



FOOD SECURITY VETERINARY PROJECT



2004



INTRODUCTION

Livestock diseases are a major constraint to livestock development in Southern Sudan. The livestock owners and NPA have joined forces to control and eradicate diseases of livestock within Yirol and Kajo-Keji Counties. The project has planned and executed animal health activities with much care and the project has been successful in controlling, even reducing the targeted diseases.

NPA has established community-based animal health activities covering the two counties as well as support to ox plough activity in Yei, Juba and Terekeka Counties. Most recently in 2004, NPA has taken on a partnership with Vetworks Services Trust in Terekeka County to ensure the provision of uninterrupted veterinary services to communities through this Sudanese NGO.



To ensure sustainability and relevance to local needs, NPA uses community-based animal health workers, AHAs and stock persons to deliver animal health services. The veterinary services cater for community involvement but emphasize more on service delivery and facilitate animal health development that have more sustainable outcomes. NPA 's intervention has facilitated a fair distribution of veterinary services to the communities in Yirol and Kajo-Keji Counties and builds their social capital as a safeguard to future shocks. Implementation of local practical approaches brings direct benefits to livestock owners, in particular approaches that deliver more appropriate animal health services.

Broad Veterinary Project Goals:

- The Veterinary Project will protect animals from immunisable diseases through vaccination.
- The project will lead to knowledgeable and competent community based animal health workers through training.
- The project will lead to reduced livestock mortality and improved health.
- The project will endeavour to increase community awareness about the project through workshops.
- The project activities will lead to better household food security through improved nutrition from consumption of animal products.
- The project will endeavour to facilitate the community in ensuring that the project becomes a sustainable community based animal health project.
- The project will support the agricultural oxenisation activities in Yei, Juba and Terekeka Counties by ensuring the bulls are in good health.
- Rinderpest eradication through surveillance.
- Partnership with Vetworks Trust for sustainability and support.

Project Activities

Routine Curative Treatments:

The use of community based animal health approach is a positive way of addressing the problems of providing basic animal health care over vast areas with rough terrain. Delivery of animal health services is predominantly the responsibility of community based animal health workers. The community based animal health workers are supervised to ensure that they maintain quality services. The CBAHWs have also taken up the challenge of cost-recovery and have established themselves well enough to make an impact on disease control.

The CBAHWs involvement in Kajo-Keji and Yirol Counties continues to improve the efficiency of services delivery. In Kajo-Keji County, they have generally been able to deliver adequate animal treatments. A total of 10,937 different livestock disease cases against planned target of 8,900 were treated. The treatment continued against East Coast Fever, Contagious Caprine Pleuropneumonia (CCPP), Brucellosis, Trypanosomiasis, Contagious Bovine Pleuropneumonia (CBPP), Coccidiosis and other endemic livestock diseases as well as control of external and internal parasites such as ticks, intestinal worms and liver flukes at cost recovery. Other cases include Mange, Heartwater and eye infections.

The most common cases were external parasites, East Coast Fever, ticks, internal parasites, intestinal worms, CCPP and Brucellosis, Trypanosomiasis and CBPP in descending order. Ticks and diseases they transmit are widely distributed throughout and are the most significant ectoparasites of livestock and vector-borne infections, which constitute a major constraint towards cattle production.

In Yirol County, the CBAHWs delivered curative treatments to just 2,537 cases against the planned target of 37,000. The very low level of livestock disease cases treated was as a result of delay in community drug procurement as well as insecurity caused by conflict between Dinka Agar of Rumbek County and Dinka Atwot of Yirol County. Between March and June, conflict was a common occurrence in Yirol and Rumbek Counties as the Dinka Agar and Atwot frequently clashed violently. The effects of conflict such as displacement, restriction of movement of people, loss of lives, properties and livestock were a threat to livelihood and veterinary service operations. It was not until the end of the year that the situation returned to normal and this allowed the resumption of veterinary activities.

In Yirol and Kajo-Keji Counties, community-based animal health workers delivered curative, preventive and promotive services, which largely benefited individual animals and their owners (i.e. "private goods" services). The treatments ran concurrently with community education on epidemiology of disease and prevention and, where applicable, emphasis on traditional prevention, treatment and control practices. Livestock owners provided a complementary system of animal health services by using indigenous knowledge to treat various types of diseases.

Disease outbreaks:

Heartwater disease outbreak was reported in Godo village of Bori Boma - Kajo-Keji County. The disease is a tick-borne disease caused by *Amblyomina* ticks. Heartwater is a protozoa disease and caused the deaths of 8 head of cattle.

Foot and Mouth Disease (FMD) is endemic in Yirol County. The most significant method of spread is by direct contact. Tissues and discharges of infected cattle are highly infective and in almost all cases cause disease on contact. Foot and Mouth Disease outbreaks were reported in Abang and Ngop Payams in June and July 2004 respectively.

Project Activities

Vaccinations

The veterinary staff in Kajo-Keji and Yirol Counties undertook a vaccination programme against the major diseases. In Kajo-Keji County, the vaccination of cattle against Contagious Bovine Pleuropneumonia (CBPP) was carried out in the fourth quarter. The project drastically increased on the previous year 's figures. The CBPP vaccination was the most impressive, recording a number of 7,889 head of cattle against a target of 5,000.

Livestock owners commonly cited the improvements in vaccine supplies and vaccination as an important factor explaining improvements in animal health and productivity. Ill health in animals affects public health and the economy of the community as well as inconveniencing the livestock owners.

The prolonged loss of conditions in fattening cattle and death of young calves are the most serious economic outcome from FMD. Vaccination was to be carried out in the face of an outbreak and symptomatic treatment and professional advice were intensified all over the two payams. NPA was obliged to report disease outbreak to FAO.

Lumpy skin disease outbreak was reported in Pagarau Payam of Yirol County and 8 head of cattle died. Lumpy skin disease is an acute disease characterized by fever, coetaneous nodules and generalized lymphadenitis. The outbreak was investigated and reported to FAO and SAAR. In late November, an outbreak of Haemorrhagic Septicaemia was reported in Tit Agau Payam of Yirol County, resulting in the death of 15 head of cattle. The veterinary staff investigated the outbreak and supportive treatment was delivered. The outbreak was reported to FAO and SAAR.

Vaccinations:

Vaccinations are ongoing in the two Counties of Kajo-Keji and Yirol to contain spread of diseases such as Contagious Bovine Pleuropneumonia (CBPP) , Blackquarter, Anthrax and Haemorrhagic Septicaemia. These diseases are prevalent in both counties (especially in Yirol County) and are considered as most problematic.

In Kajo-Keji County, vaccinations against CBPP have been going on for nearly four years and this has resulted in reduced mortality rates. A total of 7,065 head of cattle were vaccinated against CBPP, a performance rate of 141.3 % of the planned target. A further 1,391 head of cattle were protected against Haemorrhagic Septicaemia. The community based animal health workers are key players in the provision of vaccinations.

The small poultry farmers in Kajo-Keji County do not give much attention to sanitation and disease control. As a result, frequent disease outbreaks occur with very heavy losses particularly during the rearing seasons. The common diseases reported include Newcastle disease. Veterinary staff normally deal with the disease when it occurs. In 2004, 1,262 chickens were vaccinated against Newcastle disease, with vaccines purchased by the community. This was the main preventive and promotive measure to vaccinate chickens before an outbreak.

The community in Kajo-Keji County also purchased vaccines to vaccinate dogs against rabies as it is endemic in most areas of the County. Prevention of rabies is important in dogs due to the prevalent transmission to man and other animal species. Hence, where control in dogs is successful the cases in cattle and people are fewer.

Project Activities

In Yirol County, vaccinations against major epizootic diseases were one of the major activities. The major vaccinations carried out are CBPP, Haemorrhagic Septicaemia, Blackquarter and Anthrax. The diseases are feared due to their potential to impact negatively on animal health and they have been a major focus for the NPA Veterinary Project.

In 2004, 10,368 head of cattle were vaccinated against Blackquarter and Anthrax in Yirol County despite the prevalent insecure conditions. A further 9,922 head of cattle out of the planned target of 30,000 were vaccinated against Haemorrhagic Septicaemia in Yirol County, achieving coverage of 33%. The vaccination figures were lower than the planned target due to inadequate vaccine supplies from FAO coupled with the hostilities causing physical insecurity. Cost recovery has also reduced the response of some livestock owners to vaccinations, especially in difficult times as experienced in 2004. The diseases in Yirol and Kajokeji Counties were carried through routine vaccinations. Hence various types of vaccines were provided by FAO.

Cost Recovery:

The cost recovery policy implemented by the NPA Veterinary Project aims to prepare the communities in Kajo-Keji and Yirol Counties for a privatised animal health service, where livestock owners pay full cost for vaccinations and treatments. The project provides veterinary services on a cost recovery basis through trained community based animal health workers (CBAHWs), Animal Health Auxiliaries (AHAs) and stock persons.

The acceptance of the community based animal health system, cost recovery and principles of privatisation so far has supported livelihoods and local capacities. Encouraging CBAHWs, AHAs and stock persons to provide services for a fee allows their sustainability, and therefore their future.

In Kajokeji County, fees charged for treatments and vaccinations of livestock diseases, external and internal parasites and intestinal worms amounted to 1,796,640 Uganda Shillings (US\$ 1,033) and the revenue was remitted to veterinary coordination committees.

In Yirol County, veterinary services were also provided on a cost recovery basis. The 90 active CBAHWs, 6 AHAs and a stock person were engaged by the project. The veterinary staff realized 3,493,675 Sudanese Dinars (US \$ 699) as cost recovery for treatments and vaccinations. Remunerations of CBAHWs, AHAs and stock person were supported through cost recovery and were directly linked to work carried out. CBAHWs, AHAs, and the stock person received 1,401,861 Sudanese Dinars (US\$ 280) as an incentive from their services. The remaining 1,481,389 Sudanese Dinars (US\$ 296) were remitted to veterinary co-ordination committees as net cost recovery.

In both counties of Yirol and Kajo-Keji Counties, veterinary coordination committees decide how best to use revenue collected from animal health services.

Privatisation of veterinary services is also now taking root in Yirol and Kajo-Keji Counties, which will ensure sustainable animal health and have a positive socio-economic impact on livestock owners.

Project Activities

Capacity Building through Training:

NPA is a partner in facilitating institutional strengthening and capacity building to enhance sustainable development. NPA continues to strengthen capacity building of the staff and communities.

Yirol County: NPA trained selected community representatives of Konybai Management Committee and Payam Veterinary Supervisors seconded to the project in leadership skills, entrepreneurship, basic book-keeping and accounting for two weeks in collaboration with VSF Belgium, that runs regular training courses for veterinary supervisors at Mariel Lou, Bahr el Ghazal. The participatory training was in two phases, with the first more general and basic, while the second was more detailed and mainly attended by the staff that were to be involved in the day to day management of Yirol County Community Pharmacy. In addition, four Payam Veterinary Supervisors followed a three days cold chain maintenance course in Rumbek. The course was facilitated by FAO.

Kajokeji County: Given that the cadre of community based animal health workers is useful in delivery of animal health services, monitoring and reporting disease outbreaks, 27 of them were retrained. A refresher course was organized in September and the objective was to ensure the CBAHWs continued to provide high quality animal health services to the community and also to share experiences in which they highlight difficulties and operations.

In October, 25 persons were selected by the community to undergo two weeks training on community based animal health and management. Of these, 8 came from South Bari – Juba County, Bor County and Lainya Payam of Yei County. The 25 persons were trained to diagnose, treat and control major endemic livestock diseases. After completion, the new CBAHWs were equipped with basic knowledge and skills on disease control. Since then the CBAHWs have continued to provide disease control and surveillance services in their home areas and are covering gaps identified by key stakeholders.

Farmers in Kajo-Keji County lack knowledge on the modern honey harvesting methods and therefore their product is of poor quality. Bee keeping is one of the few profitable village based micro –economic enterprises because economic returns are high. In light of this, the NPA Veterinary Project organized a four days training on beekeeping production methods and new entrepreneurial values for farmers. Trainers from Uganda facilitated the training. The farmers were trained on modern bee keeping; honey harvesting, refining and processing to promote bee keeping as a viable economic activity.

Dialogue meetings:

The project encourages active participation, and subsequently empowers communities by giving them the experience and confidence needed to influence the decisions they take about their services.

In Kajo-Keji County, 4 major dialogue and one veterinary co-ordination committee training were conducted. The training of the veterinary co-ordination committee was specifically on their roles and responsibilities. Due to the insecurity for much of the year in Yirol County, planned dialogue meetings could not take place.

Project Activities

Monitoring and surveillance:

Monitoring and Surveillance and were conducted as they are useful tools as part of all disease control activities, with the results used in planning disease control. In Yirol County, Payam Veterinary Supervisors made 42 Rinderpest surveillance trips to cattle camps and markets to closely monitor the situation, looking for any indication of the disease.

Tsetse control project:

The tsetse control project continued to generate a lot of interest from both the community and other NGOs working in Southern Sudan who would like to replicate its success. The staff designed a tsetse screen, which can be easily managed by community members besides being affordable to the community. In the fourth quarter, 260 pieces of tsetse screens were made and handed over to the tsetse fly control committee. A further 250 screens were issued to the tsetse fly committee for sale. The tsetse control committee retails the screens at Ugandan shilling 1,500 per piece to the community. This activity is creating a pool of revolving fund. The project conducted a two days training on tick and tsetse control for community members. The members were trained on the use of acaricides for controlling both tsetse flies and external parasites in cattle.

Establishment of pharmacies:

As a move towards sustainability, the NPA Veterinary Project in Kajo-Keji and Yirol Counties has facilitated and mobilised the communities to establish pharmacies so that in the near future, supply of animal health inputs is no longer a responsibility of NPA.

NPA has supported the establishment of private veterinary pharmacies in Yirol and Kajo-Keji Counties. Following privatisation, the pharmacies stock essential veterinary drugs and other inputs, and supply the local markets. Drugs are procured from Uganda and sold to community based animal health workers and livestock owners at commercially viable prices.

In both counties, privatisation of pharmacies is taking root. In Kajo-Keji County, NPA together with the community are strengthening the existing service delivery mechanism. The Veterinary Project through the community, channelled veterinary drugs worth 2,910,000 Uganda shillings (US 1,617) as start up capital to a private veterinarian who would in turn refund the same after sales. The pharmacy was seen to have increased efficiency in service delivery, but in late December 2004, a fire gutted the private veterinary pharmacy and efforts by villagers to put out the inferno were fruitless and nothing was salvaged.

In March, 3 Konybai Management Committee members travelled to Kampala to purchase veterinary drugs and other inputs prioritised by the community in Yirol County to stock the pharmacy. During the third quarter, Konybai Community Veterinary Pharmacy opened its doors to the community and community based animal health workers. By December, the revenue generated from veterinary drug sales amounted to 352,100 Sudanese pounds (US\$ 704).

The establishment of pharmacies in Yirol and Kajo-Keji Counties has increased access of livestock owners to drugs and is enabling timely treatments of sick animals, hence reducing mortality rates. This is a significant step on the way to sustainability of services.