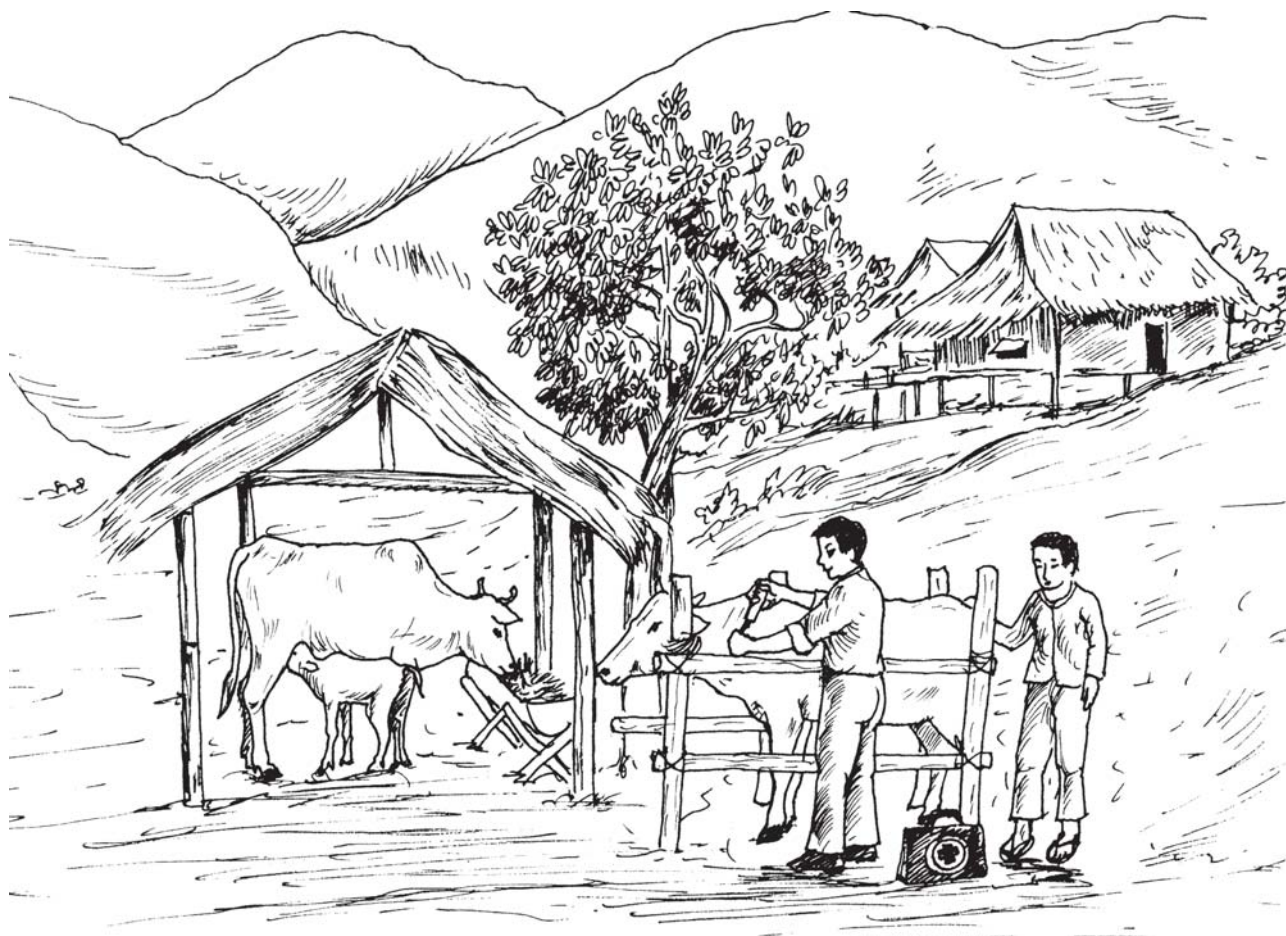


Village Veterinary Worker Network as a Private Sector Approach



Livestock are an important source of income for nearly all upland farmers so veterinary services are essential. Recurrent epidemics make investment in livestock uncertain, and farmers hesitate to invest in improved livestock keeping methods if they cannot access good veterinary services. The most common animal diseases in Luangnamtha Province are Hemorrhagic Septicaemia, Swine Fever, Newcastle Disease and Fowl Cholera. In 2001, Foot and Mouth disease appeared for the first time. To combat these diseases, many projects supported Village Veterinary Worker (VW) training conducted by local district agriculture and forestry offices.

However, these local vets have so far had little impact on the occurrence of epidemics in targeted villages. Vaccines are often not available at the right time; many vaccine storage refrigerators do not work, making it impossible to maintain the cold chain from the district capital to the villages. In some areas the majority of VWs trained by DAFO have not been working with animals at all.

In 2003, the GTZ RDMA (rural development in mountainous areas) project undertook a different approach to VVW training in Sing and Nalae districts, Luangnamtha province. In this project, training is still conducted by DAFO staff, but veterinary equipment and drugs are dispensed from private pharmacies. These VVWs are not volunteers, but charge fees for their services and sell medicines for profit.

Background

	Sing	Nalae
Population	25,275	20,432
Major Ethnic Groups	45% Akha, 32% Leu, 7% Hmong, 6% Tai Neua, 4% Yao, 4% Tai Dam/Lao	79% Khamu, 19% Leu
Highland Coverage	90%	95%
Number of Villages	95%	80%
Livestock in both districts totalled 18,000 cattle and buffalo, 20,000 pigs and 110,000 poultry.		

Project strategy and aims

The overall goal of the project was to provide each farmer in Sing and Nalae with access to veterinary services. DAFO staff from each district were trained to adapt the VVW curriculum to their district's special situation.

- In each village, one VVW was selected and trained.
- One private pharmacy was set up in each district capital.
- Pharmacists received training in book-keeping and how to supply themselves with vaccines, drugs and equipment.
- Two private village pharmacies were established in central villages of remote sub-districts in Sing, with three more scheduled to open in Nalae by April 2005.
- A follow up and evaluation system with DAFO staff was recently established.

Major elements of the project strategy:

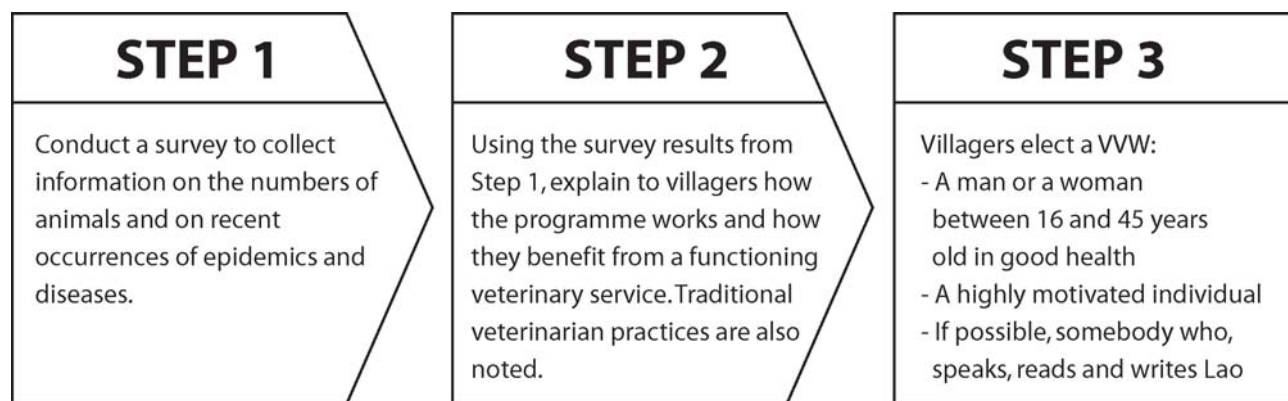
- Choosing the best VVW.
- Organising VVW training.
- VVW training courses adapted to the literacy level of non-Lao speakers.
- Availability of drugs, vaccines and equipment assured by a private network of pharmacies.
- Set-up of a cold chain for vaccines from the factory to the animal.
- Regular follow-up of VVWs.

Selecting a VVW

A VVW must be a motivated individual. Rather than let the chief simply appoint the VVW, this project helped the villagers select a VVW by holding a plenary meeting of men and women in each village.

During Step 3, it is explained that it is more important (because translators help with the course work), to choose someone motivated and willing to learn than someone who knows Lao. It is also explained that the VVW does not receive a per diem during the training. This eliminates those who are only interested in earning money during the training.

Course 2 covers treatment and prevention of the major cattle and buffalo diseases occurring in the province. Theory is explained over three days; the fourth day is for practical training and the fifth is a review in which role playing helps VVWs put their theoretical knowledge into practice.



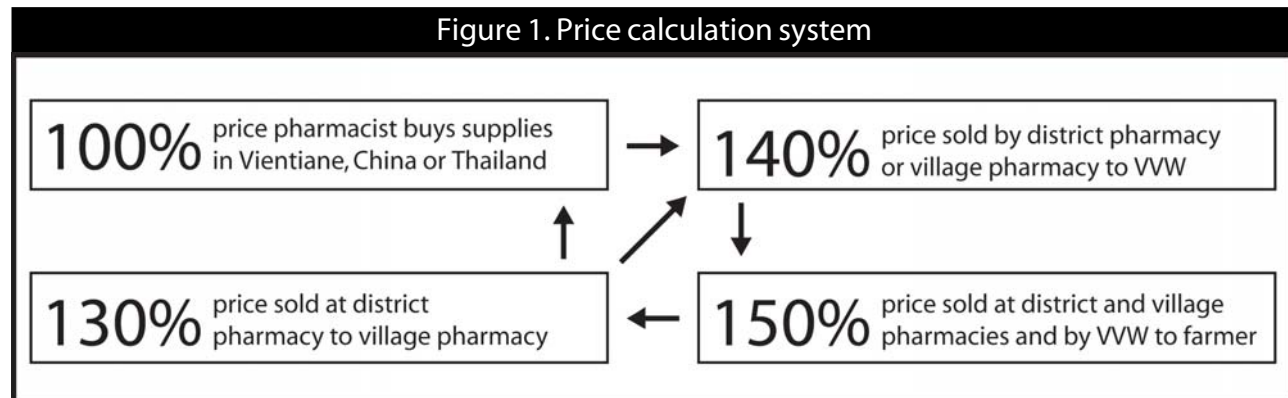
VVW training courses

Course 1 is an introduction and makes clear the difference between the treatment and the prevention of a disease, a point often neglected in short VVW training courses. Confusing the two can lead to vaccination of sick animals, which then causes villagers to question the whole idea of vaccination. Other topics in this course include how to store drugs and vaccines, how to clean and sterilise veterinarian equipment, plus simple courses in maths to allow them to do book-keeping and drug dose calculation.

In the same way, **Course 3** deals with pig disease, **Course 4** with poultry disease and **Course 5** with the diseases of other animals (e.g. horses, goats, dogs and cats) as well as wounds, abscesses, diarrhoea and fractures.

After each course, the VVWs are given an initial stock of drugs and equipment. On demand, after having organised a vaccination campaign in the village, the VVW receives free vaccines for the first campaign against each disease. This stock of drugs and equipment has to be sold to the villagers according to the established price

Figure 1. Price calculation system

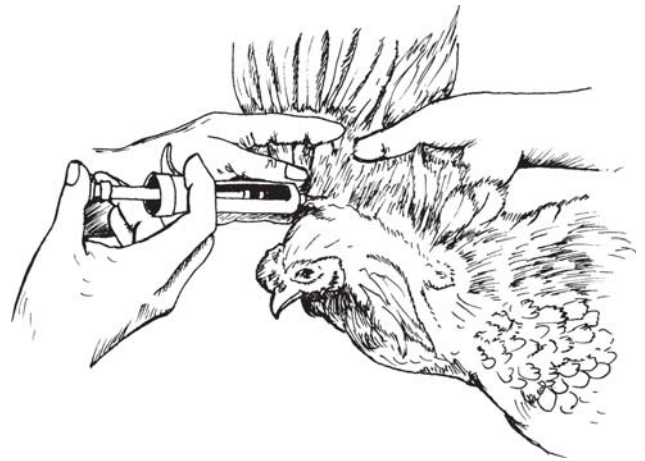


system (Figure 1). The money obtained allows the VVW to buy new drugs and vaccines as well as to earn a profit.

Drugs, vaccines and materials

Before this project, drugs and vaccines in both districts were only available at DAFO livestock departments. Vaccines were often not available at the right time for vaccination (i.e. shortly before the rainy season and before the cold season for Hemorrhagic Septicaemia and Fowl Cholera). The refrigerators where vaccines were stored were often not working - maybe because of 'diluted responsibility' in an office where there are several people but no individual directly responsible for keeping the refrigerator in proper working order. Some days, all DAFO staff were out in villages so there were no staff present who knew how to use the drugs and vaccines, or their prices when farmers came to buy. These problems were solved by establishing one private veterinary pharmacy in each district capital.

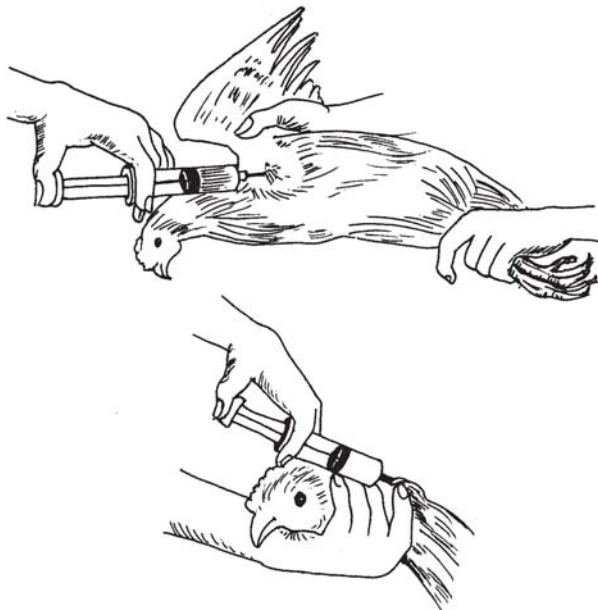
Drugs, vaccines and equipment produced in Laos are given preference. Some equipment is purchased in China and a number of veterinary drugs are bought from the Veterinary Supply Unit (VSU) in Vientiane or in Thailand. The project established a contact between private veterinary pharmacists and companies where they can



obtain supplies. The pharmacists attended the VVW training as well as a special training course on bookkeeping, how to further advise the VVW, and how to report and cooperate with the DAFO follow-up team.

In Sing and Nalae, many villages are more than six travel hours from the district capital where a private veterinary pharmacy is located (six hours are the maximum time on a sunny day that vaccines can be transported in an icebox





containing two freeze-packs to keep temperatures below 4°C). To ensure vaccine to all villages, the project established village pharmacies with a solar fridge to keep vaccine at appropriate distances (two in Sing and three scheduled for Nalae).

In addition to the 10% profit for selling medicine, a VVW charges a fee for veterinary services. The current charges range from between 500 Kip for treating a chicken to 2,000 Kip for a buffalo.

Cold chain for vaccines from the factory to the animal

Vaccines are bought from the Nongthene Vaccine Factory or the VSU. The district veterinary pharmacists collect the vaccines in Vientiane or arrange for them to be collected in Luangnamtha. VVWs living in villages less than six hours from the district capital come directly to these central veterinary pharmacies and take the vaccines in small iceboxes to their villages. VVWs give their warm ice packs to the veterinary pharmacist and receive cold ones in exchange. In the same way, village veterinary

pharmacists take more vaccines from the district veterinary pharmacy to their village pharmacy to supply remote villages within a range of six-hour range of their village.

In the beginning, it is difficult for the pharmacists to judge the quantity of vaccines needed to ensure they are sold before the expiration date, while always having vaccines available. The project supports the pharmacists during a one-year period, during which unsold expired vaccines are exchanged.

Regular follow-up

Especially during the beginning of their activity, VVWs have to be followed-up regularly, at least every three months. These follow-up visits:

- Ensure the curriculum understanding of each VVW.
- Provide individual explanations for unasked questions during training.
- Help the VVW organise their first vaccine campaign.
- Assist in treating sick village animals.
- Collect data on VVW activity.

Lessons learned

While data is not available to produce a full evaluation, there have been some lessons learned from the first follow-up in Sing district.

- The VVWs attended most training sessions and appeared highly motivated. While some complained about not receiving per diems, and having to attend common meals and sleep at the training centre, most trainees soon praised the 'group feeling' and spent time in the evenings helping the weaker students.



- Not all VVWs are active but less than 10% have shown no activity at all since training. One reason for inactivity is that VVWs felt they did not have enough support from village authorities. For these villages, special meetings were scheduled to explain the role and function of the VVW, the difference between treatment and prevention of disease, and how vaccines work. It was noted that most VVWs spend more time treating sick animals than vaccinating, so these special information meetings on disease prevention will be held in all villages.
- Pharmacists' incomes are currently low as most are still working with their initial stock. Most pharmacies also sell drugs to farmers who are not VVWs and sell other products for animal husbandry such as chicken and pig food.

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