); and a grant from the Swiss Agency for Development Cooperation (SDC).

**Reference**

Nampanya S, J. Richards, S. Khounsy, P. Inthavong, M.Yang, L. Rast, Windsor PA. 2012b. Investigation of Foot and Mouth Disease hotspots in northern Lao PDR. Transboundary and Emerging Diseases; accepted May 2012