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Planning a community animal health care programme in Afghanistan

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• Introduction

Arghandarb Valley in the Daye Chopan district is one of the least developed in Afghanistan. It is situated in the southern foothills of the Hindu Kush at an altitude of 1900-2900m. Rural development has been disrupted here by 13 years of war. Agricultural production is mostly subsistence with almonds providing a cash income. Sedentary farmers till gravity-fed irrigated fields with oxen and grow cereal crops as a staple. They also raise cattle, sheep and goats as a source of dairy products and meat. Significant numbers of transhumant pastoralists who keep sheep and goats and camels are located in the area and enjoy a symbiotic relationship with the sedentary farmers.

Health Unlimited, a medically-orientated NGO, has been working with the Daye Chopan community for the past eight years, running an integrated rural development programme. In response to requests from farmers for assistance to improve animal health, they recently asked VetAid to investigate the local situation.

Neither NGO knew much about the community's agricultural production system and even less about localised animal health problems in the Daye Chopan area, which lies outside the range of the Afghan Government Veterinary Service. Although a small-scale survey of animal management practices in Afghanistan was conducted by Findlen (1990), VetAid still had little notion of the community's production priorities and needs.

• Participatory Rural Appraisal

VetAid project staff decided to carry out their own survey of the Daye Chopan community using participatory research methods. Their aims were to discover:

- The decision-making process and abilities of individuals in the community;
- The problems affecting different wealth groups, as perceived by the community;
- Cultural restraints;
- Physical restraints; and,
- The indigenous technical knowledge of the area (such as recognition of diseases and ability to control or treat them, feeding strategies etc.).

Methods

VetAid wanted to involve the community fully in the project, so participatory techniques were chosen to encourage people to analyse their problems and identify potential solutions. A comprehensive range of PRA tools were tried and tested throughout the survey with the full cooperation of the people of Daye Chopan. Methods included:

- Informal structured interviews, using a compact tape recorder;
- Key informant interviews, using a compact tape recorder;
- Group interviews, to discuss and cross-check information;
- Diagrams, movement of livestock maps, transects and seasonal calendars;
- Wealth Ranking;

- Pair-wise ranking and direct matrix ranking; and,
- Progeny histories;

The research period was scheduled to run for three months. Of the above techniques informal structured interviews formed the crux of the survey. Wealth ranking was most useful in classifying the community's problems while other ranking techniques were good at determining how people saw their options.

Wealth ranking

The method described by Grandin (1988) was used at the start of the survey in three separate villages. Existing lists of landowners and farmers were used to carry out a formal stratified survey of livestock numbers and wealth indicators. Wealth ranking showed how the different sectors of the community perceived wealth. In addition, by dividing the community into different wealth groupings, it helped to identify how problems and production priorities were related to wealth.

In general people had no misgivings about talking about relative wealth, but were more reluctant to actually quantify it. On the whole, there was general agreement between informants on the rankings assigned to households. The wealth ranking exercise provided useful background information for follow-up discussions on livelihoods, vulnerability and the options which people felt were open to them.

Direct matrix ranking

Having identified the various wealth groupings, informants were asked to rank their most limiting socio-economic problems. This led on to a discussion of the factors which were limiting production and, more specifically, animal health disorders. This method of problem analysis allowed people to isolate and prioritise those situations which could realistically be improved using the minimum of resources.

Disease ranking

Disease was mentioned as a problem by all wealth sectors keeping goats and sheep but it was most significant for the Koochi pastoralists. Questioning and ranking focused on the nature of the problems and the traditional methods of dealing with them. People generally agreed about which diseases were worst, but the biggest problem was translating Pushtu names for diseases into scientific terms. This was because Pushtu names describe particular symptoms which might be caused by a number of pathogens, and it was often difficult to match these described symptoms to specific diseases. Thus western-trained vets face a language and communication barrier which can only be partially solved by using participatory methodologies.

Pushtu names for diseases were recorded and details of symptoms, occurrence, local treatment and proposed control methods noted. Table 1 shows the results of this ranking exercise. This shows that a small number of diseases were constantly ranked as most important, regardless of relative wealth strata. Ranking helped people clarify the disease problems and potential solutions available to them. The treatment and control of diseases that were ranked as being most important were included in the curriculum for the training of Basic Veterinary Workers (BVWs). VetAid staff also had the opportunity to collect information on local diseases whilst they were treating sick animals or carrying out post-mortem examinations.

Fodder ranking

The availability of adequate amounts of winter livestock feed is one of the main problems in the Daye Chopan district. To help overcome this shortage, wild plants are collected from the mountain sides in the spring, sun dried and then fed to camels, cattle, sheep and goats in the winter. Farmers and their families collect as much wild fodder as possible, especially if they can only cultivate a limited amount of winter fodder. The type of plants collected depend upon the location. These plants are ranked below (Table 2) according to their value as feed and their palatability.

Table 1. Farmers' ranking of diseases affecting livestock

Rank	Pushtu disease names	English disease names
Sheep and Goats		
1	<i>Tak</i>	Anthrax/acute pneumonia/enterotoxaemia
2	<i>Loey</i>	Pneumonia syndromes
3	<i>Garg</i>	Liver fluke
4	<i>Rikhak/Maknai</i>	Helminths
5	<i>Busmarg/Goat death</i>	Contagious caprine pleuro pneumonia (goats only)
6	<i>Poon</i>	Sarcoptic mange (goats only)
Cattle		
1	<i>Gomarg</i>	Haemorrhagic septicaemia (HS)
2	<i>Kundreze</i>	HS, pneumonia
3	<i>Pehrey</i>	Ruminal stasis?
4	<i>Thin</i>	Liver fluke, TB?
5	<i>Thin and pica</i>	Phosphorous deficiency
6	<i>Tamba</i>	Frothy bloat
Camels		
1	<i>Tigawooni</i>	HS, anthrax
2	<i>Poon</i>	Sarcoptic mange
3	<i>Much Wahooni</i>	Surra
Donkeys and Horses		
1	<i>Bogmara</i>	Anthrax
2	<i>Marla</i>	Glanders, strangles, pneumonia
3	<i>Schumard</i>	Colic
4	<i>Shar shar bandh</i>	Exertional myopathy
Poultry		
1	<i>Shinee</i>	Red mites
2	<i>Kunabuki</i>	Newcastle's disease

Table 2. Ranking of value and palatability of wild plants collected for winter-feeding goats

Name	Month collected	Palatability	Value	Other
<i>Koumaria</i>	May	1	2	Difficult to collect. Supplement: donkey, horse, sheep.
<i>Pooshee</i> (wild rhubarb)	May/June*	2	1	Difficult to collect. Supplement: cow, camel, donkey, horse, sheep.
<i>Shinshoobi</i> (wild mint)	May*	4	3	Grows on irrigation channel banks. Supplement: donkey, horse, sheep.
<i>Spearki</i> (wild lavender)	May*	5	5	Easy to collect, causes sickness in sheep
<i>Woosha</i>	May*	3	4	Easy to collect. Supplement: donkey, horse, sheep.
<i>Sturkgh</i>	May*	6	5	Supplement: donkey, sheep.

* sun dried at place of cutting, transported to winter housing by donkey

Seasonal calendar

Drawing seasonal calendars helped both the VetAid staff and the farmers to visualise and consolidate the livestock management system, seasonal health and production problems. However it was discovered that people found it difficult to express themselves by drawing. People traditionally communicate using speech in this area - writing and drawing are not common methods of conveying information. Frequently interviews took place in settings that were not conducive to using pictures, e.g. inside a carpeted home where it was necessary to use paper and pens, themselves a foreign media. Hence, the underlying concept and purpose of using diagrams as a form of communication was not always understood by the informants.

- **Project planning**

The use of PRA methods to encourage communities to make their own decisions was only partially successful. The war has caused the breakdown of traditional decision-making bodies. As a result the local *mujihadeen* commander is responsible for community welfare and any community development proposals have to be approved by him. The community have lost the impetus to organise themselves and are quite willing to accept the advice of outsiders. Individuals were given the opportunity to express their own needs and analyse their own problems but it was left to VetAid and local *mujihadeen* leaders to propose the ensuing development programme.

The survey brought to light a severe animal health problem, affecting the poorest members of the community most seriously. The community leaders were consulted about ways of solving this problem and raising production in a sustainable manner, both economically and ecologically. The result was a project to train livestock keepers (who became known as Basic Veterinary Workers) to treat, prevent and control the most serious diseases, as ranked by the community. The training builds upon existing livestock knowledge, useful traditional beliefs and practices recorded during the survey. The project also plans to train shopkeepers in the use of anthelmintics and flukicides. The Basic Veterinary Workers

(BVWs) were not paid whilst being trained, instead they were to benefit from the sale of medicines at a profit after the training. Farmers readily accepted the project and expressed willingness to pay for the previously unavailable drugs.

The training was carried out on-site by Afghan paravets (previously trained in Pakistan) using practical training techniques suitable for illiterate people. Further training in the use of locally available medicines, the management of revolving funds and disease treatment was to be provided at regular intervals during the next two years. The BVWs received loans to buy their basic medicine kit and assistance with securing drug supplies.

The effects of training were assessed using structured informal interviews and monitoring forms. These asked about the effectiveness of the newly introduced drugs and the farmers' use of the service provided by the BVWs. Monitoring forms were designed to be completed by illiterate farmers and paravets.

The project hopes to lay the foundation for similar projects in other areas. Neighbouring communities have been contacted and are receptive to the idea of training members of their communities as BVWs. The interaction with farmers during the participatory survey has helped to establish a good working relationship with the Daye Chopan community. The Afghan paravets will be given PRA training so they can carry out a participatory appraisal themselves using the tools found useful in Daye Chopan. These locally tried and tested techniques can help the paravets to monitor and evaluate their work in order to become more sensitive to the needs of the local farmers. It was considered imperative, if the projects are to be sustainable, for the community to participate in evaluating their problems and discussing the solutions.

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