

5

Livestock healthcare for Tibetan agro-pastoralists: application of Rapid Rural Appraisal techniques

Claire Heffernan

• Introduction

Participatory Rapid Appraisal (PRA) and Rapid Rural Appraisal (RRA) research techniques are relatively new to the primary health care arena. Recently, there has been much interest in the application of these methods in information gathering for livestock healthcare delivery systems.

This Rapid Appraisal (RA) focused on the primary livestock healthcare system and knowledge of livestock diseases and healing among Tibetan agro-pastoralists of the Himalayas. This study took place in the village of Ringmo, in Shey-Phoksundo National Park in the Dolpa District of Nepal¹.

Shey-Phoksundo National Park comprises an area of 3,555km. Much of the park lies to the north of the main Himalayan range. Approximately 2,800 people, mostly agro-pastoralists of Tibetan descent, reside in the park (Bajimaya, 1990). Livestock herds are comprised mainly of yak and yak-hybrids with cattle and goat herds more common in the lower elevations of the park.

Ringmo village is located on the perimeter of Lake Phoksundo, in the northern corridor of the park. The Tibetans of this village are followers of the Bon Po sect of Buddhism. The village has residents from mid-spring to late fall each year. During the winter, families and herds move south to temporary settlements at lower elevations. Most of the herds in this

¹ This RA was part of a larger project undertaken by the Institute of Forestry and USAID Nepal, examining National Park resource use. This portion of the project took place over a six week period in August and September, 1992.

village were comprised of yaks with a few cattle. Unlike other areas of the park, few yak/cow hybrids were observed. The breeding of yak/cow hybrids is considered unpure and religiously frowned upon, thus the few *zho* (male) and *zhom* (female) hybrids observed, had been purchased from Tibetans from areas further north, who held no such religious objections.

• Study objectives

The objectives of this study were to:

- Outline the primary livestock healthcare delivery system;
- Define cultural beliefs toward animal disease and healing;
- Obtain an understanding of seasonal migrations and animal husbandry techniques; and,
- Determine community-driven needs for veterinary inputs.

• Methodology

Open-ended interviews with individuals from each household and key informant interviews provided the basis for most of the information of the study. Stocking numbers and migration patterns were mapped for each household and corroborated by key informants.

Key informant interviews

Three key informants were identified by the community members as having special knowledge of livestock healthcare. One key informant, the village animal doctor, unfortunately was on a trading expedition to Tibet at the time of the study. His son,

however, was able to supply some specialised information on the nature of several diseases and treatments from having observed his father. The village mayor was also considered a knowledgeable source because of his standing in the community. The third key informant was an animal shaman from a neighbouring village. He was considered by all to be an expert in the area of livestock healthcare and was called upon to treat difficult clinical cases and disease outbreaks.

Key informants were first asked to identify commonly occurring diseases. As these diseases were identified and discussed, specific questions were asked regarding clinical signs, causality, seasonality and post-mortem signs. Discussions about disease were viewed as an exchange of information from both sides and not simply an informal question and answer session. Many diseases are common to farmers the world over (such as mastitis) and thus presented the opportunity to share information. Herders became much more interested in the process and gave more detailed information when common ground was found.

All three key informants easily detailed the clinical signs and seasonal occurrences of these diseases. Post mortem signs were unknown in most cases. Due to the religious restrictions, the slaughter of animals is prohibited. Thus, the carcasses of sick animals are almost never consumed and are usually buried. Consequently, knowledge of internal anatomy is poor. The animal shaman was the only informant interviewed that could outline disease processes in internal organs.

Individual interviews

Herders easily talked about livestock husbandry, however most were reluctant to discuss livestock disease. There are two possible reasons for this. Buddhists consider animals to be spiritual beings. The nature of most illness, both human and animal, is considered spiritual (caused by an unlucky encounter with harmful ghosts and spirits). Commonly, throughout the Himalayas, many of the secular population prefer not to advance opinions on disease and illness because they believe there is a correct answer they do not have access to (Desjarlais, 1992). Secondly,

unlike other pastoralists societies, laymen do not treat sick animals. Even in cases of dystocia (difficult birthing), herders will not pull calves, but defer to the two animal healers in the area. Thus, knowledge of livestock illness and disease is specialised and considered a matter of great learning.

From our interviews, it also became apparent that women were reluctant to discuss livestock at all and referred us to older male relatives, even though women are the primary caretakers of livestock during the summer months when most men are on trading expeditions to Tibet or Jumla, Nepal.

Livestock disease ranking

This exercise was undertaken in order to gain an understanding of herders' perceptions of the importance of livestock disease within their production system. Herders were asked to name the diseases that caused the most problems in their herds.

The most serious problem indicated by household informants was *Cumar Po* - a poisoning caused by eating certain species of grass. This grass is found beside trails in the lower elevations. The clinical signs of this disease are dramatic with hematuria (bloody urine) and slow wasting. Most informants were able to give us specific information about this disease. First, as the nature of most diseases is spiritual, this disease was one of a few which did not have 'other worldly' associations, thus informants felt the most comfortable talking to strangers about it. Additionally, this disease is more common in the fall and the study took place in August and September.

Key informants, on the other hand, provided very different information regarding disease ranking. Diarrhoea was considered the number one disease problem in adult animals. It occurred year round, with a high seasonal incidence in the winter. Diarrhoea was also the major cause of calf mortality. Key informants also linked poor nutrition, which caused 'weakness', as a factor in this disease.

It became apparent from this exercise that disease ranking is complex and data often cannot be taken at face value. For example,

many herders who mentioned *Chumar Po* as their biggest disease problem, did not have animals who would have been exposed to it (yak or yak hybrids used on trading expeditions). Also, herders were aware of the species of grass that caused this disease and avoided areas where it grew. Thus we had to look for other cultural reasons that might cause herders to mention this disease most often.

Livestock numbers

Many pastoralist and transhumant populations are sensitive about questions regarding livestock numbers. The residents of Ringmo were no exception to this, and informants tended to exaggerate herd sizes. This was most common amongst the poorest members of the village. Thus, when attempting to accurately determine stocking numbers, triangulation is extremely important. First visual inspection and direct counts should be utilised when possible. The seasonality of the study is also often important. During the summer herds are kept communally and it is easy to perform direct counts of community totals. In the winter, households keep cattle and yak/cow hybrids in shelters at night with the yaks ranging close by, thus household numbers would be easier to acquire. Numbers were broken down into adult yak and nak (female yak), calves and yearlings; adult *zho* and *zhom*, calves and yearlings; and adult cow male and female, calves and yearlings. As different cultures determine the age of animals differently, it is important to determine what constitutes the age of an adult. All numbers were verified by key informants.

• Conclusions

The use of PRA/RRA methods in livestock healthcare systems research is at an exciting stage of development. These techniques gear researchers toward gathering information with a socio-cultural grounding. Among pastoralist populations where herding livestock is a culture and social matrix, as well as an economic livelihood, traditional research methods that ignored these factors created lopsided and illogical development practices.

In the Himalayas, religious beliefs and livestock healthcare are inextricably linked. Among the Tibetans of Dolpa, we found a

sophisticated livestock healthcare system that has developed over centuries. Knowledge of this belief system is vital to the formation of effective governmental and non-governmental interventions.

Globally, pastoralists exist in some of the most inhospitable and demanding environments in the world. Systems for survival have developed over centuries. RRA techniques allow researchers some insight into these survival strategies. Our study among the Dolpa Tibetans at the 'roof of the world' allowed us to glimpse the realities that make yak production systems viable in the Himalayas. One of the risks of doing rapid appraisals, such as this one, is to focus only on the problems and miss the larger picture. It was important for us to remember that a culture that has survived for centuries at 14,000 feet must be doing something right.

- **Claire Heffernan**, 11 Old Coach Circle, Hampden, MA 01036, USA.

REFERENCES

- Bajimaya, S. 1990. Socio-Economic, Community Development and Tourism Survey in Shey Phoksundo National Park. Department of National Parks and Wildlife Conservation, Nepal.
- Desjarlais, R. 1992. *Body and Emotion: The Aesthetics of Illness and Healing in the Nepal Himalayas*. University of Pennsylvania Press, Philadelphia.