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① Dr Berhans
please liaise with
Mr Mertens to follow up
18/11/03
AR

6th November 2003

SUBJECT: Proposal for continuation of VSF-Belgium Fight Against Lineage One Rinderpest Virus Project for Southern Sudan, March to October 2004

Dear Dr Musiime,

Following discussions with Dr Rene Bessin and Mr Paul Mertens regarding the continuation of PACE activities in southern region of Sudan beyond the end of the current VSF-Belgium contract which ended 31st October 2003, VSF-Belgium was invited to submit a request for a no cost extension to the current contract and a new proposal to cover the remaining period to October 2004.

The no cost extension has already been submitted and I believe is in the process of signing by EU Delegation. The no cost extension will end on 28th February 2004.

VSF-Belgium would therefore like to submit the enclosed proposal for the period 1st March to 31st October 2004.

We welcome your comments on this document.

Regards

Allan Duncan
Acting Head of Mission
VSF-Belgium

Cc: Dr Rene Bessin, PACE Director
Otto Moller, EC Delegation



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**"Fight Against Lineage 1 Rinderpest
Virus" Project
in Southern Sudan**

Phase Two:

March to October 2004

A. PROJECT SUMMARY

1. PROJECT TITLE

“Fight Against Lineage 1 Rinderpest Virus” Project in Southern Sudan – Phase 2

2. PROJECT GOAL/OVERALL OBJECTIVE

Reduction of poverty among those involved in livestock farming, and increasing productivity, thereby improving their livelihoods and enhancing food security.

3. PROJECT PURPOSE

Develop and apply appropriate systems for animal disease surveillance and control to ensure the eradication of rinderpest, thereby supporting Sudan’s livestock industry and sector.

4. IMPLEMENTING AGENCY

Veterinaires sans Frontieres-Belgium

5. KEY OUTPUTS

1. Adequate capacity maintained for effective project management.

2. Community-based services for effectively co-ordinated delivery of rinderpest eradication and contagious bovine pleuropneumonia (CBPP) control strategies are functional in areas served by Operation Lifeline Sudan southern sector.

3. Sudan is on schedule to be internationally recognized as free from rinderpest disease in 2005.

4. An appropriate strategy for the control of CBPP is being implemented.

6. TARGET GROUPS

Livestock-keeping communities in southern Sudan, especially pastoralist and agro-pastoralist groups in rinderpest lineage one risk areas.

7. AREA COVERAGE

Operation Lifeline Sudan southern sector areas of southern Sudan.

8. TIME FRAME

8 months duration with start date of 1st March 2004

9. PROJECT COST

688,000 EUR

Abbreviations

ACORD	Agency for Co-operation and Research in Development
ADRA	Adventist Development and Relief Association
AHEADC	Department of Animal Health and Epizootic Disease Control
AU/IBAR	African Union - Interafrican Bureau for Animal Resources
BVD	Bovine Virus Diarrhoea
CAHS	community-based animal service
CAHW	community-based animal health worker
CAPE	Community-based Animal Health and Participatory Epidemiology Unit
CAR	Central African Republic
CBPP	contagious bovine pleuropneumonia
CVL	central veterinary laboratory (Khartoum)
DOT	Diocese of Torit
DRC	Democratic Republic of Congo
EC	European Community
ECF	East Coast Fever
EDF	European Development Fund
ELISA	enzyme-linked immunosorbent assay
EVK	ethno-veterinary knowledge
FAO	Food and Agriculture Organisation
FEAU	Food Economy Assessment Unit
FEWS	Famine Early Warning System
FRRA	Fashoda Relief and Rehabilitation Association
GAA	German Agro-Action
GREP	global rinderpest eradication programme
IAEA	International Atomic Energy Agency
ICRC	International Committee of the Red Cross
MCF	Malignant Catarrhal Fever
MOU	memorandum of understanding
NGO	non-governmental organisation
NPA	Norwegian People's Aid
OCHA	Office for Co-ordination of Humanitarian Assistance
OIE	Office International des Epizooties
OLS	Operation Lifeline Sudan
OLS-NS	Operation Lifeline Sudan Northern Sector
OLS-SS	Operation Lifeline Sudan Southern Sector
Oxfam-GB	Oxfam Great Britain
PACE	Pan African Programme for the Control of Epizootics
PARC	Pan-African Rinderpest Campaign
PCU	Programme Co-ordination Unit
PI	Performance Indicator
RP	rinderpest
SC-UK	Save the Children – United Kingdom
SPLM	Sudan People's Liberation Movement
SRRA	Sudan Relief and Rehabilitation Association
SRRC	Sudan Relief and Rehabilitation Commission
UK	United Kingdom
UN	United Nations
UNDP	United Nations Development Fund
UNICEF	United Nations Children's Fund
VA	Veterinary Assistant
VSF-B	Veterinaires sans Frontiers – Belgium
VSF-S	Veterinaires sans Frontiers – Suisse
VSF-G	Veterinaires sans Frontiers – Germany
WFP	World Food Programme
WHO	World Health Organisation

B. PROJECT DESCRIPTION

1. Background

The last foci of lineage 1 rinderpest virus in Africa is believed to lie in the southern region of Sudan. The cattle populations in the border areas of southern Sudan move across international borders for pasture and trade. Identification and elimination of any remaining endemic areas in southern Sudan is therefore crucial for rinderpest eradication from the east and central Africa regions. Much progress has been made towards this during 2002-3 in the first two years of the Fight Against Lineage 1 Rinderpest Virus Project. This project aims to concentrate surveillance activities in the higher risk areas of southern Sudan in order to identify and eliminate the remaining foci and contribute to the final eradication of lineage one rinderpest virus from Africa.

Southern Sudan has a long history of underdevelopment and conflict. Since independence was granted to Sudan in 1956 there has been civil war between south and north, apart from a period of peace between 1972 and 1983. Millions of people, mainly civilians, have been killed, displaced or are refugees. Southern Sudan is controlled partly by the Government and partly by rebel groups. The prolonged conflict has created what is described as a chronic, complex emergency; development has been prevented, infrastructure has been destroyed, trade and transport routes have been disrupted, schools and health services are almost non-existent, and administrative structures are minimal and have few resources. The effects of a series of droughts and floods have been exacerbated by the conflict, causing periodic famines. Internationally mediated peace talks are currently proving successful and there is great hope that a peace agreement will be signed in early 2004.

Operation Lifeline Sudan (OLS) is a consortium of United Nations (UN) agencies and non-governmental organisations (NGOs) that is providing humanitarian assistance to the war-affected communities of southern Sudan. OLS activities include assistance for food relief, water, human health, education, fisheries, crop production, animal health and others. OLS southern sector (OLS-SS) operates in the areas of southern Sudan that are controlled by rebel groups, and gains access to these areas via Kenya and Uganda. The largest rebel group of southern Sudan is the Sudan People's Liberation Movement (SPLM), which forms the de facto government in the areas under its control. Other smaller rebel groups control parts of Upper Nile and Jonglei regions. The relief sections of these movements, SRRC (Sudan Relief and Rehabilitation Commission), and FRRRA (Fashoda Relief and Rehabilitation Association) are the counterparts of the southern sector livestock programme.

OLS northern sector (OLS-NS) works in the areas of southern Sudan that are under the control of the Government. The Government, specifically the Department of Animal Health and Epizootic Disease Control (AHEADC), which includes PACE Sudan, is the counterpart of the northern sector livestock programme.

1.1 Government policy for the livestock sector

The Government of Sudan has a policy of liberalisation of trade and privatisation of services. The agricultural sector is at the core of its strategy for future development of the country. Privatisation of animal health service delivery is encouraged.

The SPLM has prepared policy documents for the rehabilitation and development of southern Sudan. These include policies for a mixed public and private sector economy, and include the privatisation of animal health service delivery. Livestock is a key component of the economy

of all initiatives to improve this sector. SPLM legislation is still in a process of development but key decision-makers show willingness to incorporate appropriate provisions for creating a favourable environment for the development of privatised animal health services.

1.2 The livestock sector

The southern region of Sudan has an area of approximately 650,000 square km and is bordered by the transition zone of Sudan, Central African Republic (CAR), Chad, Democratic Republic of Congo (DRC), Uganda, Kenya, and Ethiopia. It can be divided into several ecological zones; rainforest, savannah forest, flood plains, swamp and semi-desert. Its estimated population of 7-8 million people is made up of numerous tribal groups of which the Dinka, Nuer, Murle, Mundari, Toposa and Boya are the main agro-pastoralist groups, keeping large herds of cattle, goats and sheep, and a few chickens. Other agriculturalist tribes keep smaller numbers of livestock.

The distribution of livestock in southern Sudan varies with the ecology of the various regions. Western Equatoria and the western part of Bahr el Ghazal are mainly rainforest and savannah forest, and are infested with tsetse fly. The main livestock kept in these areas are poultry, with small numbers of sheep and goats and very few cattle. The rest of Bahr el Ghazal, Upper Nile and Jonglei are composed of savannah forest, intersected by flood plains and swamps associated with the major rivers. These areas support agro-pastoralist tribes, keeping cattle, sheep, goats and some chickens. Eastern Equatoria is mountainous to the west, supporting a mixed crop and livestock farming system, and semi-desert to the east supporting pastoralist cattle and goat-herding tribes.

The livestock population of southern Sudan is difficult to quantify, due to the seasonal movement of livestock, the displacement of communities due to the war, frequent raiding of livestock and a cultural taboo against counting livestock. It is likely that the population decreased significantly during the war due to high mortality associated with rinderpest and other disease outbreaks in the 1980s and early 1990s, sale and slaughter during the periodic famines, and heavy cattle raiding especially in Bahr el Ghazal. However, there are many reports that the cattle population is once more increasing, mainly due to the apparent elimination of rinderpest. Drawing data from a variety of sources the latest estimate of the cattle population for southern Sudan is 6.8 to 7.8 million with approximately 5.8 million cattle in OLS-SS areas (Jones 2001). The number of sheep and goats is estimated to be about the same as the cattle population and the number of chickens is approximately twice the number of sheep and goats (16 million). There are small numbers of pigs in Western Equatoria and in eastern Upper Nile.

The proportion of households owning cattle has been estimated by the food economy assessment unit (FEAU) of Save the Children United Kingdom and World Food Programme (SC-UK/WFP) and varies between regions. Very few households own cattle in Western Equatoria. In Eastern Equatoria, Upper Nile, Jonglei and Lakes regions approximately 80% of households own cattle, whilst in Northern Bahr el Ghazal approximately 60% own cattle. Livestock ownership has decreased significantly during the war in Bahr el Ghazal due to loss of livestock through raiding, disease and sale or slaughter during famine.

Livestock are an integral part of the culture and economy of the agro-pastoralist tribes of southern Sudan, and provide a major proportion of their food needs. Milk, meat and blood provide 20-60% of food needs depending on region and season of the year. Cattle are kept in large numbers as a means of storing wealth, for bartering, for marriage payments and other

Uganda, and north into the transition zone of Sudan. Sheep, goats and poultry are less culturally important but make a major contribution to food security especially for the poorer members of the community.

The main livestock problems as identified by the local communities include disease, access to grazing and water sources, raiding, and access to markets. All these problems have been exacerbated by the chronic civil war. Pre-war animal health services were limited and what was there has been completely disrupted by the war, access to traditional grazing and water sources has been restricted due to areas of conflict, and infrastructure including markets have been destroyed. In areas of relative stability some of these problems have been partly addressed as the communities have started to recover and international aid has provided assistance.

1.3 Beneficiaries and parties involved

The ultimate beneficiaries of the project are the cattle keepers in OLS-SS areas. All communities in southern Sudan keep livestock and utilise livestock products, therefore all will be the beneficiaries of this programme through reduced cattle morbidity and mortality. However the agro-pastoralist communities, keeping large herds of cattle will receive greater benefit than their agriculturalist neighbours.

Other beneficiaries will be the community-based animal health workers (CAHWs), supervisors and co-ordinators who will benefit from additional training and remuneration for vaccination and surveillance activities. The project will actively encourage the participation of women as animal health workers and they will be expected to be significant beneficiaries.

Numerous parties will be involved in the project. OLS northern and southern sector livestock programmes work closely with their respective counterparts, the Government of Sudan's AHEADC, and SRRC and FRRA. In both northern and southern sector FAO co-ordinates and collaborates with partner NGOs implementing community-based programmes throughout the southern region (Accomplish, ACORD, ADRA, DOT, El Bir, GAA, Nile Milk Producers, NPA, Oxfam-GB, SC-UK, VSF-B, VSF-S, VSF-G, VETWORK Sudan).

Other UN agencies are involved in southern Sudan, namely Office for Co-ordination of Humanitarian Affairs (OCHA), WFP, United Nations Development Programme (UNDP), and World Health Organisation (WHO).

This project will be implemented by Veterinaires sans Frontieres Belgium (VSF-B) a specialist livestock NGO that has been working within the OLS-SS livestock programme since 1995. The VSF-B co-ordinator will report to the Pan African Programme for the Control of Epizootics (PACE) Co-ordination Unit at AU-IBAR Nairobi, which will provide regular advice to this project, make field visits and participate in OLS livestock co-ordination meetings. Within PACE, the Community-based Animal Health and Participatory Epidemiology (CAPE) Unit is closely involved with OLS-SS in the development of the community-based approach and privatisation of animal health services in southern Sudan. In addition VSF-B, within the framework of the OLS-SS Livestock Programme, will co-ordinate with the FAO-OLS livestock programme and with the OLS-SS livestock NGOs, especially those working in the rinderpest lineage one risk areas.

1.4 Problems to be addressed

The primary focus of this project is the eradication of lineage 1 rinderpest virus. *Widespread*

campaigns carried out by the OLS Livestock programme from 1993 onwards reduced the number and severity of outbreaks to almost none. The last confirmed outbreak was in early 1998 in Torit County, Eastern Equatoria, and the last clinical case associated with this outbreak was in August 1998. Since that time all rinderpest rumours have been investigated and found to be either outbreaks of other diseases or false alarms. However, in early 2001, there were reports from around Pibor, Jonglei region, of high mortality in cattle due to rinderpest-like clinical signs. The cause of this outbreak was never clarified and it is possible that this area is part of an endemic system.

The cattle populations in the border areas of southern Sudan move across international borders for pasture and trade. Elimination of the endemic areas in southern Sudan is therefore crucial for rinderpest eradication from the east and central Africa regions. This project aims to concentrate disease control activities in the suspected rinderpest endemic areas of southern Sudan in order to eliminate the remaining foci and contribute to final eradication of lineage one from Africa.

The secondary focus of the project is implementation of an appropriate control strategy for contagious bovine pleuropneumonia (CBPP). This disease is endemic throughout the southern region, and until recently control efforts were sporadic. A control strategy was introduced during 2003 and this will be promoted and improved during this project.

To achieve the eradication of rinderpest, sustained intensive surveillance will be necessary and this action will address problems inherent in general disease surveillance, emergency preparedness and service delivery. The capacity for disease surveillance will be enhanced by the provision of training for animal health workers; the necessary infrastructure at the field and laboratory levels will be improved; cost recovery will be promoted; and, as a combined effect of these measures, the basis will be provided for sustainable animal disease control.

The problem to which the continued threat of rinderpest and continuous presence of CBPP contributes is the lack of food security, specifically the contribution of livestock to food security. Livestock contribution to household food security is less than it should be due to low productivity and reduced livestock ownership.

1.5 Other interventions

Before the war and between 1972 and 1983, animal health services were provided by the Directorate of Animal Resources through the Provincial Veterinary Departments. Each district within a province had a District Veterinary Officer who was assisted by one or more Veterinary Assistants to organise vaccination campaigns and provide treatments from the district headquarters clinic. Stockmen and retainers were based in villages and carried out vaccination, treatments, and disease reporting. These services faced many constraints; organisational and administrative, lack of infrastructure and logistical problems. With the resumption of civil war in 1983, the Government animal health services in the south were disrupted. In the areas controlled by SPLM, responsibility for livestock came under the SRRRA Chief Veterinary Co-ordinator. A veterinary co-ordinator was appointed for each county. These were usually ex-Government trained Veterinary Assistants (VAs) or Stockmen of variable technical knowledge and no resources. In Government-controlled areas the Government animal health structure continued but had little or no resources and access to rural areas was limited by conflict.

In 1989, Operation Lifeline Sudan, a consortium of UN agencies and NGOs, started to

one component of the UNICEF programme was vaccination of cattle against rinderpest. Vaccine was provided free of charge and vaccinators were trained, equipped and monitored by one UNICEF veterinarian. During the period 1989 to 1992, an average of 280,750 cattle were vaccinated annually against rinderpest using heat labile rinderpest vaccine and full cold chain. Between 1989 and 1992, ICRC (International Committee of the Red Cross) also provided 1.3 million doses of rinderpest vaccine.

In 1993, UNICEF started a new programme to develop a community-based, decentralised, privatised animal health service with technical support from Tufts University School of Veterinary Medicine. The initial focus of the programme was on rinderpest control utilising thermostable vaccine, but it gradually widened its activities to include control of other major cattle, sheep, goat and poultry diseases. CAHWs provided treatments and vaccinations on a cost recovery basis. The UNICEF/OLS-SS livestock programme worked in both Government and rebel-held areas until 1996.

In 1996 UNICEF/OLS northern sector with technical support from Tufts University started a programme, which, like the southern sector, initially focussed on training of vaccinators and rinderpest vaccination, but later increased its activities to facilitation of community-based animal health services (CAHS).

In 2000, UNICEF passed its role in the livestock programme to FAO. Currently the OLS livestock programme is composed of FAO and NGOs (twelve¹ NGOs facilitating CAHS in southern sector areas and five² in northern sector areas) covering approximately 80% of southern Sudan. Almost two thousand animal health workers have been trained and are currently active. These are supported by more than 50 FAO/NGO veterinarians/livestock professionals. FAO northern and southern sector livestock projects directly facilitate CAHS projects in certain areas of southern Sudan and provide a lead agency co-ordination role for the NGOs participating in the programme. The FAO livestock projects are funded mainly from emergency funds from several donor governments. The NGO projects, including VSF-B, facilitate CAHS projects in complementary areas of southern Sudan and VSF-B also provides training for mid-level animal health personnel drawn from all southern sector areas. Funds for the NGO projects are secured by individual NGOs from a variety of donors. The FAO livestock project provides some material and technical support to the NGOs, including vaccines and vaccination equipment.

Between 1993 and 2002, more than 7.5 million cattle were vaccinated against rinderpest, an average of greater than 1 million vaccinations per year. Efficacy of vaccination was monitored to a limited extent in southern sector through collection of sera from cattle camps where vaccination was carried out. The results of rinderpest antibody ELISA tests carried out by National Veterinary Laboratory, Muguga, Kenya, on serum collected from a variety of locations between 1995-2000, indicate that vaccine handling and injection is being carried out effectively by CAHWs. The percentage of sero-positive vaccinated animals averaged 79% compared to 57% sero-positive unvaccinated animals, although the sample size was small.

During the first phase of the Fight Against Lineage 1 Rinderpest Virus Project, rinderpest vaccination ceased in most areas by December 2001, and in the remaining areas of the infected zone in June 2002. All vaccine was withdrawn from the field. Passive and active rinderpest surveillance systems were developed and implemented by different levels of

¹ ACORD, ADRA, DOT, NCDS, NPA, Oxfam-GB, SCF-UK, VSF-Belgium, VSF-Germany, VSF-Suisse,

animal health workers. Many stomatitis-enteritis cases were reported, investigated and found not to be rinderpest. A CBPP control strategy was developed and introduced during 2003. This proposal outlines activities that follow on from the first phase (November 2001 to February 2004).

1.6 Documentation available

The main documents that describe the background of the ‘Fight against lineage 1 rinderpest virus project’ in southern Sudan include:

- UNICEF-OLS Rinderpest Prevention and Surveillance within the Frame of the Household Food security Programme in south Sudan – A Review, March 2001.
- RDP Livestock Services Draft Report of the consultancy to assist in the development of a rinderpest eradication strategy in the west and east Nile ecosystems, April 2001, J.C. Mariner.
- Review of Rinderpest Control in Southern Sudan 1989-2000, B.A. Jones, CAPE Unit of PACE, OAU-IBAR, 2001.
- Jones, B.A., Decmer, B., Leyland, T.J., Mogga, W. and Stem, E. 1998. Community-based Animal health Services in Southern Sudan; the Experience and Future. Animal Health and Production for Development. Proceedings of the IXth International Conference of Association of Institutions of Tropical Veterinary Medicine, p 107-133. Harare, Zimbabwe, 1998.
- Fight Against Lineage 1 Rinderpest Virus Project Reports to PACE, Years 1 and 2.
- Jones, B.A., Araba, A.A., Koskei, P. and Letereuwa, S. Experiences with community-based and participatory methods for rinderpest surveillance in parts of southern Sudan. In workshop proceedings - Primary Animal Health Care in the 21st Century: shaping the rules, policies and institutions, Oct 2002, Mombasa. AU-IBAR, Nairobi.

2. Intervention

2.1 Overall objective

In common with the global framework of the PACE Programme, the 'Fight Against Lineage 1 Rinderpest Virus' Project in southern Sudan has the goal of reducing poverty among those involved in livestock farming and increasing productivity, thereby improving their livelihoods and enhancing food security.

2.2 Purpose

The purpose of this project, in common with the overall AU-IBAR 'Fight Against Lineage 1 Rinderpest Virus' Project Global Plan, is to develop and apply appropriate systems for animal disease surveillance and control to ensure the eradication of rinderpest, thereby supporting Sudan's livestock industry and sector.

2.3 Results

The project will have four main outputs or results that are aligned to the four thrusts of the global PACE programme. These are:

- Result 1** Adequate capacity maintained for effective project management.
- Result 2** Community-based services for effectively co-ordinated delivery of rinderpest eradication and CBPP control strategies are functional in areas served by Operation Lifeline Sudan southern sector.
- Result 3** Sudan is on schedule to be internationally recognized as free from rinderpest disease in 2005.
- Result 4** An appropriate strategy for the control of CBPP is being implemented.

2.4 Main Activities

2.4.1 Project Management

2.4.1.1 Co-ordination office

The project will maintain adequate capacity for effective project management and implementation. The project will contribute personnel, resources and running costs to the administration unit of VSF-Belgium, which will provide accounting, procurement and logistical support to the project. VSF-B will maintain a co-ordination office in Lokichokio, from where field activities will be co-ordinated.

2.4.1.2 Training

Local training will be organized for 10 field veterinarians and livestock officers (Sudanese and other nationalities) in rinderpest epidemiology and diagnosis. Funding will be provided for two Sudanese veterinarians to attend training courses or make study visits in the region, relevant to rinderpest eradication and/or CBPP control.

2.4.1.4 Technical support and co-ordination

The project will organise annual participatory review and planning meetings in Nairobi and

collaboration. The project will participate in and contribute to OLS regional livestock co-ordination meetings, which provide opportunities to review, inform and plan with field personnel and counterparts.

The project will provide technical support to OLS-SS livestock agencies on the utilization of the community-based approach for effective disease surveillance and follow up of outbreaks.

2.4.2 Community based services for the delivery of rinderpest eradication and CBPP control strategies

2.4.2.1 Community-based services

As part of the OLS Livestock Programme, the project will participate in the development of and support to community-based animal health services. Project personnel will participate in co-ordination meetings and other fora for programme development. For key areas lacking NGO support to the community-based animal health service, the project will collaborate with other members of the OLS livestock programme to provide basic technical and material support. CAHW kits for 50 CAHWs will be purchased and supplied to areas in need.

The project will develop partnerships and provide financial support to indigenous NGOs that support livestock activities in key areas. The nature of the support will be defined through a memorandum of understanding (MOU) between the project and the indigenous NGO.

The project veterinarians will carry a limited kit of basic medicines to allow them to treat sick animals as they go about their rinderpest and CBPP control activities. In areas where there is an established network of CAHWs and supervisors with a regular supply of medicines, livestock keepers will be referred to the nearest animal health worker to obtain services. However in areas where there are no trained animal health personnel, or personnel are trained but do not have a regular supply of medicines, it is necessary for the project veterinarians to have a small stock of medicines to meet the immediate priorities of the livestock keepers.

2.4.2.2 Training of Animal Health Auxiliaries

In rinderpest lineage one risk areas, the project will monitor the existing capacity of community-based animal health services and identify the need for new supervisors and co-ordinators, or refresher training of existing supervisors and co-ordinators. Support will be provided for at least 9 veterinary auxiliaries to attend 4-5 months training courses or 2-month refresher training courses provided by VSF-B.

2.4.2.3 Legislation

The project will collaborate with the stakeholders involved in the development of appropriate legislation to allow privatized veterinary supervised community-based animal health service delivery in southern Sudan, particularly in relation to sanitary mandates. The project has a seat on the Livestock Council, which has the mandate to advise the Directorate of Livestock Development and Marketing on livestock policy and to develop standards and register CAHWs.

2.4.3 Rinderpest Eradication

The main thrust of the project will be to ensure that Sudan is on schedule to be internationally recognized as free from rinderpest disease within the timeframe recommended by PACE.

2.4.3.1 Border harmonization meetings

Bearing in mind the common borders of southern Sudan with Ethiopia, Kenya, Uganda, DRC and CAR, and the movement of pastoralist groups across these borders, all rinderpest eradication activities will be co-ordinated with neighbouring countries through border harmonization meetings; local meetings between field staff; and AU/IBAR, PACE and other co-ordination meetings. These will provide opportunities for information sharing, co-ordination of strategic and operational planning, and will promote the optimal use of resources and complementary implementation of activities.

2.4.3.2 Support for surveillance networks

The project will continue to improve on the epidemio-surveillance system that was developed in 2002-3, in consultation with PACE, counterparts, OLS Livestock programme agencies and institutions providing laboratory support.

- *Livestock Data Unit:* the project will build the capacity of the future veterinary services for the southern region by seconding one project veterinarian to establish and maintain a livestock data collection system within the SPLM Directorate of Livestock Development and Marketing to collect, analyse and prepare reports of baseline data, monthly general disease reporting and surveillance reports.
- *Training:* In support of surveillance networks, the project will continue to provide training to CAHWs (approximately 50) and supervisors, co-ordinators and vets (approximately 50) in rinderpest surveillance, outbreak reporting, investigation and sampling and emergency outbreak response. Approximately 15 field workshops will be organized focussing on lineage 1 risk areas. The project will disseminate guidelines on surveillance, reporting and investigation of rinderpest outbreaks.
- *Extension:* the project will continue to produce and distribute suitable materials for raising community awareness on rinderpest eradication and CBPP control. Project vets will organise approximately 10 community meetings in key areas to raise awareness, or provide support to other partners to facilitate community meetings.
- *Passive surveillance:* The project will support a system for monthly general disease reporting within the Directorate of Livestock Development and Marketing.
- *Activated stomatitis-enteritis reporting:* The project will promote the rapid reporting of all disease outbreaks and ensure that all rumours or suspected cases of stomatitis/enteritis arising from outbreak reporting and active surveillance are promptly investigated.
- *Active surveillance:* Development of the system of active surveillance for stomatitis-enteritis will continue. The systems introduced during years one and two will be reviewed and improved. Purposive disease searching will be carried out by project personnel, in collaboration with NGO staff and counterparts, in areas identified as rinderpest risk areas.
- *Wildlife surveillance:* The project will facilitate the implementation of a sero-survey of wildlife in the rinderpest lineage 1 risk areas. This will be carried out by the PACE wildlife unit. The project will also raise the awareness of communities and animal health workers of the importance of reporting deaths and disease amongst wildlife.
- *Performance indicators:* PIs will be reviewed for general disease reporting, activated stomatitis-enteritis reporting, stomatitis/enteritis outbreak investigation and diagnosis, and sero-surveillance.
- *Support for surveillance activities:* animal health workers will be paid for active surveillance activities carried out. Some key animal health workers will be provided with bicycles to assist in surveillance activities and outbreak response. A reward will be offered for the people involved in the reporting of a laboratory-confirmed rinderpest outbreak.

2.4.3.3 Specimen submission and Laboratory Diagnostics

The basic laboratory facility in Lokichokio will be maintained and the laboratory assistant

other samples to regional laboratories. Links will be maintained with appropriate regional laboratories for diagnostic support. The project will pay for the services provided by the regional laboratories. In the event of a suspected rinderpest outbreak, duplicate sets of samples will be collected; one set to be sent to the regional reference laboratory, one set to the Central Veterinary Laboratory, Soba and, when necessary, samples will be sent to the world reference laboratory in UK.

The project will maintain rinderpest sampling kits in all locations and will utilise the penside rinderpest antigen test and filter paper serum collection. Cold chain equipment will be supplied to support collection of rinderpest samples.

2.4.3.4 Emergency preparedness plan

In collaboration with all stakeholders, the project will develop an emergency preparedness plan that takes into account the major constraints to rapid response in southern Sudan, by:

- Updating the sub-national and county contingency plans for the most likely rinderpest emergency scenarios,
- purchasing and maintaining at strategic points stocks of items necessary for rinderpest emergency response,
- co-ordinating with PACE Sudan, FAO and NGOs in the planning and implementation of rinderpest emergency response, including provision of technical support and transport.

2.4.4 CBPP control strategy

2.4.4.1 Development of a CBPP control strategy

Epidemiological information on the dynamics and impact of CBPP will continue to be collected through general disease reporting, outbreak reports and investigation, and participatory disease searching with follow up field and laboratory investigations. For areas where CBPP control is a priority, appropriate strategies for CBPP control will be promoted.

2.4.4.2 Training

Training for different levels of animal health workers on the CBPP control strategy will be carried out in areas where the control strategy is to be implemented.

2.4.4.3 Support to control of CBPP and other diseases

The necessary supplies to support the implementation of the CBPP control strategy in priority areas will be identified and procured e.g. vaccines, cold chain and medicines. Links with suitable laboratories will be made for laboratory support to CBPP control.

3. Assumptions

3.1 Assumptions at different levels

3.1.1 Assumptions to the project goal

It is assumed that the growth in the supply of animal products continues and that climatic conditions remain favourable to livestock and crop production. Information from the Central statistical bureau, reports of the meteorological department, Famine Early Warning System (FEWS) reports, and WFP/FEAU reports will be the sources of verification.

In a project of this scale, the national and regional political situation should remain stable throughout the period of the PACE Programme. AU and UN reports will provide relevant information on this important assumption.

3.1.2 Assumptions from results to the project purpose

For the results to contribute to the project purpose it is assumed that:

- Funds for approved budgets are released promptly.
- Farmers are increasingly prepared to pay for services and medicines/vaccines.
- The policies of the counterpart rebel movements remain supportive of the increased role of the private sector in the delivery of veterinary services, and appropriate legislation defining tasks and responsibilities of public and private veterinary services is drafted and endorsed.
- With regard to the eradication of rinderpest, the security conditions throughout the country permit effective disease surveillance and timely response to reports of rinderpest outbreaks.
- All PACE member countries continue to support AU/IBAR's harmonization of cross-border disease surveillance and control measures in eastern and central Africa.

3.1.3 Preconditions

The security situation in southern Sudan should permit the reasonably timely implementation of project activities over a sufficiently prolonged period. It should be no worse than during the last five years.

Controlling forces in all areas of southern Sudan should permit timely access by project personnel and their agents, and grant the necessary clearances (with or without signed memorandums of understanding).

FAO, OLS and the NGOs operating in OLS areas receive collateral funding for their core activities and retain an effective presence in areas of importance to the PACE project.

CVL in Soba and the regional reference laboratory in Kenya will maintain their capability to test samples for rinderpest by serology, virus isolation, and differential diagnosis, and will submit results received in a timely manner. Similarly, laboratory support for CBPP diagnosis should be available within the East African region.

3.2 Risks and flexibility

There is a risk that rinderpest will recur from areas in neighbouring countries. AU/IBAR, through the PACE Programme, will maintain and strengthen cross-border harmonization to

Climatic extremes (drought and floods) affect the management of livestock and the activities of livestock owners in southern Sudan. The OLS livestock programme has experience of developing and applying strategies to mitigate the impact of climatic conditions on their field activities. The OLS livestock programme will continue to liaise with FEWS, which collects information on rainfall and vegetation in southern Sudan; this will assist with early warning of crises likely to affect the project.

Southern Sudan is in the midst of a civil war and areas can become insecure at any time. The OLS consortium has a team of security officers who monitor the security situation, and OLS attempts to anticipate possible security problems. The CAHS model allows services to continue for considerable time in the absence of external support, and the OLS livestock programme adapts its implementation approach depending on the level of security ranging from permanent presence to one hour visits. However a major escalation of conflict could completely prevent access to key areas and cause major displacement of livestock and their owners. In this event OLS would closely monitor the situation and seize all windows of opportunity to continue activities. Close collaboration between northern and southern sector projects allows flexibility in coverage as control of areas changes and access becomes easier from either north or south.

The community-based approach that will be continued in southern Sudan will ensure that project activities will be adapted to meet the specific needs and priorities in each of the many ethnic groups, and will build on existing livestock knowledge and management methods.

This project will liaise closely with the OLS livestock programme, which is co-ordinated by FAO-OLS. It will depend on the participation of FAO livestock staff and the co-operation of the OLS NGOs. The project will be at serious risk if the FAO-OLS livestock activities or the individual NGO projects do not receive adequate funding. The main sources of funds for FAO-OLS and NGOs are donor emergency funds, which are often for short periods. To minimise this risk FAO seeks to obtain funds from a wide range of donors and attempts to obtain longer term funding for its core activities. FAO also budgets for extra supplies to assist NGOs that have funding shortfalls, by providing medicines, vaccines, and equipment to allow projects to continue until further funds are obtained.

At a technical level, there is a risk that diagnostic methods for rinderpest might not be applied in time due to the remoteness of most of the project areas. This would compromise effective rinderpest surveillance. However, it is proposed that 'pen-side' tests for rinderpest diagnosis will be used to provide early warning of the presence of infection to improve the reliability of rinderpest surveillance in parts of southern Sudan, and ensure rapid outbreak response and containment.

4. Project Implementation

4.1 Physical and non-physical means

VSF-B will co-ordinate field project implementation from an office in Lokichokio, northern Kenya. Administrative, financial, procurement and logistical activities will be based in Nairobi with a forward base in Lokichokio. VSF-B will work within the framework of the FAO-co-ordinated OLS-SS livestock programme, and will receive support as necessary and on request from the PACE Common Services Unit. VSF-B will maintain the four vehicles purchased in years 1 and 2 of the project, and purchase small quantities of equipment and

commission investigations, provide necessary training, purchase equipment, medicines and materials, and meet the running costs of field activities.

The project will adopt guidelines on rinderpest surveillance and control published by the FAO and the IAEA (International Atomic Energy Agency) and will assist Sudan to follow the Office International des Epizooties (OIE) pathway. The PACE Epidemiology Unit will assist in strengthening surveillance networks in Sudan, and the associated border areas of Ethiopia, Kenya and Uganda.

4.2 Organisation and implementation procedures

Through the PACE Programme Co-ordination Unit in Nairobi, AU/IBAR will co-ordinate the two sub-projects in the northern and southern sectors of Sudan and will ensure close collaboration with the FAO-OLS livestock programme.

VSF-B project administration and procurement will be based in Nairobi while the base for co-ordinating implementation and forward logistics will be in Lokichokio. However, some co-ordination activities will be carried out in Nairobi where most key stakeholders are based. Project personnel will spend most of their time within southern Sudan

VSF-B will employ specialist personnel including a veterinarian project manager who will specialize in epidemiology and community-based animal health services, and three field veterinarians who will focus on surveillance, training of animal health workers, and promoting community dialogue for rinderpest eradication. Where possible the project will employ southern Sudanese personnel. Local and expatriate personnel will be required to travel extensively inside southern Sudan.

Administrative personnel will be locally recruited to manage financial, procurement, logistical and personnel aspects of the project. Five drivers/field assistants will be employed to support field activities. A laboratory assistant will be employed for the Lokichokio laboratory and CAHWs, supervisors and co-ordinators will be engaged on contract to carry out surveillance activities and rinderpest vaccination campaigns, if necessary.

Equipment and materials will be purchased in accordance with European Development Fund (EDF) procedures. The project will provide equipment to improve the existing cold chain in rinderpest lineage 1 risk areas, and basic field stores will be constructed where needed. Items to be purchased will include field sampling equipment, laboratory equipment and materials, vaccination equipment, training and extension materials, field kits for CAHWs, and office supplies. Thermostable rinderpest vaccine will be purchased to maintain an adequate contingency stock for potential outbreaks. CBPP vaccine or medicine will be purchased as required for utilization in disease control plans.

Provisions are made to meet costs associated with co-ordination meetings, workshops and local training, laboratory fees, and the transportation of samples.

The project will provide for air transport to remote areas and four field vehicles will be maintained. Mobile radios will be maintained for fieldwork and the project will provide supervisors/co-ordinators with bicycles. In addition, this project will contribute to the VSF-B Southern Sudan programme support costs of radio communication network, telephone, fax and e mail, security network, emergency evacuation, logistical system, procurement system, stationery and other office costs, and OLS consortium co-ordination.

The project has a contingency fund, which could be mobilized to respond to emergencies and to create flexibility during implementation.

EDF procedures will be followed for the recruitment of technical assistance, and the purchase of vehicles and equipment. Project management will be decentralized but the PACE Programme's administrative and financial procedures will be applied. Annual work programmes will be approved by AU/IBAR and will be implemented on the basis of administrative orders.

4.3 Timetable

The implementation of the project will begin within two months of the EC's endorsement of the contract between the AU/IBAR and VSF-B, and will last for 8 months.

4.4 Costs and financing plan

The budget for this 8 month project is €688,000, and is allocated as indicated in Annex II and IIa.

4.5 Special conditions/accompanying measures

The "Fight Against Lineage 1 Rinderpest Virus" Project in Southern Sudan will comply with the special conditions of the financing agreement of the PACE Programme and, broadly, with those of the memorandum of understanding between the Regional Authorizing Officer (the Director of AU/IBAR) and each PACE member country.

The Government of Sudan will continue its support for the eradication of rinderpest from the whole of Sudan and is committed to following the OIE pathway recommendations until completion. The project will encourage all other counterparts (SRRC and FRRA) to continue their support for the eradication of rinderpest from southern Sudan.

The project will encourage the Government and SPLM to continue their policies of free market and privatisation of services. The process of integration and legitimisation of CAHWs within the overall system of animal health service provision will be promoted by the project.

5. Factors ensuring sustainability

5.1 Support policies

The legislation of the Government of Sudan and SPLM are supportive of the objectives of the project. The policies related to the livestock sector favour the development of private sector players in the delivery of animal health services, which, in the long-term, will ensure greater sustainability of service provision at the level of the livestock owner.

5.2 Appropriate technologies

The project will ensure the use of appropriate international standards required to verify the absence of rinderpest, which will ensure that Sudan is well positioned on the OIE pathway for the declaration of freedom from rinderpest.

The project will promote existing local knowledge of animal health and management and utilise the most beneficial practices in conjunction with introduced technologies appropriate to local conditions. Such introduced technologies include thermostable rinderpest vaccine, the use of filter papers for serum collection and storage, use of penside rinderpest antigen tests, cold chain equipment suited to meet climatic conditions, including solar and kerosene fridges, portable fridges, and cool boxes.

With regard to information management, the PACE Common Services Data Management Unit will provide support for the introduction of the PACE Integrated Database (PID).

5.3 Environmental protection measures

Through its emphasis on good practices, including the provision of training in the correct handling and dosing of animal health products, the project will promote the safe disposal of expired/unusable medicines, vaccines, and equipment. The choice of appropriate medicines for supply into southern Sudan includes a consideration of its environmental impact e.g. choice of ectoparasiticides.

It is considered that the transhumant livestock management system practised in most areas of southern Sudan is the most sustainable method of utilisation of the grazing resources. Livestock populations, movements and pasture conditions are monitored and there is no indication of land degradation through overgrazing in OLS-SS areas at the present time.

5.4 Socio-cultural aspects: women and development

Virtually all rural families own cattle and other domestic animals, so that the benefits of improved disease control will be widespread. The end beneficiaries of the project are the livestock owners and the project will promote community participation at all stages of implementation. Regular community meetings and workshops will be held, and community members will receive training and support to carry out and manage the main project activities. Participatory methods are used during meetings, workshops and training courses, and will build on the existing knowledge of the livestock owners, and on ethno-veterinary knowledge (EVK).

The participation of all members of the community will be encouraged and specific activities will be undertaken to encourage the participation of women in prioritising local needs, developing solutions and implementing activities. Some women have been trained as CAHWs and supervisors and specific activities to meet the priorities of women have been carried out e.g. control of small ruminant and poultry diseases. This project will include the above priorities in its implementation methodology.

Interethnic conflict, commonly manifested as cattle raiding, is a major problem especially in the south east of southern Sudan, in addition to conflict related to the civil war. Various organizations have facilitated a programme of peace meetings between multiple ethnic groups to the east and west of the Nile. The project will liaise with ongoing activities and participate where appropriate. Some of the project's activities could reinforce peace agreements, through collaboration between ethnic groups in the provision of animal health services.

5.5 Institutional and management capacity

The project aims to assist in building capacity at all levels of animal health service provision

To ensure effective project implementation, a project co-ordination office in Lokichokio will be maintained to support field activities.

At community level, FAO-OLS and NGOs support community leaders (as members of veterinary co-ordination committees), CAHWs and supervisors. FAO-OLS and NGOs also work in co-ordination with the animal health services providing technical advice, particularly on facilitation of the community-based approach. This project will co-ordinate its activities, where appropriate with initiatives to strengthen private veterinarians and pharmacists, to establish a privatised system to deliver veterinary services, and to encourage the formation of a veterinary association and a veterinary board

5.6 Economic and financial analyses

In southern Sudan there is a situation of chronic civil war. Much of the infrastructure and economy has been destroyed, necessitating the use of aircraft to access many areas, the importation of most project materials, the maintenance of a high level of security cover, and a good communication system. These factors make this project expensive. However, the aim of the OLS livestock programme is that, with the onset of peace, the animal health services should be self-financing. Therefore the project promotes cost recovery.

The objective of the global eradication of rinderpest requires the eradication of the disease from southern Sudan and the project costs can be regarded as an important contribution to the overall goal. The costs are justifiable since the project will safeguard the investment made under the PARC programme and will complement other initiatives all of which contribute to GREP, which aims at the permanent relief of a major threat to sustainable cattle production.

6. Monitoring and Evaluation

6.1 Definition of indicators

At the technical level, standard international performance indicators will be adopted and transferred for use during and after the project to measure the sensitivity, specificity and timeliness of the rinderpest surveillance system. For example, the rinderpest status will be assessed by reference to the results of surveillance for which indicators have been proposed. The results of laboratory tests will be assessed by reference to performance indicators.

Indicators will be developed and applied to assess the performance of project personnel and these will be linked to project monitoring. Certain activities will be monitored quantitatively using standard data collection forms used by CAHWs, supervisors, NGOs and FAO; data on surveillance, treatments, vaccination, and revenue will be collated in a database. Local project activities will be reported in narrative reports prepared by field veterinarians, NGOs and FAO including meetings, workshops, training courses held and activities carried out. FAO-OLS and VSF-B will collaborate in the collation of this data; FAO-OLS will focus on the more general data whilst VSF-B will focus on the data specific to rinderpest eradication and CBPP control

Participatory methods will be used to assess the impact of activities on the incidence of diseases and effectiveness of animal health service coverage. This will be done regularly during the project so that activities can be adjusted accordingly.

Provisional performance indicators are shown in Table 1 below.

Table 1: Performance Indicators for Rinderpest Eradication Activities in OLS-SS Areas

Title	Performance Indicator (GREP recommendation)	Performance Indicator (adapted for southern Sudan)
General disease surveillance	1. Number of districts forwarding general disease reporting formats within 30 days at least 10 months of the year per total number of districts.	1. Number of counties forwarding monthly disease reports to Department of Livestock Development and marketing, Yei within 30 days at least 10 months of the year per total number of counties.
Active disease search	2. Number of districts surveyed using active disease search techniques with results reported within 90 days per total number of districts	2. Number of counties surveyed using active disease search techniques with results reported to the NGO, Lokichokio within 90 days.
Active disease reporting	3. Number of reports of stomatitis-enteritis received, recorded and forwarded within 30 days per 100,000 heads of susceptible species	3. Number of reports of stomatitis-enteritis received, recorded and forwarded to the NGO, Lokichokio within 30 days per 100,000 head of cattle.
Stomatitis-enteritis outbreak investigation	4. Number of reports of stomatitis – enteritis investigated and appropriately sampled by a veterinary professional trained in rinderpest surveillance within 7 days of report per 100,000 heads of susceptible species	4. Number of reports of stomatitis-enteritis investigated and appropriately sampled by an animal health auxiliary (or higher) within 7 days of report per 100,000 head of cattle. .
Preliminary rinderpest diagnostic testing	5. Number of cases examined by rinderpest antigen, serological, immunohistopathological and/or RNA detection techniques with preliminary results reported within 3 days of receipt of samples per 100,000 heads of susceptible species	5. Number of cases examined by rinderpest antigen detection techniques with preliminary results reported within 3 days of receipt of samples per 100,000 heads of cattle.
Stomatitis-enteritis case definitive diagnosis	6. Number of stomatitis-enteritis cases diagnosed definitively by laboratory methods at national and/or reference laboratories within 60 days of receipt of samples per 100,000 heads of susceptible species (e.g. RP, BVD, MCF, ECF, etc.)	6. Number of stomatitis-enteritis cases diagnosed definitively by laboratory methods at reference laboratories within 60 days of receipt of samples per 100,000 heads of cattle.
Serosurveillance	7. Number of serum samples collected and tested with results reported within 120 days of collection per total number of populations identified in the country.	7. Number of serum samples collected and tested with results reported within 120 days of collections per total number of populations in the country (will apply in year four and five).
Wildlife surveillance	8. Number of serum samples collected and tested with results reported within 90 days of collection per thousand heads of susceptible species.	8. Number of serum samples collected and tested with results reported within 90 days of collection per thousand heads of susceptible species.

6.2 Reviews/Evaluation

The PACE Programme held a mid-term evaluation in October-November 2002 that included an evaluation of this project. A second PACE evaluation is planned for six months before it ends, i.e. April 2004 (PACE will end on 31 October 2004). The evaluation of this project will be linked to the overall evaluation.

Project staff will regularly interact with PACE advisors in the region and facilitate their field visits, allowing ongoing evaluation of the project.

7. Implementation Schedule

ACTIVITY	YEAR THREE (3-10/04)			
	M -A	M -J	J- A	S- O
1. Project management				
1.1 Co-ordination office and project support unit maintained	X	X	X	X
1.2a Two vets to attend training course/overseas study visit.		X	X	
1.2b Short training course(s) for field veterinarians.		X	X	
1.3a Organize two participatory review & planning meetings			X	X
1.3b Technical support to FAO/NGOs on use of community-based approach for outbreak follow up and active disease surveillance.	X	X	X	X
2. Community-based systems for delivery of animal health services.				
2.1a Support CBAHS areas without NGO support	X	X	X	X
2.1b 50 CAHW kits supplied	X	X	X	X
2.1c Support indigenous NGOs	X	X	X	X
2.2 9 supervisors/co-ordinators trained and equipped.	X	X	X	X
2.3 Assist in the development of legislation for privatized delivery of sanitary mandate.	X	X	X	X
3. Rinderpest Eradication				
3.1 Participate in border harmonization meetings and initiatives	X	X	X	X
3.2a Establish and maintain livestock data collection unit	X	X	X	X
3.2b Training of CAHWs (50), supervisors, co-ordinators and vets (50) in rinderpest surveillance, outbreak reporting, investigation and sampling.	X	X	X	X
3.2c Provide extension materials for raising community-awareness.	X	X	X	X
3.2d Community meetings for awareness raising (approximately 10)	X	X	X	X
3.2e Develop monthly general disease reporting system	X			
3.2f Investigate all rumours or suspected cases of stomatitis/enteritis	X	X	X	X
3.2g Active surveillance system for stomatitis-enteritis carried out by CAHWs, supervisors and co-ordinators.	X	X	X	X
3.2h Participatory disease searching in rinderpest risk areas	X	X	X	X
3.2i Sero-survey of wildlife by PACE wildlife unit	X			
3.2j Review performance indicators for disease surveillance			X	
3.2l Support surveillance activities through payments, provision of 30 bicycles.	X	X	X	X
3.3a Maintain system for submission of samples from field to laboratories	X	X	X	X
3.3b Maintain basic laboratory facility in Lokichokio with laboratory assistant	X	X	X	X
3.3c Maintain links with regional laboratories for diagnostic support	X	X	X	X
3.3d Provide rinderpest sampling kits in all locations	X	X	X	X
3.3e Utilise penside rinderpest antigen test and filter papers for serum.	X	X	X	X
3.3f Supply cold chain equipment to support sample collection.	X	X	X	X
3.4a Update contingency plans for rinderpest emergency scenarios			X	
3.4b Purchase and maintain stocks of items for rinderpest emergency response	X	X	X	X
3.4c Co-ordinate with PACE Sudan & NGOs in rinderpest emergency response.	X	X	X	X
4. CBPP control strategy				
4.1a Collect CBPP epidemiological information.	X	X	X	X
4.1b Refine and promote CBPP control strategy.	X	X	X	X
4.2a Provide training to animal health workers in CBPP control strategy (100)	X	X	X	X
4.3 Supply resources for CBPP control strategy	X	X	X	X

'FIGHT AGAINST LINEAGE 1 RINDERPEST VIRUS' PROJECT IN SOUTHERN SUDAN

Intervention logic	Objectively verifiable indicators	Means of verification	Assumptions
<p>Overall objective</p> <p>Participation among those involved in livestock farming is reduced and productivity is increased, thereby improving their livelihoods and enhancing food security.</p>	<p>Livestock-keeping communities can meet all their nutritional needs.</p>	<p>Annual food economy and nutritional assessments (World Food Programme and UN reports)</p>	
<p>Specific objective</p> <p>Appropriate systems for animal disease surveillance and control are established to ensure the eradication of rinderpest, which support the development of Sudan's livestock industry and sector.</p>	<p>The project submits regular up to date reports to OAU/IBAR.</p> <p>Emergency preparedness plans are developed and activated rapidly and effectively in the face of any confirmed outbreak of rinderpest that may occur during the project period.</p> <p>Community-based veterinary services are delivered on a full cost recovery basis.</p>	<p>Reports on file at AU/IBAR.</p> <p>Annual reports of the PACE Programme Epidemiology Unit.</p> <p>OLS livestock programme reports on file at FAO-OLS.</p>	<p>Growth in the supply of animal products continues [Central statistical bureau]</p> <p>Climatic conditions remain favourable to livestock and crop production. [Meteorological department reports, Famine Early Warning System reports]</p> <p>National and regional political stability during the period of the PACE Programme. [AU and UN reports]</p>
<p>Result 1</p> <p>Adequate capacity maintained for effective project management.</p>	<ul style="list-style-type: none"> - Support and management of the project is operational and remains effective throughout the project. - 2 Sudanese veterinarians have attended short courses or study visits in the region. - 10 field veterinarians trained in rinderpest diagnosis. - two OLS-SS stakeholder workshop held 	<p>Project reports</p> <p>Project reports</p> <p>Project reports</p> <p>Workshop report</p>	<p>Funds for approved budgets are released promptly. [Project reports]</p>

Intervention logic	Objectively verifiable indicators	Means of verification	Assumptions
<p>It 2</p> <p>Community-based services for rinderpest eradication and CBPP control strategies are functional in areas served by OLS-SS</p>	<ul style="list-style-type: none"> - two Sudanese indigenous NGOs supported to implement animal health activities in key areas - 9 mid-level animal health workers have been supported by the project to receive basic or refresher training, and received kits. - project members participate in Livestock Council meetings 	<ul style="list-style-type: none"> MOU and SINGO Project reports Project reports VSF-B AHA training center reports Livestock Council meeting minutes 	<p>The policies of the counterpart rebel movements remain supportive of increased role of the private sector in the delivery of veterinary services. [Policy documents]</p>
<p>It 3</p> <p>Area is on schedule to be internationally recognized as free of rinderpest disease in 2005.</p>	<ul style="list-style-type: none"> - Project personnel have attended relevant AU-IBAR and other national and regional co-ordination meetings and workshops during the project period. - Livestock Data Unit established within Directorate of Livestock Development and Marketing - 30 CAHWs have received basic training and 20 CAHWs have received refresher training supported by the project, and received kits - 50 supervisors, co-ordinators and field vets have received training in rinderpest eradication and CBPP control - extension materials have been developed and disseminated to at least 75% of field veterinarians and mid-level animal health workers. - a rinderpest epidemio-surveillance system is operational and complies with performance indicators. - Quarterly surveillance and disease outbreak reports are submitted to PACE PCU. Rinderpest rumour reports are submitted immediately to PACE PCU. - rinderpest outbreak contingency plan updated. 	<ul style="list-style-type: none"> Meeting reports Project reports Project reports Project reports Project reports Guidelines for epidemio-surveillance in OLS SS Project surveillance reports PACE PCU reports OLS-SS Contingency Plan 	<p>Farmers are increasingly prepared to pay for services and medicines/vaccines. [Cost recovery revenue]</p> <p>Security conditions throughout the country permit effective disease surveillance and timely responses to reports of rinderpest outbreaks [PACE Sudan reports, Project reports]</p> <p>All PACE member countries continue to support OAU/IBAR harmonization of cross-border disease surveillance and control measures in eastern and central Africa. [OAU/IBAR reports]</p> <p>Reliable diagnostic services are available within the region [PACE Epidemiology Unit reports]</p>

Intervention logic	Objectively verifiable indicators	Means of verification	Assumptions
<p>It 4</p> <p>appropriate strategy for the control of CBPP is being implemented.</p>	<ul style="list-style-type: none"> - Data on CBPP epidemiology is collected, collated and analysed. - CBPP control strategy is promoted and supported by provision of vaccines, medicines and cold chain 	<p>CBPP epidemiology data report</p> <p>CBPP control strategy guidelines, Project reports</p>	
			<p><i>Preconditions</i></p> <p>Government services in OLS northern sector areas are functioning effectively.</p> <p>At the national level, the security situation should permit the timely implementation of project activities over a sufficiently prolonged period.</p> <p>Controlling forces in all areas of southern Sudan should permit timely access by project personnel and their agents and grant the necessary clearance.</p> <p>FAO-OLS and the NGOs operating in the OLS areas received collateral funding for their core activities and remain an effective presence in areas of importance to the PACE project.</p> <p>The CVL in Soba and the regional reference laboratory in Kenya will maintain their capability to test samples for rinderpest serology and differential diagnosis.</p>

ANNEX II Budget for the Operation

Code	Component & item	Total
1	Enhanced national capacities	
1.1	Personnel Project support unit	35200
1.2	Equipment	2500
1.3	Running costs	89600
	Sub-total	127300
2	Improved veterinary services	
2.1	Personnel	0
2.2	Equipment	16500
2.3	Running costs	64000
	Sub-total	80500
3	Fight against rinderpest	
3.1	Personnel	204400
3.2	Equipment	52050
3.3	Running costs	184750
	Sub-total	441200
4	Control of other epizootics	
4.1	Personnel	0
4.2	Equipment	10000
4.3	Running costs	25000
	Sub-total	35000
	Total	684000
	Contingencies	4000
	Grand total	688000

Annex IIa Detailed Budget for Phase 2 (March - October 2004)

1	Enhanced national capacity				
Code	Component & item	Unit	Quantity	Unit cost	Total EUR
	Project support unit				
1.1	<i>personnel</i>				
1.1.1	Head of Mission	month	1	5000	5000
1.1.2	Senior Accountant	month	2	1700	3400
1.1.3	Office & Personnel Manager	month	2	1000	2000
1.1.4	Purchasing Officer	month	2	750	1500
1.1.5	Secretary	month	2	525	1050
1.1.6	Office Assistant	month	2	275	550
1.1.7	Bookkeeper	month	4	900	3600
1.1.8	Messenger	month	2	400	800
1.1.9	Storekeeper Loki	month	2	400	800
1.1.10	Logistician Loki	month	2	700	1400
1.1.11	Sub-grant Manager	month	1	3500	3500
1.1.12	Reg Services Manager	month	1	2000	2000
1.1.13	Reg Programme Manager	month	2	4800	9600
	<i>sub total</i>				35200
1.2	<i>equipment</i>				
1.2.1	Lokichokio base maintenance		1	2,500	2500
	<i>sub total</i>				2500
1.3	<i>running costs</i>				
1.3.1	office cost NBI/Loki	month	8	800	6400
1.3.2	communications	month	8	400	3200
1.3.3	vet training/study visits	course	2	6000	12000
1.3.4	vet training course Loki/Sudan	course	1	8000	8000
1.3.5	co-ordination meetings Loki/Nairobi	session	2	2500	5000
1.3.6	co-ordination meetings Sudan	session	4	2500	10000
1.3.7	Audit	session	1	5000	5000
1.3.8	Indirect costs	unit	1	40000	40000
	<i>sub total</i>				89600
	sub total enhanced national capacity				127300
2	Improved veterinary services				
Code	Component & item	Unit	Quantity	Unit cost	Total EUR
2.1.	<i>personnel</i>				
2.2	<i>equipment</i>				
2.2.1	CAHW equipment	kit	50	130	6500
2.2.2	Vaccines/medicines	unit	1	10,000	10000
	<i>sub total</i>				16500
2.3	<i>running costs</i>				
2.3.1	vet auxiliary training	year	6	4000	24000
2.3.2	support to indigenous NGOs	year	2	20000	40000
	<i>sub total</i>				64000
	sub total improved veterinary services				80500

3	Fight against rinderpest				
Code	Component & item	Unit	Quantity	Unit cost	Total EUR
3.1.	Personnel				
3.1.1	Veterinarian, Project Officer (1)	month	8	4800	38400
3.1.2	Field Veterinarians (4)	month	32	2500	80000
3.1.3	Field Assistants (5)	month	40	1000	40000
3.1.4	Laboratory Assistant (Lokichokio)	month	8	750	6000
3.1.5	Accommodation Lokichokio	month	8	2500	20000
3.1.6	surveillance/vaccination payments	year	1	20000	20000
	<i>sub total</i>				204400
3.2	equipment				
3.2.1	sampling/lab equipment	unit	1	10000	10000
3.2.2	cold chain	unit	1	10000	10000
3.2.3	vaccination equipment	unit	1	3000	3000
3.2.4	extension materials	unit	1	10,000	10000
3.2.5	quick run kits for staff (maintenance)	unit	10	70	700
3.2.6	camping kits for staff (maintenance)	unit	10	300	3000
3.2.7	computer equipment	unit	1	5000	5000
3.2.8	stationery & field office costs	unit	1	3000	3000
3.2.9	construction/maintenance, field bases	unit	1	3000	3000
3.2.10	bicycles with tool/spare parts kit	unit	30	145	4350
	<i>sub total</i>				52050
3.3	running costs				
3.3.1	rinderpest vaccine	50 dose	2000	5	10000
3.3.2	laboratory fees	unit	1	5000	5000
3.3.3	field workshops, CAHWs/supers	session	15	1250	18750
3.3.4	community meetings	session	10	200	2000
3.3.5	air/road transport, staff	month	8	6500	52000
3.3.6	air/road transport, cargo	year	8	5000	40000
3.3.7	vehicle running costs	vehicle	4	8000	32000
3.3.8	communications running costs	year	1	5000	5000
3.3.9	wildlife survey	survey	1	20,000	20000
	<i>sub total</i>				184750
	sub total fight against rinderpest				441200
4	Control of other epizootics				
Code	Component & item	Unit	Quantity	Unit cost	Total EUR
4.1.	personnel				
4.2.	equipment				
4.2.1	cold chain	unit	1	10000	10000
	<i>sub total</i>				10000
4.3.	running costs				
4.3.1	vaccines/medicines	year	1	20000	20000
4.3.2	sampling/laboratory costs	year	1	5000	5000
	<i>sub total</i>				25000
	sub total control of other epizootics				35000
	Sub total				684000
	Contingency				4000
	Total Budget Year Three				688000

Totals per costs center	year 3
personnel	239600
equipment	81050
running costs	363350
Total	684000