Capacity building for district extension staff, students and large ruminants smallholder farmers in northern Lao PDR

By
Dr. Syseng Khounsuy
Vientiane, 29-30 Julv. 2013

Outline
• Background
• Capacity building program
  – Livestock extension staff
  – Students
  – Targeting farmers
• Discussion

Background
Agriculture sector is very important:
• 70% of the population participate in the agriculture and livestock production.
• contributing about 33% of national GDP and
• Livestock production contributes about 15% of agricultural GDP.

Background (cont)
The main constraints of large ruminant production is stemmed from:
- Disease outbreaks (FMD & HS)
- Feed deficiency
- Low capacity building (Farmers, District extension staff)
Therefore, improving local capacity for the stakeholders involving with the project (district extension staff, traders and farmers) is very important step through

- Participatory applied research (disease investigation and data collection)
- Formal training program on large ruminant health and production
- Group meeting and discussion

### Training for Extension staff

<table>
<thead>
<tr>
<th>Workshop Name</th>
<th>Topics</th>
<th>Location</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Staff training</td>
<td>Project background, large ruminant animal health</td>
<td>LPB</td>
<td>September 2008</td>
</tr>
<tr>
<td>Animal health</td>
<td>Diseases, epidemiology, outbreak investigation, sample collection</td>
<td>LPB</td>
<td>6-7 Feb, 2009</td>
</tr>
<tr>
<td>Nutrition</td>
<td>Forage establishment, quality and quantity assessment, body condition scoring, feed requirements</td>
<td>LPB</td>
<td>6-8 April, 2009</td>
</tr>
<tr>
<td>Biosecurity</td>
<td>Disease risk assessment and management,</td>
<td>LPB</td>
<td>21-22 July, 2009</td>
</tr>
<tr>
<td>Reproduction</td>
<td>Reproduction physiology, breeding soundness examination, reproduction management</td>
<td>LPB</td>
<td>16-18 Mar, 2010</td>
</tr>
<tr>
<td>Nutrition &amp; Marketing</td>
<td>Forage conservation, large ruminant nutrition physiology, value assessment of ruminants for different markets, reproduction &amp; marketing interventions</td>
<td>XK</td>
<td>15-17 June, 2010</td>
</tr>
<tr>
<td>Extension methodology and village-level biosecurity</td>
<td>Development of extension strategies from all topics covered in previous workshops</td>
<td>LPB</td>
<td>6-8 December 2010</td>
</tr>
</tbody>
</table>

### Training for Extension staff (cont)

<table>
<thead>
<tr>
<th>Workshop Participants</th>
<th>LPB</th>
<th>XK</th>
<th>HP</th>
<th>BK+LNT</th>
<th>Whole group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>8</td>
<td>5</td>
<td>7</td>
<td>6</td>
<td>26</td>
</tr>
<tr>
<td>Female</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Parasitic disease question scores (/6)**
- Mean: 4.9

**Infectious disease question scores (/24)**
- Mean: 19.0

**Nutrition question scores (/6)**
- Mean: 4.27

**Reproduction question scores (/6)**
- Mean: 4.4

**Total**
- Mean: 32.6
  - SD: 2.5
**Training for Farmers**

- On job training through participatory applied research had been conducted since the project started
- 2 days formal training program on large ruminant has been implemented between 2011 and 12 covering
  - Important disease (FMD, HS, toxocara & liver fluke)
  - Basic biosecurity
  - Nutrition & silage making
- Farmers cross visits (between and other project’s areas)

**Training for Farmers (cont)**

- 7 Crawford Fund ‘Train the trainer’ workshops
- **Village-level biosecurity Program:**
  - risk assessment (priority disease: FMD and HS)
  - movement controls
  - quarantine of introductions (For two weeks)
  - prophylaxis:
    - vaccination (FMD and HS)
    - minimise contacts
  - traders;
    - cleaning/disinfection (Traders meeting had been conducted)
  - surveillance & reporting: VVW’s and district staff monthly
  - public awareness via posters (FMD, HS, TV)

**Capacity building for students**

- Lao students
  - 4th year vet (NOUL): 26
  - 5th year Animal Science (NOUL): 36
  - 3rd year ag college (NAFC): 35
  - Placement For:
    - Vet students (NOUL): 4
    - Animal sci students (NOUL): 10
    - Animal sci students (NAFC) 10
- Australian students from USYD
  - PhD : 2
  - Honours: 7
  - Rotation rural practice: 18
Capacity building for students (cont)

<table>
<thead>
<tr>
<th>Workshop Name</th>
<th>Participation</th>
<th>Location</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large ruminant health 1</td>
<td>NOUL: 4th year vet students 26, NAFC: 3rd year students 34</td>
<td>VTE</td>
<td>Sept 2011</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LPB</td>
<td>Sept 2011</td>
</tr>
<tr>
<td>Large ruminant health 2</td>
<td>NOUL: 4th year vet students 26, NOUL: 5th year animal sci students 35</td>
<td>VTE</td>
<td>Nov 2011</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VTE</td>
<td>Nov 2011</td>
</tr>
<tr>
<td>Nutrition</td>
<td>NOUL: 4th year vet students 26, NAFC: 3rd year students 34</td>
<td>VTE</td>
<td>Feb 2012</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LPB</td>
<td></td>
</tr>
<tr>
<td>Reproduction</td>
<td>NOUL: 4th year vet students 26, NAFC: 2nd year students 34</td>
<td>VTE</td>
<td>May</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LPB</td>
<td>2012</td>
</tr>
</tbody>
</table>

Discussion

- The local capacity building is very important particular at the beginning of the project
- Training staff (training for trainers) and then the trained staff to train farmers and VVWs and village chief is sound and recommended
- The project research results are applied immediately through the training and lecturing at Educational institutes
- Although the project capacity building activities prove to be very successful continued and further training programs are needed and expanded into other areas

Acknowledgements