

Assisting small-scale farmers to produce healthy animals

J. Turton

*Animal Health for Developing Farmers, ARC-Onderstepoort Veterinary Institute,
Private Bag X05, Onderstepoort, 0110, South Africa*

Abstract

Small-scale farmers need to be empowered to better recognise, prevent and treat diseases in their livestock so that they are less dependent on outside assistance and can have healthy and productive livestock. This empowerment can be achieved through information modules on animal health. The Animal Health for Developing Farmers Programme at the Agricultural Research Council-Onderstepoort Veterinary Institute (OVI) started in April 1998 with the specific aim of developing appropriate and relevant information modules on animal health at a suitable level for small-scale farmers. The information modules consist of posters, slide presentations, written and cartoon type pamphlets (translated into all relevant languages), videos and electronic information modules. They are designed to be delivered by those doing extension work with small-scale farmers (government, NGOs, educational and research institutes, private sector, commodity organisations and farmers unions). The programme is also identifying research priorities in animal health for small-scale farmers. It is envisaged that informed livestock owners will have healthy, productive livestock, and these livestock can effectively be used to provide animal power.

Introduction

Livestock health problems can prevent small-scale farmers from achieving optimal agricultural production, and many communities have little or no access to veterinary services. This can result in reduced productivity, disease and death of livestock, including livestock used to provide animal power. There is thus a need to empower small-scale farmers by providing them with well-structured information modules on animal health directed at the appropriate level of understanding to assist farmers in recognising, preventing and treating diseases in their livestock. This will result in healthy and productive livestock, and the farmers will be less dependent on outside assistance, which is often not available.

Objectives of the Animal Health for Developing Farmers Programme

The Animal Health for Developing Farmers Programme commenced at the Agricultural Research Council Onderstepoort Veterinary Institute (OVI) in April 1998, with the specific aim of developing appropriate and relevant information modules on animal health for small-scale farmers. The programme is directed towards empowerment of small-scale farmers to recognise and deal with animal diseases, to understand the importance of those diseases, and to improve productivity by integrating animal health control with improved husbandry. These information packages are designed to be delivered by governmental and non-governmental organisations (NGOs) doing extension work with small scale farmers.

It is anticipated that these information modules will enable small scale farmers to:

- Evaluate the health of animals in their herds and animals that they wish to purchase
- Perform relevant procedures on their livestock
- Recognise serious, as well as controlled, diseases
- Recognise and overcome management-related problems

The information modules will incorporate different media, including written and cartoon type information pamphlets, slide presentations, posters, electronic information modules and videos. All written information will be translated into the relevant South African languages so that the information is widely available. These information modules need to be simple and relevant.

As it is important that these information modules are appropriate and relevant, they are initially being tested by programme staff in target communities throughout the country, which have been identified by linkages with government and NGOs. Feedback from the farmers following the presentations will determine whether the modules are understandable and relevant, how they can be improved, in what language and format the farmers want the modules, what the animal health concerns of the farmers are and which topics farmers most need to have information on.

Apart from the initial assessment of the pilot modules, programme staff will not be responsible for the delivery of the training modules. Linkages with national and provincial veterinary services and agriculture, educational and research institutes,

NGOs and the private sector will identify the most feasible and appropriate means of delivery and also ensure that relevant organisations are aware of the availability of the training packages. Additionally, an extension needs survey is being conducted of provincial veterinary and agricultural extension staff to determine what is needed to assist them in their extension work with small scale farmers.

The other objectives of the programme are training of trainers (particularly animal health technicians), and identifying research priorities in animal health for small-scale farmers.

Achievements

Achievements since the initiation of the project have been considerable, although staff capacity is low (a programme manager, two researchers and one secretary) and that staff only joined the project in November 1998 and February 1999.

Information module development

Fourteen slide presentations have been developed, with accompanying information leaflets. Topics include: Is my animal healthy? (ruminants, pigs, poultry); Why did my animal die?; Common diseases (poultry, cattle, sheep and goats, pigs); Zoonotic diseases; Internal parasites of sheep, goats and cattle; Brucellosis and Tuberculosis; Tick-borne diseases; What is the difference between vaccination and treatment?

In addition to the information leaflets accompanying the slide presentations, the following four pamphlets have been published or are in the process of being finalised by the Directorate of Agricultural Communication: Is my animal healthy?; Tick-borne diseases in cattle; How to estimate the age of cattle; How to estimate the age of goats and sheep.

Four posters have been developed in collaboration with the Graphic Design Department of the ARC Central Office: Tick-borne diseases; Zoonotic diseases (Diseases spread by eating infected meat and drinking infected milk); Zoonotic diseases (Diseases spread by bites: Rabies); Diseases of small scale broilers.

The following three electronic information modules are being developed in collaboration with the Information Systems Development Department of ARC Central Office: Tick-borne diseases; Is my animal healthy?; Common diseases of small-scale pig herds.

An infotoon (cartoon type brochure) entitled "How should medicines be used?" is being finalised.

Some of the modules have been translated into Xhosa, Afrikaans and Tsonga-Shangaan.

The topics of relevance to animal traction developed to date include:

- Is my animal healthy?
- Common diseases of cattle
- Why did my animal die?
- Zoonotic diseases
- Internal parasites of sheep, goats and cattle
- Tick-borne diseases
- What is the difference between vaccination and treatment?
- Brucellosis and tuberculosis
- How to estimate the age of cattle
- How should medicines be used?

Community visits

Fifteen farmer days have been conducted, in six of the nine provinces: Gauteng Province (Irene, Elandfontein, Medunsa, Johannesburg, Magaliesburg); North-West Province (Ipelegeng, Moretele, one held at OVI); Northern Province (Mankweng, Mafefe); KwaZulu-Natal Province (Impendle, Khokhwane, Ngcolosi); Eastern Cape Province (Koloni) and Mpumalanga Province (Moutse).

These community visits/farmer days were organised by liaison with various organisations or institutions for example: the Gauteng Veterinary Services (through the farmer to farmer extension training, organised by the Coaching, Training and Development Programme and the ARC-Irene), the North-West Emerging Farmers' Association, the North-West Veterinary Services, the National Veterinary Faculty, the Northern Province Department of Agriculture, the Rural Women's Movement, the Pig and Poultry Fair, the KwaZulu-Natal Department of Agriculture, the Agricultural and Rural Development Research Institute, (ARDRI), at Fort Hare, the Northern Province Veterinary Services and Heifer Project International.

Thirteen of the modules have been tested at these farmer days as slide presentations and as written pamphlets. Farmer numbers at each farmer day have varied from a minimum of eight to a maximum of 200+, with an average of 25. Farmer feedback has been very positive overall and indicated the information modules to be useful and understandable. Farmers would prefer information (oral and written) in their home language. Most preferred the slide type of presentation, although some people were interested in videos. Most would prefer handouts with pictures and words rather than only words. Often people cannot read English, and some cannot read at all.

Apart from the farmer days, eight other communities were visited in Gauteng, Northern, North-West, KwaZulu-Natal and Eastern Cape Provinces, and information obtained about animal health concerns.

Research priorities

Some small scale farmers' needs and concerns have been identified, such as the use of medicinal plants to treat disease, and these can eventually lead to focused research projects.

Outputs

Anticipated outputs of the programme are:

- Improved productivity through building the capacity of livestock owners to recognise disease and carry out primary health care.
- Improved extension services through delivery of focused and appropriate information.
- Improved disease surveillance through comprehension and participation of livestock owners.

- Improved human health through knowledge of potential zoonoses and the need for hygiene when handling animals.
- Cost-effective and environmentally sustainable animal health programmes based on good husbandry and only strictly appropriate medication and chemical intervention.
- Identification of veterinary needs (services, medicines, and information).
- Identification of the major animal health problems constraining developing livestock owners.
- Identification of research needs and priorities.

Ultimately, the result should be a significant contribution to development in the livestock sector of agriculture, which would result in better household food security, job creation, and a competitive advantage internationally.

Informed livestock owners will have healthy, productive livestock, and their large ruminant stock and equids can be used more effectively to provide animal power when required in food production and income generating activities.