FINAL PROJECT PROPOSAL

ON A

PROPOSED MDTF GRANT

TO THE

GOVERNMENT OF SOUTHERN SUDAN

FOR A

SOUTHERN SUDAN: LIVESTOCK AND FISHERIES DEVELOPMENT PROJECT

October 12, 2006
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AHA</td>
<td>Animal Health Auxiliaries</td>
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<tr>
<td>CAHW</td>
<td>Community Animal Health Workers</td>
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<td>CBIST</td>
<td>Capacity Building and Implementation Support Team</td>
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<tr>
<td>COMESA</td>
<td>Common Market for East and Southern Africa</td>
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<td>CPA</td>
<td>Comprehensive Peace Agreement</td>
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<td>CRS</td>
<td>Catholic Relief Services</td>
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<td>CQ</td>
<td>Consultant Qualification</td>
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<td>DG</td>
<td>Director General</td>
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<td>DSP</td>
<td>Directorate of Special Projects</td>
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<tr>
<td>EAA</td>
<td>External Audit Agent</td>
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<td>EC</td>
<td>European Commission</td>
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<td>ECHO</td>
<td>European Commission Humanitarian Office</td>
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<td>ESMF</td>
<td>Environment and Social Management Framework</td>
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<td>FAO</td>
<td>Food and Agriculture Organization</td>
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<td>FM</td>
<td>Financial Management</td>
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<td>FMD</td>
<td>Foot and Mouth Disease</td>
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<td>GNU</td>
<td>Government of National Unity</td>
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<td>GoSS</td>
<td>Government of Southern Sudan</td>
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<td>IAS</td>
<td>International Accounting Standards</td>
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<td>ICB</td>
<td>International Competitive Bidding</td>
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<td>IDP</td>
<td>Internally Displaced Persons</td>
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<td>IFMIS</td>
<td>International Financial Management Information System</td>
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<td>IPP</td>
<td>Interim Project Proposal</td>
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<td>JAM</td>
<td>Joint Assessment Mission</td>
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<td>LCS</td>
<td>Least Cost Selection</td>
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<td>LICUS</td>
<td>Low Income Countries under Stress</td>
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<tr>
<td>LFICCC</td>
<td>Livestock and Fisheries Inter-Ministerial Coordination Committee</td>
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<tr>
<td>MA</td>
<td>Monitoring Agent</td>
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<tr>
<td>MAF</td>
<td>Ministry of Agriculture and Forests</td>
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<td>MARF</td>
<td>Ministry of Animal Resources and Fisheries</td>
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<td>MDTF</td>
<td>Multi Donor Trust Fund</td>
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<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
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<tr>
<td>MIM</td>
<td>Master Implementation Manual</td>
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<td>MOEFP</td>
<td>Ministry of Finance and Economic Planning</td>
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<tr>
<td>MOU</td>
<td>Memorandum of Understanding</td>
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<td>MOWECT</td>
<td>Ministry of Environment, Wildlife Conservation and Tourism</td>
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<td>MVWMP</td>
<td>Medical and Veterinary Waste Management Plan</td>
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<td>NCB</td>
<td>National Competitive Bidding</td>
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<td>NGOs</td>
<td>Non-Government Organizations</td>
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<td>OIE</td>
<td>Organization for Control of Epizootics</td>
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<td>OLS</td>
<td>Operation Lifeline Sudan</td>
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<td>PA</td>
<td>Procurement Agent</td>
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<td>PAA</td>
<td>Project Accounting Agent</td>
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<td>PACE</td>
<td>Pan African Program for Control of Epizootics</td>
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<td>PDU</td>
<td>Project Disbursement Unit</td>
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<td>PIM</td>
<td>Project Implementation Manual</td>
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<tr>
<td>Acronym</td>
<td>Full Form</td>
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<td>PSC</td>
<td>Project Steering Committee</td>
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<td>PWC</td>
<td>Price Waterhouse and Coopers</td>
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<td>QCBS</td>
<td>Quality and Cost Based Selection</td>
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<td>RPF</td>
<td>Resettlement Policy Framework</td>
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<td>SAAR</td>
<td>Secretariat for Agriculture and Animal Resources</td>
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<td>SBD</td>
<td>Standard Bidding Documents</td>
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<td>SDARF</td>
<td>State Directorate of Animal Resources and Fisheries</td>
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<td>SMAARI</td>
<td>State Ministries of Agriculture, Animal Resources and Irrigation</td>
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<tr>
<td>SMC</td>
<td>Safeguards Management Committee</td>
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<td>SOE</td>
<td>Statement of Expenditure</td>
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<td>SP</td>
<td>Stock Persons</td>
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<td>SPCRP</td>
<td>Sudan Productive Capacity Recovery Program</td>
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<td>SPSC</td>
<td>State Project Steering Committee</td>
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<td>SPLM</td>
<td>Sudan Peoples Liberation Movement</td>
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<td>SVLC</td>
<td>Supporting Livestock of Vulnerable Communities</td>
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<tr>
<td>TA</td>
<td>Technical Assistance</td>
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<tr>
<td>TOR</td>
<td>Terms of Reference</td>
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<td>TST</td>
<td>Technical Support Team</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>UNICEF</td>
<td>United Nations International Children Emergency Fund</td>
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<tr>
<td>VP</td>
<td>Veterinary Pharmacists</td>
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SOUTHERN SUDAN: LIVESTOCK AND FISHERIES DEVELOPMENT PROJECT

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A. STRATEGIC CONTEXT AND RATIONALE

1. Country and Sector Issues

1. The signing of the Comprehensive Peace Agreement (CPA) in January 2005 has opened a new chapter in which the Government of Southern Sudan (GoSS) has an opportunity and obligation to establish a capacity to serve the people of Southern Sudan, retaining the important contribution of the NGO sector, but shifting the locus of control away from external parties. This is particularly important in the livestock and fisheries sector and crop agriculture sectors, on which a majority of the people in this area will have to base the recovery of their livelihoods.

2. The framework for recovery and development is presented in the Joint Assessment Mission (JAM) report which states that the GoSS has adopted a vision for equitable development and poverty reduction but the region will have to start from a very low level in terms of institutional capacity and socio-economic development. According to the JAM report agriculture (including livestock and fisheries) is the main source of income for about 85% of the people in Southern Sudan. There is no data on the contribution of agriculture to the economy of Southern Sudan.

3. In Southern Sudan, there is evidence of high incidence of poverty. Key education and health indicators are among the lowest in the world. Infrastructure is virtually non-existent, and a public administration system has to be developed from scratch. Low levels of income and purchasing power, together with disruption associated with conflict and very limited infrastructure, have constrained economic activity and market development. Since the signature of the CPA, it is estimated that, out of the 4 million Internally Displaced Persons (IDPs) and 2 million refugees, more than 0.5 million have returned to the South. As security improves, more will gradually move back, thus compounding the challenges. The development strategy outlined in the JAM report is to promote rural development through a big push on basic infrastructure to support internal and external trade linkages and services to promote the productivity of agriculture, among other things. The report has indicated that transformation of the agriculture sector (including livestock and fisheries) and promoting private sector development are central to the challenge of peace and development in Southern Sudan.

4. The agro-ecological characteristics of Southern Sudan determine the pattern of agricultural activity. The area can be divided into three zones. The Central zone, covering the northern part of Upper Nile State, has modest rainfall and relatively fertile soil. The Flood zone, covering the south part of Upper Nile State, most part of Jonglei State, a large part of the Lakes and Unity States and the extreme northern part of Bahr el Ghazal State, receives heavy rainfall and has heavy impermeable soil. The Equatorial zone extends over most of the other parts of Southern Sudan, has more rainfall than the Central zone and has poor quality soil. Animal production is an important activity among the communities in Upper Nile, Unity, eastern part of Jonglei most of Bahr el Ghazal, Eastern and part of Central Equatoria. Fishing is an important activity for the communities living along the Upper Nile area, Lakes, Jonglei, Unity and the northern part of Central Equatoria.

5. Livestock production represents a significant proportion of agricultural activity, and is directly affected by land and public investment policies, particularly as these apply to migratory grazing and trading routes. Estimates of cattle population in Southern Sudan varies from 8-10

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1 The report is a collaborative effort of the World Bank, United Nations, Government of Sudan and Sudan Peoples Liberation Movement (SPLM).
million. The cattle to human population ratio is said to be one of the highest in Africa. Livestock is an important economic asset, in addition to having cultural value. Ownership of cattle is also a risk management tool for pastoralists and farmers, the latter continually facing uncertainty caused by crop failure.

6. Estimate for the fisheries production potential along the River Nile and particularly in the Sudd region\(^2\) range between 100,000 to 300,000 tons per year on a sustainable basis, which is on par with Lake Victoria’s current fisheries production. This estimate is based on the combined water surface area of over 90,000 sq. km in the River Nile and 16,500 sq. km in the Sudd area.\(^3\)

2. Sector Issues

7. **Livestock.** The potential of the livestock sector is affected by numerous constraints: heavy disease burdens, low productivity exacerbated by chronic droughts and insecurity; lack of adequate marketing infrastructure; and poorly organized and informed herders and traders. Many of these constraints derive from the lack of policies available to govern animal production, marketing, trade and veterinary public health, and the absence of reliable data to prioritize sector development interventions. The last livestock census was conducted in 1976.

8. **Animals Prone to Disease.** Cattle owners report very high losses (more than 20%) of animal. A major factor is believed to be disease. Sudan has provisionally been declared free of Rinderpest disease by International Organization for Control of Epizootics (OIE). Serological screening is currently underway to provide the basis for confirming Sudan free of this infection. However, there are several other diseases which could cause cattle losses and also impose considerable public health risks and impediments to trade. Given the spatial distribution of livestock across the Southern Sudan, and limited human resource and physical infrastructure, tackling the remaining diseases poses a formidable challenge. Hence there is a need for careful cost benefit analysis of disease control options and a sound implementation strategy.

9. **Declining Community Based Animal Health Service Delivery.** Under the Operation Lifeline Sudan (OLS) Livestock Program of the UN agencies, vaccination campaigns and distribution of animal health drugs were carried out by a network of Community Animal Health Workers (CAHWs) set up and trained by Non-Government Organizations (NGOs). The cold chain system necessary to store drugs and vaccines was financed under the program. The CAHW network provided, on a cost recovery basis, services have helped preserve the livestock base of Southern Sudan. More than half of the trained CAHWs (around 4000 in total) are reported to be still available but less effective because of diminished support. Financial support to the NGOs for the CAHWs network has reportedly declined following the signing of the CPA and the OLS phase-out.

10. **Competing Demand for Land and Water.** Ruminant livestock in Southern Sudan depend entirely on grazing to meet their nutritional needs. However, availability of grazing fluctuates with season across the agro-ecological transect. Grazing resources are most abundant in the wetter parts of the region but higher disease (for example Trypanosomosis) challenges there limit livestock presence in those areas. Consequently, livestock are concentrated in drier regions where pastoral and agro-pastoral production systems dominate in order to maximize use of grazing and water resources. Animals gain weight during the wet season but often suffer considerable weight loss during the dry, depending on the harshness and duration of the season.

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\(^2\) The Nile river system forms many lakes, lagoon and swamps which is known as the Sudd.

\(^3\) These estimates will have to be authenticated through a formal assessment of fisheries resources.
It is quite unlikely that alternative production system e.g. planted pastures or intensive grain feeding, will emerge in Southern Sudan, even in the long term. Therefore, increasing animal production and productivity will depend on improving current production systems such as, better range management strategies which in turn will necessitate secured access rights by herders to grazing lands and watering points.

11. Sedentary farming is expanding following the peace agreement, restored security, return of IDPs and refugees and the natural increase in human population. With an increase in livestock population as well, on a fixed land base, there may be competing demand for land for farming and grazing and, water for domestic purposes, irrigation and cattle. These issues need to be addressed through better analysis and planning, and designing of appropriate policies and regulations to promote sustainable development of both livestock and crop agriculture. Thus a better estimate of livestock resources is necessary to formulate appropriate land use policy which would help to minimize potential risks of conflicts between pastoralists and farming population.

12. Limited Market Access. The structure of the livestock market network has the primary market at the village level, with secondary at the provincial level, and in selected border posts for exports to neighboring countries, such as, Uganda and Kenya. It is reported that the average price of cattle in the primary market may be about one-eighth that of the fob price. Access to markets is constrained by poor infrastructure as well as services.

- Trekking is, and will remain, an important means to get animals to markets for many more years. Conflicts over land and the grazing, and watering resources indicated above could be further exacerbated by these treks which require that herders and livestock traders traverse set routes to gain access to marketing towns, and set border crossing and trading points.
- As trekking to markets takes from several days to weeks, animals are susceptible to weight loss and death if proper feed and water, and health services are not available. There are no holding grounds for animals to rest and recuperate after long period of trekking before being sold.
- The existing town markets are in derelict state. There is limited access to water and animal feed, and hygiene standards are very low.
- Herders with little information on market conditions and prices have limited bargaining power.
- High incidence of taxation on livestock and lack of transparency are disincentives for the sellers of livestock.
- Trade at border posts is also constrained by inadequate inspection, animal health and certification facilities and services.
- Limited representation of Southern Sudan livestock trade issues in the regional trade bodies, such as Common Market for East and Southern Africa (COMESA), affects harmonization of regulations and establishment of appropriate standards for trading live and slaughtered animals, and skins.

13. Issues with Fisheries. The fisheries potential cannot be fully realized due the following constraints: (a) inadequate fisheries management measures; (b) lack of policy, strategy and legal

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4 Alan King and E. Mukasa-Mugerwa: Livestock Marketing in Southern Sudan (With Particular Reference to the Cattle Trade Between Southern Sudan and Uganda) – April 2002; Pan African Program for Control of Epizootics.

5 The rehabilitation of main roads has just begun. The rehabilitation and construction of secondary road networks will take several more years.
framework; (c) inadequate transport and energy infrastructure; (d) lack of extension service; and (e) very limited access to markets.

14. **Insufficient Institutional Capacity.** Poor staffing and lack of skilled human resources in Southern Sudan pose a considerable challenge. According to the human resources survey\(^6\) (April 2006) the number of livestock experts is comparatively higher than fisheries but both far from adequate. According to the survey, there are 157 veterinary and 127 fisheries officers in Southern Sudan. Two thirds of these officials have been working in the former garrison towns\(^7\) with very limited exposure to field reality and modern technologies.

15. **Window of opportunity exist for sustainable development of the livestock and fisheries sector.** In October 2005, the former SPLM Secretariat for Agriculture and Animal Resources (SAAR) and the former Ministry of Agriculture, Livestock, Forestry and Fisheries of the Government of Southern Sudan held a roundtable meeting with key stakeholders including representatives of FAO and the World Bank, to discuss the vision for agriculture and other natural resources sectors, and identify main investment priorities. The roundtable discussion was based on the “New Sudan Food and Agriculture Policy Framework” prepared by the Secretariat for Agriculture and Animal Resources (SPLM SAAR) in 2004, the JAM and other reports on sector development programs. The vision, as articulated at the meeting, is to transform pastoral, fisheries and agricultural activities from subsistence to commercial enterprises that generate marketable surplus, and develop domestic and export markets to absorb the surplus. The meeting also underlined the need to preserve the vast but fragile natural resource base to allow for sustainable development. The meeting concluded that an immediate priority is to build institutional capacity in the sector.

16. In late October 2005, the Ministry of Animal Resources and Fisheries (MARF) and the Ministry of Agriculture and Forestry (MAF) were created and a Minister for each Ministry was appointed. In a joint policy statement issued in November 2005, both Ministries endorsed the conclusions of the earlier roundtable and reiterated the need for building institutional capacity.

17. The head of MARF, the Under-Secretary, was appointed in early 2006. In addition, seven directorates were formed and each headed by a Director General (DG). The directorates are: Planning and Marketing, Research, Extension and Training, Animal Production and Range, Veterinary Services, Fisheries, Administration and Finance, and Special Projects. The DGs have been formally appointed. The roles and responsibilities of these directorates have not yet been fully determined.

3. **Rationale for MDTF Bank Involvement**

18. During the war, several organizations such as the European Commission Humanitarian Office (ECHO), European Commission (EC), FAO, UNICEF and USAID have been involved in the livestock sector in Southern Sudan. The main focus of their support was animal health, training and provision of related equipment. Programs were implemented by a number of international and local NGOs. With the signing of the peace agreement, many of these programs have been phased out or the scope reduced. While these programs have been individually targeted at both the short and medium term needs, none had the mandate or capacity, or the resources to support rapid and integrated development of the livestock and fisheries sector.

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\(^6\) The survey was carried out by Computer Feeds Limited and Ecotech consultants for GoSS in April 2006.  
\(^7\) These areas were held by the Government of Sudan during the civil war.
19. FAO is preparing the Sudan Productive Capacity Recovery Program (SPCRP) for funding (estimated Euro 40.0 million over five years) by the EC, of which Euro 10-15 million is expected to be spent for livestock and fisheries sector. The proposed EC project is expected to help build human and physical capacities of State Ministries of Agriculture, Animal Resources and Irrigation (SMAARI) in five States (Lakes, Leich, Northern Bahr el Ghazal, Western Bahr el Ghazal and Western Equatoria) to deliver improved animal health services and agricultural support, and increased livestock, fisheries and crop production, income generation and marketing. The SPCRP is not expected to focus on capacity building at the levels of MARF and the States which would not be covered. The proposed EC project would not also focus on the development of appropriate policy framework for the sector. Financial involvement of GoSS is also not envisaged in SPCRP.

20. Land O’ Lakes, a private dairy company, in collaboration with a Sudanese NGO, is implementing few small pilot programs on dairy development around Kapoeta (Eastern Equatoria). The pilots are based on the model of dairy cooperatives. The program is financed by USAID.

21. The GoSS/MARF/Southern Sudan Multi-Donor Trust Fund (MDTF) project would help to build a policy framework and harmonize management and capacities across the sector. The project with MDTF involvement would also help build synergy with the proposed SPCRP and the dairy development initiative, and fill in the gaps where support will not be available from other programs. Livestock production areas receiving SPCRP support are expected to benefit from the new commercial outlets and enhanced export facilities financed under the MARF project financed by GoSS and MDTF. This project is the Government’s livestock and fisheries sector development project where substantial financial support will be provided from the domestic budget. Donor assistance through the MDTF will only supplement Government’s effort to vitalize the sector.
B. PROJECT DESCRIPTION

1. Project Development Objectives and Key Performance Indicators

22. The overall aim is to assist recovery of rural livelihoods based on livestock and fisheries. The specific objective of this project is to improve the performance of the livestock and fisheries sectors in five selected States of Southern Sudan through capacity building, improving animal health, reducing post-harvest losses and improving market infrastructure.

23. Indicative key performance indicators are provided below.

- Animal disease surveillance and control system established.
- Number of cattle traded in market towns and border points increased by $x$ percent by the end of the project.
- Volume of fish that reach main markets increased by $x$ percent by the end of the project.

24. Annex 6 provides an initial Results Framework. A consolidated Results Framework with baseline data against final indicators will be developed based on surveys and consultation with stakeholders within six months after grant effectiveness.

2. Project Components

25. The US$42.0 million Project includes four components. Detailed description of the components is provided in Annex 2.

26. Component 1: Institutional Development and Capacity Building (US$11.25 million). This component will aim to:

- help to define the roles and responsibilities of the Government at the National Unity, GoSS and States levels, and the private sector, for the development of the livestock and fisheries sector, and enact basic legislation and regulations to facilitate these relationships;
- improve the capacities of MARF to formulate policies, design appropriate legal instruments and set priorities;
- improve the capacity of MARF and the five State Directorate of Animal Resources and Fisheries (SDARF) under the project to develop implementation plans and budgets, and coordinate service delivery among partners for accelerated and sustainable development of the sector;
- build technical and managerial skills, at senior levels of MARF and the five SDARFs;
- develop MARF’s monitoring and evaluation (M&E) capacity and establish its M&E system to measure the performance of the sector (including assessment of the development impact);
- assist MARF to carry out critical studies to help fill the information and data gaps to enable prioritization of investment decisions;
- improve the working conditions for MARF and five SDARFs through building and refurbishing offices; and
- improve capacity for sustainable management of natural resources.
27. The project will finance technical assistance for institutional and organizational development, training, construction of MARF headquarter office and rehabilitation of five SDARF offices (where necessary), office equipment, and vehicles, studies and recurrent costs. Technical Assistance will help MARF to formulate policies, design appropriate legal instruments, set priorities, and develop implementation plans and budgets, and coordinate service delivery among partners as well as to provide general project implementation support. External support will be specifically provided in the areas of overall project management and coordination, financial management and procurement. Technical assistance services for capacity building and project implementation support, construction of MARF head office and urgent rehabilitation of five SDARF offices, office equipment, vehicles for MARF, studies and operating cost and SDARF will be financed in the first year.

28. **Component 2: Improvement of Service Delivery for Animal Health (US$17.0 million).**
This component will focus on the control of diseases which not only affect the production and productivity of livestock, but also limit marketability of the animals in local and regional markets. In order to ensure that the public sector does not crowd out private providers of veterinary services in the long-run, this component will build on, and expand, the community based service delivery system which has been operating in Southern Sudan. The component will therefore help to strengthen the capacity of the CAHW and Veterinary Pharmacists (VP) networks. Experienced NGOs will be contracted to build capacity of, and supervise, the CAHW and VP networks. The component will also train field veterinarians and veterinary technicians to supervise animal health service delivery. The NGOs would specifically focus on the issues of selection of community workers, incentives, and developing a system of replenishment of stock.

29. The project will finance the services of the NGOs and construction of one central (Juba) and two regional laboratories (Wau and Malakal), expansion of the Marial Lou Livestock Training Center, regional experts to provide training of trainers, contingency drugs and cold chains, cost of mobile clinics and requisite laboratory and field diagnostic equipment and supplies. The NGOs services will be contracted at the beginning of first year. In addition construction and equipping of the laboratories will also be undertaken in the first phase of the project.

30. **Component 3: Livestock Marketing Support (US$8.4 million).** This component will be implemented in the second phase of the project. The focus of the component will be on the development of market facilities and peri-urban dairy development. Access to markets will be improved through monitoring and analyzing the price trends in major markets, and dissemination of price information through print and other appropriate media; training of livestock traders and herders in auction system, grading and certification, and legal procedures for export; access to veterinary services in the holding grounds, including inspection and certification services; and meat inspectors for quality control. Physical facilities for markets, such as (i) the development of five holding and auction yards/grounds in marketing towns and border trading points with Uganda, Kenya and possibly Ethiopia; (ii) demarcation of trading routes and provide water supply services along these routes; and (iii) five sanitary slaughtering facilities in selected towns are included in the project. The component will develop arrangements for the operation and maintenance of the physical facilities before the physical construction begins.

31. The project will finance the cost of price monitoring and dissemination, training, services at the market points, and the physical facilities. Project investments in the physical facilities will be based on the findings of the studies to be commissioned in the first year and then construction of recommended infrastructure will start in the second phase of the project. Physical construction of
slaughter houses will be financed based on the findings of the study and appropriate arrangement of public-private partnership has been identified and agreed with potential partners.

32. Under this component a study will be carried out in the first year to assess the potential of peri-urban dairy activities in Southern Sudan and identify suitable entry points to promote sustainable dairy development. Based on the results of the feasibility study, an experienced NGO or private sector with experience in dairy development in Southern Sudan and/or countries in the region will be contracted to organize and train milk producers, and carry out dairy production activities. The project will finance the cost of a suitable organization to implement this component.

33. **Component 4: Development of Fish Production and Marketing (US$5.35 million)**. This component will help develop an effective service delivery system for the development of fisheries resources, minimize post-harvest losses, improve access to markets, and build capacity of field officials. (Capacity building of senior officials of MARF and SDARF will be financed under Component 1.) The project will finance the expansion of the training facility at Padak, and regional experts to provide training of trainers in Southern Sudan, fishers’ training, demonstration activities, and development of capacity for extension service. Based on technical and financial assessment of the market potential for fish and interest of the communities, fish landing and other facilities will be supported under the project with community participation from the second phase of the project.

3. **Project Location**

34. The project will be implemented in Upper Nile, Unity, Jonglei, East and Central Equatoria states in Southern Sudan and in Marial Lou training center. The five States and Marial Lou are not covered under the proposed SPCRPs. The selection was also based on the following considerations:

- about half of the livestock population is concentrated in these states;
- key borders points for Southern Sudan (with Uganda, Kenya, Ethiopia and trade routes to North Sudan) are located in these states;
- more than half of the IDPs in Southern Sudan are in these states; and
- ease of supervision by MARF.

4. **Cost of the Project**

35. The total proposed project cost over five years is US$ 42.0 million, of which the Government would finance US$ 22.0 million and the MDTF would finance US$ 20.0 million.

36. The project will be implemented in two phases. Phase I will be the first two years while the remaining three years will be in Phase 2. The first phase of the project will focus on capacity building and service delivery while the second phase will concentrate on longer term institutional development and continue with service delivery and marketing activities. Program cost by phase and source of financing is shown in the table below:
### Program Cost and Sources of Financing

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<th>GoSS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase I</td>
<td>7.67</td>
<td>8.89</td>
<td>16.56</td>
</tr>
<tr>
<td>Phase 2</td>
<td>12.33</td>
<td>13.11</td>
<td>25.44</td>
</tr>
<tr>
<td>Total</td>
<td>20.00</td>
<td>22.00</td>
<td>42.00</td>
</tr>
</tbody>
</table>

37. The annual cost of the project is shown in the following table.

<table>
<thead>
<tr>
<th>Components</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Institutional Development and Capacity Building</td>
<td>3.06</td>
<td>2.42</td>
<td>2.07</td>
<td>1.95</td>
<td>1.75</td>
<td>11.25</td>
</tr>
<tr>
<td>(ii) Improvement of Service Delivery for Animal Health</td>
<td>2.0</td>
<td>5.2</td>
<td>5.1</td>
<td>3.25</td>
<td>1.45</td>
<td>17.0</td>
</tr>
<tr>
<td>(iii) Livestock Marketing Support</td>
<td>0.31</td>
<td>1.17</td>
<td>3.46</td>
<td>2.41</td>
<td>1.05</td>
<td>8.4</td>
</tr>
<tr>
<td>(iv) Development of Fish Production and Marketing</td>
<td>0.5</td>
<td>1.9</td>
<td>1.2</td>
<td>1.15</td>
<td>0.6</td>
<td>5.35</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5.87</strong></td>
<td><strong>10.69</strong></td>
<td><strong>11.83</strong></td>
<td><strong>8.76</strong></td>
<td><strong>4.85</strong></td>
<td><strong>42.0</strong></td>
</tr>
</tbody>
</table>

38. The MDTF is expected to make a commitment for the first phase (2006-2008) amount, with subsequent commitments reflected by addendum to the Grant Agreement. MARF will prepare the 2007 budget estimates which would include, among other activities of the Ministry, the program outlined in this document and will present to MOFEP for inclusion in the Government’s budget for next year.
C. IMPLEMENTATION

1. Project Implementation Period

39. The project is expected to become effective from November 2006 and implemented over five years.

2. Partnership Arrangements

40. The implementation arrangement is expected to address the issue of severe capacity limitations, the need for accelerated implementation, strengthen partnerships among various government ministries and agencies, funding partners and implementation partners. Project implementation would be jointly shared by GoSS, MARF, selected Sates, consulting firms (policy, institutional development and project implementation support), regional technical organizations (for capacity building and technical support), NGOs (organizing and supervising the service delivery functions through community based animal health workers and veterinary pharmacists, and providing livelihood support services to rural vulnerable groups), community based organizations, private sector, and possibly UN organizations for specific activities. The Government will establish a Livestock and Fisheries Inter-Ministerial Coordination Committee (LFICC) to provide strategic guidance for the coordinated development of the sector. The LFICC will comprise of representatives from the Ministries of Finance and Economic Planning (MoFEP), Animal Resources and Fisheries, Agriculture and Forestry, Rural Development, Water and Irrigation, and Transport and Roads. The LFICC will be co-chaired by the Minister of MARF and the Minister of Agriculture and Forests.

41. In the five States where the project activities will be undertaken, State Project Steering Committees (SPSC) will be established. These committees will be chaired by the State Minister of Agriculture, Animal Resources and Irrigation and comprise the head of the Directorates of Animal Resources and Fisheries, implementation partner organizations, county officials and the MARF Coordinator. The functions of the SPSC will be to review the status of implementation at the State and county levels. MARF will appoint a Coordinator at the State level to supervise the activities related to animal resources and fisheries.

3. Institutional and Implementation Arrangements

42. MARF will be the recipient of the grant. A Project Steering Committee (PSC) comprising the MARF Under-Secretary and the seven Director Generals will be established. The PSC will be responsible for the overall execution of this project including being accountable for the achievement of the project’s development objectives. The Office of the Under-Secretary will coordinate the activities of MARF and the States, line institutions and MARF, and other Ministries and MARF. Implementation responsibility of the different components of the project will be with the relevant technical Directorates at the MARF level. The Directorate of the Special Projects (DSP) will coordinate with the various directorates of MARF. To accelerate strengthening of the capacity of the Ministry and ensure timely implementation of the project activities, MARF will recruit two teams of competent technical experts. These teams will work within the organizational structure of the Ministry. The Capacity Building and Implementation Support Team (CBIST) will be accountable to the DSP who will coordinate with different directorates regarding the team’s activities. The Technical Support Team (TST) will provide technical support in the broad areas of animal health, marketing, dairy development, research and extension, and fisheries development.
The individual technical consultants will be deputed to the different Directorates but the overall coordination of the consultants’ activities will be responsibility of the Team Leader of TST who will be accountable to the DG Planning. The DSP along with DG Planning will ensure coordination between the two teams.

43. MARF will contract competent organizations and NGOs to carry specific project activities. A significant part of the management training will be in-house and carried out by the CBIST. Some specialized management training identified by MARF with the CBIST will be imparted by regional institutions. Technical training at the MARF and State levels will be outsourced to reputable institutions. Delivery of animal health services will be implemented through contracting experienced NGOs (many of which will be local) by MARF. The activities will include consultation with communities on the selection of the community based animal health workers and veterinary technicians and pharmacists; training of these workers; and monitoring the service delivery activities. MARF will also contract NGOs or private sector organizations with excellent track record in the development of community based dairy development. Service delivery for the fisheries aspects will be carried out in a manner similar to the relatively successful CAHW network organized by NGOs.

4. Procurement Arrangements

44. The JAM assessed procurement capacity in GoSS as very limited. In addition to the lack of an official institutional framework, formal procedures, or existing capacity for public procurement, a number of other constraints that would affect procurement include: (a) severe lack of communications (post, telecommunication services, etc; (b) lack of physical infrastructure; (c) limited media (e.g. to advertise); (d) lack of local suppliers in the private sector; and (e) supporting regulatory environment (e.g. customs, banking). As these constraints will affect capacity of the various Ministries in the early period of reconstruction and development, JAM recommended (as an interim measure) centrally managed procurement. As soon as a more comprehensive procurement system is put in place and capacity of the government entities is built, the centralized arrangement will be phased out and procurement responsibility will be transferred to the line Ministries and other decentralized arms of the government. Currently MoFEP has two Procurement advisors to assist the various Ministries with the procurement activities.

45. A short-term Procurement Advisor financed by USAID has been recruited by MARF. The Advisor will help MARF to start procurement actions necessary to jump-start project implementation soon after grant approval. These activities will include: developing Terms of Reference (TOR) for the TA teams, preparing bidding documents for MARF office, consultant services, recruitment of NGOs for livelihood support activities, and construction of office building. MARF will be responsible for defining technical requirements and specifications, including preparation of Procurement Plans, terms of reference for consulting assignment and supervision of contracts. The project will also support a Procurement Specialist in the CBIST who will build on the work of the USAID Advisor and help to establish a Procurement Unit and the necessary procurement capacity in MARF. It is expected that by the end of the second year of the project, MARF will be able to receive the necessary accreditation from GoSS for carrying out procurement responsibilities. In the meantime, all the procurement activities will be cleared with MoFEP.

46. Procurement of goods and civil works would be carried out in accordance with the World Bank Guidelines: Procurement under IBRD Loans and IDA Credits (May 2004). Procurement of consultant services (including NGOs) would be carried out in accordance with the World Bank Guidelines.

8 Currently, there is one newspaper in Juba with very limited circulation.
Guidelines: Selection and Employment of Consultants (May 2004). The Bank’s Standard Bidding Documents (SBD) will be used for all International Competitive Bidding (ICB) contracts and National Competitive Bidding (NCB) contracts with appropriate modifications. Bank’s Standard Request for Proposals (RFP) will be used for selecting consultants on the basis of Quality and Cost Based Selection (QCBS). In the case of small contracts for goods and works, and contracts in community participation, simplified documents will be used. For small consulting assignments, simpler methods than QCBS will be used. Overall procurement arrangements will be consistent with the recently approved GoSS Procurement Regulations which provide for institutional arrangements for decision making, approval, and processing of contracts, including payments.

47. The overall procurement risk is **HIGH**. It is expected that the risk will be addressed with the presence of a Procurement Specialist consultant in MARF to assist the procurement staff in the Ministry, the availability of a Procurement Agent to support project procurement and close supervision by the Bank.

5. **Financial Management Arrangements**

48. The GoSS was officially created in October 2005. According to the early 2005 assessment of the public financial management system by the JAM, the entire public financial management system needed to be built from scratch. However, since that assessment, significant developments have taken place providing an embryonic capacity for financial management in GoSS. In summary:

- KPMG has been recruited as the Financial Management (FM) Agent to disburse funds to meet urgent expenditures;
- an International Financial Management Information System (IFMIS) has been established using a commonly shared platform across portfolio i.e. *Free- balance software* and the system is operational;
- availability of equipment and TA in FM and Procurement provides a basis for developing and strengthening the FM functions; and
- availability of oil revenues should provide GoSS with substantial resources, if they are used in an economically efficient, transparent and accountable manner, give a reliable and dependable basis for sustained improvement.

49. **Despite these developments, the overall level of risk is considered High** because of the weak institutional and governance structures, lack of prior Bank experience of the MARF, a virtually non-existent banking system, and low financial management capacity. Consequently, the following arrangements, comparable to fiduciary controls established in other post-conflict environments are envisaged:

- MoFEP has contracted or is in the process of contracting a number of agents to carry out the basic functions of financial management and accounting for all GoSS/MDTF programs. Price Waterhouse and Coopers (PWC) is contracted as the Monitoring Agent (MA). KPMG has been contracted as the Project Accounting Agent (PAA) to ensure proper accounting and reporting of transactions in accordance with International Accounting Standards (IAS). Details are provided in Annex 8. A Procurement Agent (PA) to ensure that procurement is conducted in a transparent and accountable manner, and as per MDTF requirements and an External Audit Agent (EAA) to provide independent assessment of the reliability of the financial statements produced for the project based on international standards, are yet to be recruited.
A Project Disbursement Unit (PDU) will be established in the treasury of the MoFEP and staffed by the PAA, which will provide common financial services for all GoSS/MDTF financed projects, use the same IFMIS platform as is being implemented by the treasury (namely Freebalance), and offer clearly defined service standards to implementing agencies. These service standards will be incorporated into a Memorandum of Understanding (MOU) between the PDU and individual implementing agencies.

50. The project provides for the appointment of a Financial Management Specialist consultant by MARF within six months of grant effectiveness.

51. A simplified flow of fund arrangement is envisaged for this project. The GoSS and MDTF resources will be pooled. There will be two project accounts for this project instead of the standard Special Account. One will be US Dollar Project Accounts in a reputed and stable commercial bank in Nairobi; a second Project Account in local currency will be located in a reputed and stable commercial bank in Juba. Both the MDTF and GoSS contributions for the project will be disbursed directly into the USS Account, thereby pooling the funds. The size of the initial deposits of funds into these accounts will be determined on the basis of an estimate of the anticipated expenditures for a period of four months. If necessary this advance could be increased on the basis of an estimate of the anticipated expenditures for a period of six months, on the basis of assessment by the World Bank. Replenishments to the US $ Project Account with Grant Proceeds from the MDTF will be on basis of Statements of Expenditure (SOE) to be prepared and submitted to IDA by the PAA through GoSS. The PAA/GoSS will be responsible for managing these accounts. For large payments, the PAA through the GoSS could request IDA for direct payments to contractors from the MDTF/GoSS accounts. The accounting for these expenditures would need to be reflected in the withdrawal applications submitted by PAA through the GoSS. Based on requirement, funds will be transferred from the USS Account to the Project Account in Juba to pay for eligible expenditures in local currency. This account will also be managed by PAA/GoSS. In addition the MARF will maintain an Imprest Bank Account in a commercial bank in Juba. This account will be used to pay for smaller expenditures for program activities that will be carried out directly by MARF staff. The size of the Imprest facility is yet to be determined.

52. Monthly, quarterly and annual reports will be prepared by MARF for the purpose of monitoring project implementation. The reports will be submitted to the MA, the PSC members, MoFEP and the World Bank. Detailed reporting procedures and the format, contents and frequency of reports will be fully documented in the Project Implementation Manual (PIM).

53. MDTF resources for the Project will be accounted on a cash basis. This will be supplemented with appropriate records and procedures to track commitments and to safeguard assets. Accounting records will be maintained in US$ for consistency and stability. At present, the internal audit function is not established. However, in the interim, the PAA will perform the internal audit functions for the project, albeit the apparent conflict of interest. The project’s financial statements will be audited in accordance with International Standards on Auditing by an independent auditor with qualifications and experience satisfactory to GoSS/MDTF and IDA. The audited annual financial statements for the MDTF will be submitted to the Bank within six months following the closure of the financial year.

54. Detailed financial management arrangements are presented in Annex 8.
6. Monitoring and Reporting

55. The Directorate of Planning will be responsible for monitoring and reporting on performance. Close collaboration will be established between the DSP and Planning for monitoring and reporting purposes. Technical support to develop a monitoring and evaluation system within MARF will be provided through the CBIST (Component 1) which will also ensure measurement of performance of entities which will be contracted to support the service delivery, technical training and the livelihood activities. Directorate of Planning will work with the various Directorates with assistance from CBIST to develop simple and measurable monitoring indicators on process, outputs and outcomes in the first year of project implementation. These indicators will be developed in conjunction with the Implementation Plans that will be prepared for each component by the Directorates with support from the TA teams. The Directorate of Planning and SPD will identify data sources and responsibility for data collection and reporting. MARF will provide six-monthly and annual progress reports for submission to GoSS and the World Bank. At the end of Phase I of the project, a comprehensive report linking financial and procurement inputs with results, including indicators listed above, will be prepared by MARF. As capacities for monitoring and evaluation increase and the database is improved, other more outcome-oriented indicators could be identified for subsequent years. A technical audit will be carried yearly by an independent consulting firm (financed from the project). The scope of this audit will include technical and fiduciary processes and their adherence to the project guidelines.

7. Sustainability and Critical risks

56. The sustainability of this project depends on the development of a policy and regulatory framework which enables private sector participation, removal of structural barriers to market, efficient use of the natural resources and development of strong human resources capacity for the sector. The project aims to address these concerns, but a number of critical risks remain:

57. Timely Availability of Good Technical Assistance. Southern Sudan is being built from scratch. The demand for expertise from various Ministries for some of the key common areas, such as, project management, procurement, financial management, M&E, is very high. Capable expertise is not available in the country. Living and working conditions are relatively harsh. High level of demand may put pressure on the external sources, particularly from countries and organizations whose skilled people have experience working and living in difficult conditions. Under these circumstances, it may be difficult to find good international organizations to work in that area. Regional organizations may be better suited to understand and adapt to the conditions of Southern Sudan and thereby develop good working relationship with the people. There are not many regional organizations with good capacity to provide the needed support. The challenge will be to identify organizations suitable to work in this environment and MARF has started the procurement process to be ahead of the queue.

58. Management of Expectations. After the end of war and consequently a long period of hardship, the people of Southern Sudan expect quick results from the development interventions. This will not be easy in the face of formidable challenges already mentioned. The government will have to manage such high expectations. Since development of policies, strategies and appropriate systems to deliver services, will take some time and results will not be visible in the initial years, the project aims at expanding and upgrading the existing community based animal health service
delivery and providing livelihood support to vulnerable groups in the first phase which could demonstrate some results quickly.

59. **Effective coordination among Ministries and entities at the State and county levels will be critical.** The relevant Ministries will have to work very closely to develop appropriate policies with regard to land, water, public health, taxation, transport and communications and agriculture for livestock and fisheries development. Investment plans should also be coordinated to achieve efficiency. Coordination among sector ministries and agencies is always a challenge in any country. The challenge becomes more formidable when procurement and financial management aspects of project implementation will have to be coordinated with mechanisms developed by GoSS. In addition, MARF will also have to coordinate with the GoSS on the development of its organizational structure to ensure consistency with the overall civil service system which will be developed for Southern Sudan. Coordination will also be needed between MARF and the external partners. The proposed LFICC would be an appropriate forum to discuss cross-cutting issues and ensure harmonization of policies and programs. Availability of technical assistance is expected to help MARF with the coordination efforts.

60. **Availability of Fund.** The need for funds to develop the sector to its full potential over the medium to long term, though not yet known, is expected to be considerable. Internal as well as external sources of funds will need to be tapped. Such funds should also be available on a timely basis to allow for completion of the development activities, as well as for salaries and overheads, and annual operation and maintenance costs for physical facilities. MARF needs to prepare a medium term financing plan for the sector and reach agreement with GoSS on financial flows. Based on revenue projections and funding gaps, GoSS should seek assurance from MDTF for cofinancing support.

8. **Social Issues**

61. The project has been designed based in consultation with government officials, UN agencies, bilateral and multilateral development agencies, specialised NGOs, and other livestock and fisheries specialists. A roundtable discussion was held in June 2006 to discuss the project design and implementation mechanisms. Issues of access to services as well as risks and sustainability were also discussed. The project focuses on the rural livelihood support for the vulnerable groups, such as IDP, returning populations, female headed households, demobilized soldiers. Issues related to Bank’s social safeguards have been discussed and mitigation measures identified. OP/BP 4.12 related to Involuntary Displacement has been triggered because of the construction of the office space, training centers, laboratories and the demarcation of restocking routes may entail involuntary land and site acquisition. The project will thus adopt the MDTF-wide Resettlement Policy Framework (RFP) for application in such cases (see Section 8 below).

8. **Environmental Issues**

62. The components of the proposed project likely to generate any environmental impacts include: clean water supply, waste disposal in the slaughter houses, disposal of veterinary consumables (including vaccines, drugs, syringes), support to public infrastructure (renovation of MARF and State office buildings, laboratories, research centers, training centers, holding grounds, quarantine points) and support to livestock production infrastructure (rehabilitation of water points and stock routes). Based upon available information, the impacts are likely to be minimal, local in
extent and readily assessed, mitigated and managed. Accordingly, the project is allocated a B impact category.

63. The project will adopt the safeguards instruments (Environment and Social Management Framework ESMF, Resettlement Policy Framework RPF, Medical and Veterinary Waste Management Plan MVWMP) being prepared for use by all MDTF-financed operations in Southern Sudan. MARF will be responsible for the application of these safeguards instruments through an appointed Safeguards Officer. Since it has virtually no safeguards implementation capacity, MARF will participate in the MDTF Safeguards Management Committee (SMC), coordinated by the Ministry of Environment, Wildlife Conservation and Tourism (MOEWCT) and comprised of Safeguards Officers from each ministry benefiting from the MDTF. The MOEWCT will not have subproject approval authority. However, each Safeguards Officer will have the authority to determine, in consultation with the coordinator, whether a site is free of safeguards issues and whether additional mitigation measures are needed. The Committee will be supported by a regionally recruited advisor specialized in World Bank safeguards over the project period. The advisor will monitor the implementation of the safeguards procedures, provide training and advice to the SMC as needed, and will report to the benefiting ministries and to the MTDF Administrator. This arrangement will support not only continuous performance improvement for the Safeguards Officers and implementation of the Bank safeguards instruments, but also policy, regulatory and institutional strengthening for the MOEWCT to support environmentally sustainable growth and resource management in Southern Sudan.

64. Costs for implementing the safeguards aspects of the project are estimated at US$7,000 for equipment and supplies for the Safeguards Officer; US$10,000 for preparation of the MVWMP (shared with the MDTF Health Project); US$25,000 to support the Safeguards Advisor/Monitor and training (shared with other MDTF projects); and US$100,000 for compensation for involuntary land acquisition. Total: US$142,000.
Annex 1: Sector Context
Southern Sudan: Livestock and Fisheries Development Project

Overview

1. The economy of Southern Sudan is dominated by the traditional subsistence agricultural sector (crop production and animal husbandry). There is no reliable data on agriculture (including livestock and fisheries). About two thirds of the population of Southern Sudan is reportedly directly linked to the livestock and fisheries sector.

Southern Sudan: Development Challenges – Excerpts from the 2003 Country Economic Memorandum of the World Bank

“The development of agriculture presents a special challenge in Southern Sudan because of the civil war and widespread food insecurity. Nevertheless, agriculture still dominates the minimal economic activity. The potential for growth is large; less than 2 percent of the areas suitable for agriculture were estimated to be under cultivation even before the civil war. Apart from annual crops, tree crops and livestock, as well as lumber are other significant economic activities in southern Sudan. It is not possible to measure the aggregate growth of southern agriculture, but there can be little doubt that over the last two decades it has been below the rate of population growth because of the devastating impact of almost continual civil war. Crops are grown on a subsistence basis, but livestock production has been above subsistence in some areas, with animals exported to neighboring countries such as Kenya and Uganda. A Bank report in 1973 noted that southern Sudan has good agricultural potential and it is possible to develop a north-south complementary production relationship which could have a favorable impact on Sudan's balance of payments. The report went on to point out two major constraints to development of the agricultural sector in the south, namely, manpower and finance. Thirty years later the situation is still the same. Given the absence of data for southern Sudan on trends in agricultural and livestock production, the following sections on agricultural growth in the report will cover only northern Sudan.” (Country Economic Memorandum, June 2003)

2. Based on climate, soil type, vegetation, general characteristics of the local economy and other factors, Southern Sudan can be divided into three main environmental and agro-ecological zones:

- The Central zone which covers the northern part of Upper Nile State has a mean annual rainfall of between 400 and 800 mm. falling between the months of June and October; the soils are regarded as generally fertile.
- The Flood zone has comparatively heavy rainfall (750 and 1000 mm between the months of April and October); it covers the southern part of Upper Nile State and most of Jonglei State, large parts of Lakes and Unity States and the northern most part of Central Equatoria. It is generally flat with poor drainage, susceptible to flooding and water-logging and has heavy impermeable soils.
- The Equatorial zone extends over most of the others parts of Southern Sudan. The mean annual rainfall is between 900 and 2,200 mm falling between the months of March and November. The soils are generally described as acidic and the nutrient status is poor in some areas, and deep and loamy in the most parts.

3. Although no recent census was carried out to confirm the figures, the ruminant livestock population of Southern Sudan is reported to be quite large. It was estimated that the cattle
population is between 6 to 10 million while sheep and goats combined are about 10 million, and are roughly equally represented. Cattle holdings in Southern Sudan vary from smaller herds of 30 animals or less in the higher rainfall counties to herds of 500 or more in the drier pastoral areas. Ownership and management arrangements are usually complex. Some herds are individually owned while others by extended family or clans, or even crop farmers who entrust their animals to herdsmen for rearing in commodity barter arrangements. Eastern Equatoria (Kapoeta), Jonglei (Phou, Bieh, Latjor), Upper Nile (Fashoda), North Bahr El Gazal (Gogrial, Twic, Aweil) and Lakes (Rumbek and Yirol) count among the states which have large animal population.

4. The communities in Upper Nile, most of Bahr el Ghazal, Eastern and Part of Central Equatoria are predominantly pastoralists, although other products of their environment play an important part in their livelihood. In addition to the use of the products of cattle and to a limited extent sheep and goats (milk, butter, meat, hides and leather), the people in these areas practice some limited crop production. Livestock follow a seasonal pattern of transhumance along traditional stock routes. Cattle camps are established at the beginning of the dry season, and on the higher lands at the beginning of the wet season.

5. For farming communities, after subsistence crop production (the main crops include sorghum, maize, groundnuts and sesame), livestock are generally the most significant contributor to household food baskets, both in terms of milk and meat and exchange for grain. Cattle and small stock are kept in the vicinity of the village and grazing areas designated as pasture land by the community.

6. The food value of cattle, particularly in the form of meat, increases in years of poor crops and reaches a climax in years of famine (that can be war-induced), and are either consumed directly or bartered for grains, or sold for cash to buy grain. The importance also varies according to time of the year since with little surplus, there are often periods when grain is in short supply even though the crops have been reasonably successful.

7. The beginning of a cash economy is emerging as a result of the peace and consequent increased security, migration and urbanization. The effects of closer contact with the outside world, establishment of a civil administration are also contributing factors. In spite of the changing contexts, off-take for sales and other purposes remain comparatively low. While the main factors contributing to this situation are listed below, these are described later in this annex:

- to hedge against risks (for example, disease, threat of losses thorough raiding and conflict, droughts), cattle owners tend to keep larger herds than the resource base can effectively support, hence animal productivity is low;
- cattle are used as insurance against seasonal shortages in other types of food and bad harvest;
- generally lack of incentives, i.e. though the effects of a cash economy are beginning to be felt, the absence of enterprising and organized trade has created virtually no demand for imported trade goods; and
- herds of cattle are not owned individually, i.e. a man’s individual rights in his cattle are limited by the rights of his kinsmen.

8. Several changes are taking place in the rural economy. Increasingly pastoralists are engaging in farming - becoming agro-pastoralists -, while traditional arable farming communities are also bringing more areas under cultivation. As agriculture farming gain importance, these households may be able to meet their basic needs without resorting to selling livestock. Many of the returnees are engaging in livestock production. The latter group has limited knowledge of
cattle and needs special attention in the elaboration of training needs under the project. If rural institutions and infrastructure improve, and social services and market access are provided, integration between crops and livestock will increase, livestock will become more integrated into the cash economy and rearing of livestock for commercial purposes will assume greater importance.

9. The potential of fisheries development in southern Sudan is substantial and is core to the livelihoods of a large share of the population especially along the River Nile and particularly in the Sudd area which is estimated to have a production potential of 100,000 to 300,000 metric tones per year. This is based on the combined water surface area of over 100,000 km in the River Nile (90,000km2) and the Sudd area (16,500km2). Various estimates of the potential fish production have been made in the last two decades. Fisheries statistical data collection has been non-existent for many years and there is no evidence that an assessment of the stock of fisheries resources has ever been carried out in recent years in Southern Sudan. Aquaculture development is reported to have vast potential in Central, Eastern and Western Equatoria states, Northern and Western Bahar Gazal states, and Warrap states. In order to reap maximum benefits, the integrated aquaculture approach will be encouraged in states which also have the potential for livestock farming. The by-products of the livestock industry will be used to enhance aquaculture production.

11. Post harvest losses in fish are quite high due to lack of storage facilities. Fresh fish landed must be disposed off immediately. If it cannot be disposed off, it has to be sun dried or smoked. Inadequate transportation infrastructure is a deterrent to increased fish production but the demand for fish (particularly fresh fish) is reported to be very high.

Constraints

12. Animal health: Farmers report very high animal mortality rates that are mostly due to disease. Diseases such as Rinderpest, Foot and Mouth (FMD), East Coast Fever, Contagious Bovine Pleuro Pneumonia (CBPP), among others, have severely hindered bovine production and trade in Southern Sudan and with neighboring countries, while others such as Tuberculoses (TB) and Brucellosis pose considerable public health challenges as well. Though monogastrics are not the focus of this project, the Avian Flu outbreak declared in Sudan in March 2006 poses an additional threat to animal and human health in Southern Sudan.

13. Under the UNICEF supported OLS Livestock Program, vaccination campaigns and distribution of animal health drugs were carried out by a network of CAHWs set up and trained by NGOs. The cold chain system necessary to store drugs and vaccines in remote areas was financed by this program for which FAO eventually assumed responsibility. Standards for CAHW training, as well as a list of authorized drugs constituted the main guidelines for the OLS Livestock Program. In the absence of a structured governance system, the CAHW network provided, on a cost recovery basis, services that have helped preserve the livestock base of Southern Sudan. It is estimated that, since 1993, around 4000 CAHWs have been trained in majority of the 90 counties in Southern Sudan. According to NGO sources, about half of the trained CAHWs, 20 AHAs and SPs are still active, particularly in the 40 counties which are supported by NGOs. Overall, the system is crumbling mainly because of declining external financing and lack of any policy support. The legal recognition of CAHWs and VPs by GoSS and establishing a clear demarcation between public and private sector roles in the area of animal health services would strongly support the sustainable development of the community based animal health service system in Southern Sudan.
Community Animal Health Workers in Southern Sudan

Community Animal Health Workers (CAHWs) are identified by the community based on their knowledge of livestock production and health-related issues. They are trained by NGO staff for about two weeks on basic animal health service delivery (diagnostic, vaccinations and other treatments, surveillance, reporting etc.). Stock owners pay a fee for the services delivered by the CAHWs.

CAHWs are supervised by Animal Health Auxiliaries (AHAs). There is on average one AHA for 10 CAHWs. However, with increased security and access following the peace agreement, it is expected that AHAs may be able to supervise a larger number of CAHWs.

AHAs are supervised by Stock Persons (SPs). AHAs and SPs can also directly deliver services to livestock owners. AHAs and SPs undergo 2 and 5 months training courses, respectively. Most courses are delivered by NGO staff and trainers at the Marial Lou Livestock Training Center (Tonj county). NGO staff, who are mostly veterinarians, supervise the work of SPs and AHAs and ensure timely and satisfactory reporting.

As mentioned, CAHWs operate on a cost-recovery basis. Drugs procured by NGOs and delivered by CAHWs are charged to livestock owners at 65 percent above the purchase price. CAHWs retain 30 percent as remuneration for their work, AHAs and SPs obtain 7 and 3 percent, respectively (notwithstanding fees they get when they directly provide services to herders). The remaining margin is kept in the revolving fund to finance partly drug purchases and NGO’s overhead and management costs.

In some states, veterinary pharmacists have received support from NGOs to strengthen existing pharmacies or set up new ones. The support consists mainly in ‘one-off’ drug supplies combined with matching grants. Training of veterinary pharmacists and supervision of their activities is the responsibility of NGOs.

The following factors threatening the financial sustainability of the CAHW network are:

- Many CAHWs are leaving the network as the fees they receive for their service is not sufficient to make a living. Livestock owners prefer traditional methods of healing and not keen to pay for vaccines and drugs.
- AHAs and SPs, literate individuals who benefit from long-term and therefore ‘marketable’ training, are offered more lucrative professional opportunities. As a result, NGOs recruit some of the SPs and/or are paying fees to AHAs and SPs for specific reporting and monitoring tasks to supplement and stabilize their revenues.
- Most donor grants allocated to NGOs are six months to one year. This short term assistance causes disruptions (in supervision, drug provision…) that do not favor the development of a sustainable community animal health service system. In addition, ‘emergency’ donors (ECHO, OFDA) have reduced their funding to NGOs since the signature of the CPA and development assistance has not yet made up for dwindling short-term support.

It is estimated that, since 1993, around 4000 CAHWs have been trained in a majority of the 90 counties of Southern Sudan. According to NGO counterparts, around 2000 CAHWs and 200 AHAs and SPs are still active, especially in the 40 counties that currently receive NGO support.

14. Another notable intervention is the Pan-African Program for the Control of Epizootics (PACE) which aims to eradicate Rinderpest. The PACE has been very successful at controlling the disease and Sudan has obtained an OIE Provisional Disease Free Status. Serological screening is currently underway to provide the basis for confirming Sudan free of infection. (The Free Status declaration is expected to be granted in 2008).

15. Control of zoonotic diseases is regarded as an international public good and the Government of Sudan is obligated to contribute to this within the global governance mechanism overseen by the OIE. Public expenditure by the National Unity Government of Sudan and the GoSS to meet these obligations is required for the eradication or control of any zoonotic disease identified in Sudan. The project will assist MARF and partners, at the level of the Sudan GNU, GoSS and States, to define their respective roles and responsibilities for the development of the livestock sector, and enact basic legislation and regulations to facilitate these relationships, including the role of the private sector. However, given the wide distribution of livestock across the Southern States, and limited human resource and physical infrastructure, tackling the remaining diseases is a formidable challenge for the
GoSS, and the MARF in particular. Thus a disease control strategy, which includes prioritization of the diseases, needs to be developed after technical and economic feasibility (cost benefit analysis).

17. **Animal nutrition:** Ruminant livestock in Southern Sudan depend entirely on grazing to meet their nutritional needs. However, availability of grazing fluctuates with season across the agro-ecological transect. Grazing resources are most abundant in the wetter parts of the region, but there trypanosomiasis prohibits production apart from small populations of low performing trypanotolerant breeds. Consequently, livestock are concentrated in drier regions where pastoral and agro-pastoral production systems dominate in order to maximize use of grazing and water resources. However, even under these systems, animals only gain weight during the wet season and often suffer considerable weight loss during the dry, depending on the harshness and duration of the season. It is highly unlikely that alternative production system e.g. planted pastures or intensive grain feeding, will emerge even in the long term. Therefore, improving animal production and productivity will depend on improving the current production systems. This should include better range management strategies which in turn will necessitate secured access rights by herders to grazing lands, mineral supplementation and watering points.

18. **Sedentary farming is likely to expand at an accelerated pace following the restored security, the return of displaced people and natural population increase. As livestock population increase, there will be increasing competition between herders and crop farmers, among others, for land for grazing and water.**

19. **The project will help MARF and partners to tackle these issues by building their internal capacity for analysis and planning, and designing appropriate policies and regulations to promote orderly and sustainable development of the livestock sector. This will include effort to estimate the livestock resources and along with other Ministries and Commissions (Agriculture, Natural Resources) undertake natural resource planning.**

20. **Livestock Marketing:** Local markets in both Southern and North Sudan are growing, as are regional markets in Kenya and Uganda, in particular, with longer term possibilities in the DRC and Ethiopia. Southern Sudan’s access to regional markets may be improved through representation and/or participation in trade negotiations regionally and internationally, for example COMESA. Such negotiations could, for example, help to harmonize regulations and set standards for trading live and slaughtered animals, and skins.

21. **Access to local and regional markets is also constrained by lack of infrastructure and services. Trekking will remain an important means to get animals to markets even as primary roads are improved, as livestock production areas extend well beyond these transportation corridors. Conflicts over grazing land and watering resources as indicated above, could be further exacerbated by these treks which require that herders and livestock traders traverse set routes to gain access to marketing towns and set border trading points.**

22. **The trek to marketing points could take from several days to many weeks (up to 45 days and 800 kilometers\(^9\)) during which time animals suffer weight loss or even mortality depending on disease conditions, and feed and water availability. Often a period of recuperation is necessary before the trekked animals can be sold. Along the way, herders and traders are required to pay numerous legal and illegal taxes to gain rights of passage through rural communities and towns. Additional fees and taxes are levied at marketing points in the respective towns and trading posts.**

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\(^9\) A. King, “Livestock Marketing in Southern Sudan” for PACE, 2002
23. Herders with little information about market conditions and prices are often at the mercy of the traders who pass most, if not all, of the risk onto then while bartering needed goods and services at highly inflated values. Herders and traders arriving at urban markets or border trading points have little bargaining power with buyers who tend to exploit their ‘must sell’ predicament given the distance they have traveled. The risk of further losses if animals had to be kept for long periods in these urban or peri-urban environments or border areas without appropriate holding, feeding and watering facilities, and veterinary services places herders at a disadvantage. Also, trade at border posts is constrained by inadequate inspection and animal health and certification and services. In urban centers slaughtering and merchandizing facilities are poor and prices offered to herders for animals do not reflect a premium for quality. Some of these distortions seem to be due to marketing difficulties imposed by the war while others stem directly from the lack of facilities.

24. Significant numbers of agro-pastoralists are managing their herds in areas adjacent (peri-urban) to large urban centers, for example Juba, where markets for milk and other dairy products are rapidly developing. As these markets develop producers who have become engaged are seeking to improve the milk production of their animals by acquiring superior bulls. Milk supply from these herds could be steadily increased but collection and processing of wholesome products, in these early stages of dairy development, pose considerable challenges. Also, the animal health needs of herds used for milk production must be catered for in order to avoid the spread of such diseases as Tuberculosis and Brucellosis from animals to humans.

25. No attempt was made to conduct an economic analysis on the returns to the investment by the project, as the requisite data was not available. For example, while the cattle population in all of Southern Sudan is estimated to be between 6-10 million, the population within the target States is not known. Similarly, critical technical coefficients for such an analysis on birth and mortality rates, age at calving, calving intervals, and herd extraction rates, for example, could not be estimated. However, it is known, with a high degree of certainty, that livestock is the main means of livelihood for the majority of the people and constitute a principal resource on which future development of Southern Sudan could hinge.

26. **Barriers to Fisheries Development:** The fisheries potential cannot be fully realized due to the following constraints: inadequate fisheries management measures; lack of policy, strategy and legal framework; inadequate transport infrastructure; poorly organized fisher folks; and lack of extension service.

27. It is believed that the return of displaced populations and their concentration in particular fishing grounds (perhaps due to relatively better infrastructure) may put considerable pressure on the fisheries resources and this may result in overexploitation and damage to the fragile aquatic ecosystems. Overexploitation of fisheries resources is manifested in either low catches per unit effort or too many juvenile fish in the catches. In an effort to catch more, fishers frequently resort to the use of small mesh size nets which catch juvenile fish. The fishers confine to the shallow areas which also happen to be breeding grounds for some fish species. This is because fishers cannot move to distant or deeper fishing grounds due to lack of proper nets and boats.

28. The fisher communities are still scattered and not organized. Provision of extension services and other infrastructure improvement to such scattered groups can be a big challenge. Where some basic infrastructure exists fishers form a large proportion of the population. During the 21 years of war, there was no significant assistance for the fisheries sector since the fishers had been scattered. FAO has been working with fisher communities by distributing nets, hooks as part of the relief for the returning fishers. A number of NGOs like Catholic Relief Services (CRS), Winrock International have supported sector studies as part of the Southern Sudan Agricultural Revitalization Program.
Past, On-going and Proposed Livestock and Fisheries Development Programs

Operation Lifeline Sudan (OLS)

29. In 1988, as the death toll resulting from war-induced famines was swiftly rose, the UN Secretary General requested UNICEF to organize a special relief operation in Sudan. OLS was established in April 1989 and placed under the supervision of UNICEF and WFP. FAO took over supervisory responsibility in 2001. OLS delivered, through UN agencies and a network of around 35 NGOs, humanitarian assistance to most war-affected civilian populations in Sudan.

30. The North/South conflict as well as a series of severe droughts greatly disrupted agricultural activities in Southern Sudan. This resulted in increased dependence of rural populations on livestock to meet their daily food needs. In 1993, OLS through UNICEF and specialized partner NGOs initiated the Livestock Program to provide animal health services to stock owners.

31. Under the OLS Livestock Program, vaccination campaigns and distribution of animal health drugs were carried out by a network of CAHWs set up and trained by NGOs. The cold chain system necessary to store drugs and vaccines in remote areas was financed by UNICEF. Standards for CAHW training, as well as a list of authorized drugs constituted the main guidelines for the OLS Livestock Program. In the absence of a structured governance system, the CAHW network provided, on a cost recovery basis, services that have helped preserve the livestock base of Southern Sudan. More than half of the trained CAHWs (around 4000 in total) are still active.

32. OLS phased out following the signature of the CPA but NGOs still receive financial support from bilateral and UN agencies to promote community animal health service delivery. ECHO and USAID are among the main contributors; FAO provides NGOs with drugs and vaccines. However, overall support to NGOs involved in the livestock sector is decreasing.

33. Until the creation of GoSS, FAO was the livestock “focal point” for Southern Sudan and organized coordination meetings gathering key stakeholders every three months. MARF is now calling and chairing these meetings with financial and organizational support from FAO.

Pan African Program for the Control of Epizootics

34. The Pan African Program for the Control of Epizootics (PACE) was launched in 1999 and builds on the results of a previous program, the Pan African Rinderpest Campaign (PARC). The main objective of PACE is to accurately determine the prevalence and impact of epizootic diseases on livestock production though surveillance in 35 African countries. It is a €72 million program that is coordinated by the Inter-African Bureau of Animal Resources (IBAR) of the African Union (AU).

35. Widespread outbreaks of Rinderpest occurred in Southern Sudan in the early 1990s but the vaccination campaigns carried out by the OLS Livestock Program from 1993 onwards (a total of 7.5 million head of cattle was vaccinated) reduced the number and severity of outbreaks to almost none. To achieve the eradication of Rinderpest PARC and PACE in Sudan - programs of a cross-border nature - introduced a shift from mass vaccination to active surveillance and outbreak control.

36. PACE is implemented by local and international NGOs led by Veterinaires Sans Frontieres Belgium (VSFB) in Southern Sudan and by the GNU with the support of GTZ in North Sudan. The PACE has been very successful at controlling Rinderpest: Sudan has obtained an OIE Provisional Disease Free Status; the Free Status declaration should be granted in 2008.
Southern Sudan Agricultural Revitalization Program (SSARP)

37. USAID has been the principal financier of SPLM Secretariat for Agriculture and Animal Resources (SAAR) during the civil war, notably through training of staff and provision of equipment. The USAID-funded SSARP is the most noticeable rural development program implemented in Southern Sudan in the last decade. Launched in 2003, this US$24.0 million program aimed at addressing some of the constraints facing agriculture in Southern Sudan by providing technical and business skills training to stimulate agricultural commercialization, strengthening commodity networks and agribusinesses, and providing access to capital, technology and information. The SSARP is implemented by a consortium of NGOs led by CRS; financial services are channeled by Chemonics. The SSARP will end in September 2006.

38. Training programs for rural entrepreneurs were supported by the rehabilitation of six training centers - including one center for livestock (Marial Lou) and one for fisheries (Padak). Following the Training Center Act (2004), training centers developed under the SSARP are managed as semi-autonomous corporate bodies.

Land O’ Lakes

39. Land O’Lakes, in collaboration with Vetwork Services Trust, a Sudanese NGO, is implementing the US$ 2.5 million Southern Sudan Dairy and Livestock activity (“Creating Model Private Sector Cattle Marketing and Dairy Co-operatives”) funded by USAID. The key objective of this project launched in early 2006 is to create functioning and sustainable cattle marketing and dairy processing cooperatives as models (in Kapoeta County - Eastern Equatoria) through improved skills, technologies and practices including improved agribusiness development. The animal health component of the project includes training of existing local CAHWs.

Sudan Productive Capacity Recovery Program (SPCRP)

40. FAO is preparing the SPCRP for funding by the EC. The estimated cost of the project is Euro 40 million over five years, of which 10-15 million will be for livestock and fisheries sector in about a third of the counties in the five States: Lakes, Leich, Northern Bahr el Ghazal, Western Bahr el Ghazal and Western Equatoria States. The SPCRP is expected to build human and physical capacities of State Ministries of Agriculture, Animal Resources and Irrigation (SMAARI); deliver improved animal health services and agricultural support and invest in livestock and crop production, income generation and marketing. In addition, the project support state rural development funds and four model sub sector investment projects, one of which is the Bahr el Ghazal Livestock Production and Marketing Project that will be active in Lakes, Northern Bahr el Ghazal and Warrab States and will aim to support cattle trade though stock routes demarcation, improved animal health services and development of market infrastructure. The program will be implemented by FAO.

Fisheries

41. A very limited number of projects supporting Fisheries - mainly consisting in distribution of fishing equipment - have been implemented by OLS and non-OLS NGOs. Early 2004, FAO began to pilot a new system of fishing input delivery centered on “bush shops” in Panyinjar and Leich counties which are operated by beneficiary members of informal fishing groups under the EC-funded Humanitarian Plus Program. This small program constitutes the main on-going intervention supporting the fisheries sector.
One of the four model projects under the EC-SPCRP will support fisheries production and marketing in the Nyal, Shambe Terakeka corridor (Lakes and Central Equatoria) through development of fisher-folk associations, provision of fishing equipment and construction of fisheries infrastructure.

Supporting Livelihoods of Vulnerable Communities (SVLC) in Southern Sudan

The Swiss Agency for Development and Cooperation/Swiss Humanitarian Aid (SDC-SHA) and the Office for Foreign Disaster Assistance (OFDA) are funding VSF-Suisse’s efforts to assist the vulnerable households, particularly returnees and female headed households and to support the process of re-integration of returnees into host communities over a two year period (2005-2006) through animal restocking activities.

The project targeted 360 vulnerable households among resident and returning communities in five locations in three counties in two States. The project expected that targeted households would become self-sufficient through engaging in restocking and complementary activities of other NGOs and WFP emergency food distribution.

The recent evaluation of the project made the following key observations and recommendations:

- the project has achieved its objectives through restocking the targeted households with local animals and minimized problems associated with adaptation/stress, spreading new disease and overgrazing;
- there was a high level of community participation but more could be done to involve the communities in the identification of vulnerable households and allowing the beneficiary household to select the animals;
- positive impacts, in terms of livelihood improvement and social networking, are visible; many restocked animals are milked, part of which is consumed thereby improving household nutrition; some households have increased the numbers of small stock through rearing;
- distress sale of animals needed to be prevented;
- training of the beneficiaries should precede before distribution of animals and there should be provision of refresher training;
- fodder production should be encouraged; and farmer to farmer and farmer field school extension approach should be considered; and
- cost-benefit analysis of the restocking program should have been conducted.

Possible Synergies between the Proposed Project and Other Programs

In order to maximize synergies between MARF project for MDTF and other on-going and proposed interventions, the following points were considered by MARF during the identification phase:

- The network of CAHWs and veterinary drug pharmacists trained by NGOs has been successful in preserving livestock assets in Southern Sudan. It is important that the network that constitutes the foundation of the veterinary private sector in Southern Sudan, is strengthened and expanded. It is expected that the decentralized tiers of GoSS, under the guidance of MARF, would gradually assume responsibilities for monitoring and supervision the CAHWs.
• Rinderpest is not the only animal disease negatively affecting productivity and commercial value of livestock. Other animal diseases, including zoonotics ones, have to be effectively controlled.

• Training centers have played an important role in transferring skills to entrepreneurial farmers, herders, fisher folks and service providers. They could also be instrumental in training staff of MARF and SDARF. Training centers are semi-autonomous public entities but currently rely almost completely on USAID and NGO funding. These will need to be supported and their capacity further developed and clear financing mechanisms defined.

• The proposed project intends to develop the capacity of MARF and the five States not covered by the proposed SPCRP. The MDTF MARF project will develop town markets in Southern Sudan, as well as trade-related infrastructure to facilitate export to Uganda, Kenya, North Sudan and possibly Ethiopia. It is expected that livestock production areas which would receive SPCRP support would benefit from new commercial outlets and enhanced export facilities.

• An Initial Project Proposal for Livestock for Sudan GNU has recently been approved by MDTF. The proposed GNU project includes support to prepare a livestock census and develop production and marketing infrastructure to enhance South/North cattle trade. These are consistent with the GoSS MARF project proposal.
Annex 2: Detailed Project Description
Southern Sudan: Livestock and Fisheries Development Project

1. The US$42.0 million Project will cover five states Upper Nile, Unity, Jonglei, East and Central Equatoria states where about one half of the total livestock in Southern Sudan is concentrated. The project builds on the experiences with previous programs for improving animal health and service delivery supported by ECHO EC, FAO and USAID during the war and also addresses the critical needs for capacity building, physical infrastructure, and livelihood support to war affected vulnerable groups in rural areas and an overall policy and regulatory framework for the sector. The project design takes into consideration the need to achieve some immediate results on the ground while also contributing to the longer term sector development. The Project has four components:

Component 1: Institutional Development and Capacity Building
Component 2: Improvement of Service Delivery for Animal Health
Component 3: Livestock Marketing Support
Component 4: Development of Fish Production and Marketing

2. **Component 1: Institutional Development and Capacity Development.** The purpose of this component is to create the internal capacity for MARF and SDARF to assume and discharge their roles and responsibilities as regulators and service providers to the livestock and fisheries resources sectors of the GoSS. This is a priority activity to clearly demarcate the roles and responsibilities of the government and the private sector (including NGOs) to avoid any future crowding out of the private sector or undermining a reasonable functioning community based animal health care system. The activities under this component include:

- assisting MARF to clarify its role and responsibilities within the Sudan GNU, other Ministries of GoSS, and with State Ministries and enact basic legislation and regulations to facilitate these relationships, including the role of the private sector; developing mechanisms for transition of those activities which essentially fall in the domain of private goods to the private sector;
- building the Ministry’s capacity to formulate policies, set priorities and plans (including human resources;
- building capacity of MARF and SDARF to prepare implementation plans and budgets, and coordinate service delivery among partners for accelerated and sustainable development of the sector;
- enhancing technical and managerial skills, at senior levels of MARF and State ministries, needed for effective management of the livestock and fisheries sectors; including building capacity for administration, procurement and financial management within MARF;
- building institutional capacity within MARF and partners to provide operational level specialized training to meet certain sector needs; development of pre- and in-service training capacity and programs, including updating and developing curriculum and training material, long and short term training, study tours and short term professional attachments at other national, regional or international institutions;
- providing services of external technical experts to serve as counterparts to the directorates of MARF and States Ministries to ensure technology transfer;
- developing Monitoring and Evaluation (M&E) capacity in MARF, and establish an M&E system in the Directorate of Planning; a primary function of this capacity will be to develop performance indicators and measure the performance of the livestock and fisheries
sectors against the indicators; support in MARF; identify training needs at the central, SDARF and county levels; provide technical assistance support to build M&E capacity as well training to measure the performance of the project, including performance of the service delivery agents and other agents working with MARF on this project;

- providing adequate working environment through constructing and equipping headquarter office for MARF, rehabilitating and equipping SDARF offices in project areas; providing vehicles, information and communication facilities; and
- building capacity for sustainable management of natural resources at all levels.

3. The project will finance the following: (i) cost of Technical Assistance (TA) for policy and strategy formulation, capacity building and implementation support; (ii) construction of MARF Head office, rehabilitation of State offices in the project areas; office equipment, information and communication facilities, and vehicles and operating costs. During the first year, the project will support detailed planning for the physical investment program, including surveying and mapping, designing and costing, and equipment specifications.

4. **Component 2: Improvement of Service Delivery for Animal Health.** The main objective of this component is to protect livestock from disease which severely affect the production and productivity of livestock, and constrain access to local and regional markets. Public-private partnerships will be promoted to facilitate private sector participation in the delivery of animal health services to meet individual producer needs, in the longer run. The component will focus on the issues of (a) selection process of the community workers; (b) the level of incentives to make this a viable livelihood option; and (c) a functioning system of replenishment of stock. The project will finance studies to help address the information gap for prioritization of investment, facilitate sector planning and orient project implementation. The project will collaborate with the study proposed for both the North and South Sudan for estimating the livestock population based on aerial techniques, which is more affordable than the census. The main activities under this component are:

- To address the issue of data, the baseline data concerning disease prevalence, other than for Rinderpest, will be collected to prepare good estimates of the livestock resources of the region;
- Development of disease control strategy based on cost benefit analyses;
- Review and refinement of the CAHW system;
- Establishing an animal disease surveillance and control system which will include laboratory facilities, mobile clinics, field veterinarians and veterinary technicians, including veterinary pharmacists and supervised community-based animal health;
- Enhancing the capacity and expanding the networks of CAHWs and VPs through training of the staff at the various levels of the CAHW system as well as a cadre of veterinary pharmacists. Distribution of drugs to CAHWs will be done through licensed veterinary pharmacists. An appropriate regulatory framework will be develop (Component 1) for creating an enabling operating environment for CAHW (legal recognition through licensing) and veterinary pharmacists.

5. The project will finance the cost of the studies, construction of a central diagnostic laboratory in Juba, and the rehabilitation of two regional ones (Wau and Malakal), expansion of the Marial Lou Livestock Training Center, regional experts to provide training of trainers, contingency drugs and cold chains, cost of the mobile clinics, requisite laboratory and field diagnostic equipment and supplies. Construction of the laboratories will begin in the first year of the project. MARF will contract NGOs with good working experience in Southern Sudan to build and operate the CAHW and VP networks. This activity will start from the first year of the project.
Based on the review and further refinement of the system, in subsequent years, a rationalized system of service delivery will be established. The project will also support the training of a cadre of quality control inspectors to be hired by MARF.

6. **Component 3: Livestock Marketing Support.** The main objective of this component is to promote greater access to domestic markets for meat, milk products, and regional markets for meat and skins. The project will enhance the capacity of the producers to participate effectively in these markets by providing veterinary inspections, treatments and certification services, and better market information. The component will also focus on the issue of illegal taxation and the operation and maintenance of the systems that would be put in place, specifically defining the roles of the public and the private sector. This component will have two sub-components:

- **Improving Access to Markets.** This will help address the issues of limited market information and poor market infrastructure. The project will monitor and analyze the price trends in major markets, and development mechanisms for dissemination the information through electronic, print and verbal media. Livestock traders and herders will be trained to market in an auction system, and become knowledgeable about grading and certification, taxation, and legal procedures for export. A livestock market specialist will be available to support MARF in these areas (Component 1). Access to markets will also be increased through the improved physical infrastructure facilities, such as, (i) construction of five sanitary slaughtering facilities in selected towns; (ii) the development of five holding and auction yards/grounds in marketing towns and border trading points with Uganda, Kenya and possibly Ethiopia and providing veterinary services at these places, including inspection and certification services; and (iii) demarcating trading routes and providing services (watering and animal health) along these routes. Investment in these facilities will commence in the second or third year based on the findings of the studies on marketing and demarcation routes, mentioned in Component 1 above. The project will finance the cost of monitoring and dissemination of market information, training of traders and herders, and development of physical facilities.

- **Marketing of Improved Quality Meat.** There is no quality control for the meat sold in the local markets in Southern Sudan at the present time. Slaughter premises are in poor condition and slaughtering is being done under unsatisfactory hygienic conditions. There is no system of formal licensing of slaughter houses or any health certification of the meat sold. In most cases, products are neither inspected, nor subjected to trade and health regulations. While sanitary regulations will be reviewed and improved under Component 1, the project would finance the construction or rehabilitation of sanitary slaughtering facilities in five main town markets, based on the results of the study on market demand for meat in the urban centers. The project will also support the introduction of appropriate regulations to govern these facilities, and facilitate meat certification, and mechanism to ensure compliance with the improved regulations. These facilities, to be developed, would be co-managed on cost-recovery basis and in accordance with public health regulations by local authorities and associations of traders and butchers. Users of the facilities would be required to pay a fee. The project would also finance the training of butchers and meat handlers and of meat inspectors in the five selected towns selected.

- **Developing peri-urban dairy.** Demand for milk and other dairy products is increasing in the major urban center in Southern Sudan. In Juba for example, milk collection and processing has already started. The project will help promote further development of peri-urban dairying using Juba as a pilot. In the first or second year, a study will be carried out to assess the potential of peri-urban dairy activities in Southern Sudan and identify suitable
entry points to promote orderly development. Based on the production and market analysis, the project will provide support for training of milk producers along the production, collection, processing and marketing chain, and the creation of suitable organizations to undertake these functions. MARF will contract organizations with experience in dairy development in Sudan and neighboring countries to design and operate the pilot. The cost of this contract will be financed from the project.

7. **Component 4: Development of Fish Production and Marketing.** This component will aim at increasing production, minimizing post-harvest losses building capacity of State and county fisheries technicians and fishing community to develop an efficient service delivery system. Under Component 1, there is provision for one external Fisheries Technical Advisor and technical assistance for the preparation of legal instruments to form the basis for a proposed Fisheries Act to support fisheries development and management in Southern Sudan. Critical office equipment and vehicles, as well as training for the Directorate of Fisheries in MARF and SDARF are also included in Component 1. This component has the following sub-components.

- **Assessment of Fisheries Resources and Human Resources Development for Fisheries.** Baseline survey of fisheries resources and development of fisheries database will be a key activity in this component. The project will also focus on technical and business skills to enhance fish production and storage, fish processing, and marketing to both the fisheries personnel of MARF and SDARF, as well as outreach programs for fishers. The project will refurbish the training facility at Padak, finance regional experts to provide training of trainers in Southern Sudan, as well as academic and management training for the fisheries personnel (under Component 1). The project will finance baseline surveys and other studies, fishers’ training, demonstration activities, and community based extension workers.

- **Establishment of Fish Handling Facility.** Based on financial assessment of the market potential for fish and interest of the community, fish landing facilities will be supported under the project on co-financing terms with community participation from the third year of the project. These facilities will be located at strategic points to provide storage for dry fish, facility for fresh fish handling and fish auction yards. Pre-investment activities will include sensitizing, mobilizing and training the community in improved fish storage and handling facilities. The project will finance physical facilities for fish storage and processing.
Annex 3: Detailed Implementation Arrangements
Southern Sudan: Livestock and Fisheries Development Project

1. Implementation arrangements for the project will focus on accelerated execution, capacity building and building partnership and coordination.
   - Project implementation will be accelerated by:
     (a) supporting a TA team of internationally recruited experts, preferably from well reputed organizations to work closely with the Sudanese professionals at MARF and SDARF; and
     (b) establishing effective implementation modalities (such as contracting NGOs for animal health service delivery, rural livelihood support for vulnerable groups, etc with agreed work plans and clear performance indicators).
   - Capacity will be enhanced at all levels by:
     (a) ensuring that the international experts for project implementation and technical support transfer these skills to the MARF and SDARF officials at all levels;
     (b) providing access to training (pre and in-service, short and long-term) to both public officials and community based non-government workers, livestock and fisheries profession based groups, and professional attachments in reputed regional institutions for MARF and SDARF officials;
     (c) applying clear procurement and financial management procedures within the framework of a Project Implementation Manual and consistent with the on-going work for the GoSS.
   - Partnership and coordination will be built by:
     (a) supporting and strengthening the existing consultative forum (comprising representatives of NGOs, associations of herders, traders, community animal health workers, private sector etc) to ensure participatory formulation and implementation of the policies and strategies and the regulatory framework;
     (b) coordinating implementation arrangements to ensure effective and efficient linkages among GoSS authorities, participating donors and implementation partners.

2. Implementation period: The project will be implementation over a five year period and expected to be effective from November 2006.

3. Organization and Management: The project will operate within the framework of responsibilities for project organization and management established by MoFEP. Under these arrangements, MoFEP will have overall responsibility for procurement and financial management while internal capacity is being built in MARF.

4. MARF will be the recipient of the grant. A PSC comprising the MARF Under-Secretary and the seven Director Generals will be established and the PSC will be responsible for the overall execution of this project including being accountable for the achievement of the project’s development objectives. The Office of the Under-Secretary will coordinate the activities of the various directorates and MARF, States and MARF, line institutions and MARF and other Ministries and MARF. Implementation responsibility of the different components of the project will be with the relevant technical Directorates at the MARF level. (See the Organization Chart.) In addition to the seven Director Generals, there are few junior officials in MARF. The DSP will have coordinating functions, and liaise with the development partners and other ministries. To accelerate strengthening of the capacity of the Ministry and ensure timely implementation of the project activities, MARF will recruit competent technical experts. Two teams of technical

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assistance will be recruited by MARF. These teams will work within the organizational structure of the Ministry. The CBIST will work with DSP. The TST will provide technical support in the areas of animal health, marketing, research and extension, and fisheries development. The Team Leader of CBIST will report to the DG of DSP while the Team Leader of TST to the DG Planning. The individual technical consultants will be deputed to the different Directorates but the overall coordination responsibility will be that of the Team Leader. The DSP along with DG Planning will ensure coordination between the two teams.

5. **Oversight:** The Government will establish an Inter-Ministerial Livestock and Fisheries Coordination Committee (LFICC) to provide overall guidance for the development of the sector and to coordinate the activities of the various development partners, NGOs to ensure harmonization of the different approaches and financing of the sector. The LFICC will comprise of representatives from the MoFEP, Agriculture and Forestry, Rural Development, Water and Irrigation, and Transport and Roads. The PSC will be chaired by the Minister of MARF and co-chaired by the Minister of Agriculture and Forests.

6. **Implementation Arrangement for Each Component:** The project provides for extensive external support to help MARF address the capacity issues. As mentioned above, MARF has allocated responsibility for project implementation to the relevant directorates and plans to support these directorates with external expertise for both management and technical aspects.

- **Technical Assistance for Capacity Building and Project Implementation (Components 1, 2, 3 and 4):** Technical assistance requirements for each of these components have been identified and these have been grouped into two: organization and management support and technical support. Accordingly two firms/organizations will be recruited.

The CBIST will work in the following broad areas:

- policy and strategy development (including the areas of decentralization and the relationship between MARF and the States, delineation of public and private sector roles, planning, budgeting, financing, and the role of government in service delivery; legal aspects);
- human resources development (including manpower and facilities planning, budgeting, strategy and personnel management systems);
- management training;
- information and communication;
- social analysis and environmental management;
- monitoring and evaluation;
- engineering services to build and upgrade facilities, training institutions, and other essential infrastructure as well as to provide assistance in the acquisition of necessary equipment and material;
- program coordination;
- procurement, specifically to prepare and coordinate the implementation of the procurement plan; and
- financial management, specifically to ensure that internationally recognized accounting and auditing procedures are respected.

The Technical Support Team (TST) will work in the following broad areas:

- livestock and fisheries planning and support to policy and strategy preparation;
development of pre-and in-service training capacity and programs; including updating of curriculum and training of trainers;

- animal health and disease control system (including laboratory development);
- livestock marketing;
- dairy development; and
- fisheries development (extension service system, aquaculture and marketing)

- **Service Delivery for Livestock, Fisheries and Marketing** (Components 2, 3): Applying the competitive bidding process, MARF will contract NGOs with experience in Southern Sudan. The main responsibilities of the NGOs would be to:

  - in consultation with the community, identify suitable persons from the community to serve as community workers for animal health and fisheries;
  - develop a viable incentive system for the community workers;
  - develop a mechanism for replenishment of stocks;
  - provide training to new workers as well as refresher training to existing workers;
  - develop programs for service delivery in consultation with MARF and TST;
  - supervision and reporting;

7. **Participation of Private Sector** (Components 2, 3 and 4): There is scope for the private sector involvement in setting up veterinary pharmacies, peri-urban dairy development and fish marketing. The project would help promote private sector participation through creating an enabling policy environment and capacity building (where necessary).
The MARF organogram showing the positions currently budgeted for 2006-2007.
Annex 4: Program Costs
Southern Sudan: Livestock and Fisheries Development Project

1. Program costs total US$ 42.0 million for five years, of which the MDTF will finance US$ 20.0 million and the GoSS will finance US$ 22.0 million.

Table 1: Annual Costs of the Project by Source of Financing (US$ million)

<table>
<thead>
<tr>
<th>Year</th>
<th>MDTF</th>
<th>GoSS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.5</td>
<td>3.37</td>
<td>5.87</td>
</tr>
<tr>
<td>2</td>
<td>5.17</td>
<td>5.52</td>
<td>10.69</td>
</tr>
<tr>
<td>3</td>
<td>5.80</td>
<td>6.03</td>
<td>11.83</td>
</tr>
<tr>
<td>4</td>
<td>4.10</td>
<td>4.66</td>
<td>8.76</td>
</tr>
<tr>
<td>5</td>
<td>2.43</td>
<td>2.42</td>
<td>4.85</td>
</tr>
<tr>
<td>Total</td>
<td>20.0</td>
<td>22.0</td>
<td>42.0</td>
</tr>
</tbody>
</table>

2. Table 2 provides program costs by component. The allocation by component in second year and onwards may change as a result of the annual program planning and budgeting at the end of the previous year. The components are designed such that rapid scale-up of project activities with additional GoSS funds would be entirely possible.

Table 2: Annual Project Costs by Component (US$ million)

<table>
<thead>
<tr>
<th>Component</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional Development and</td>
<td>3.06</td>
<td>2.42</td>
<td>2.07</td>
<td>1.95</td>
<td>1.75</td>
<td>11.25</td>
</tr>
<tr>
<td>Capacity Building</td>
<td>2.0</td>
<td>5.2</td>
<td>5.1</td>
<td>3.25</td>
<td>1.45</td>
<td>17.0</td>
</tr>
<tr>
<td>Service Delivery for Animal Health</td>
<td>0.31</td>
<td>1.17</td>
<td>3.46</td>
<td>2.41</td>
<td>1.05</td>
<td>8.4</td>
</tr>
<tr>
<td>Livestock Marketing Support</td>
<td>0.5</td>
<td>1.9</td>
<td>1.2</td>
<td>1.15</td>
<td>0.6</td>
<td>5.35</td>
</tr>
<tr>
<td>Fish Production and Marketing</td>
<td>1.94</td>
<td>3.37</td>
<td>3.64</td>
<td>2.27</td>
<td>1.22</td>
<td>12.43</td>
</tr>
<tr>
<td>Operating Costs</td>
<td>0.8</td>
<td>0.5</td>
<td>0.65</td>
<td>0.75</td>
<td>0.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Total</td>
<td>5.87</td>
<td>10.69</td>
<td>11.83</td>
<td>8.76</td>
<td>4.85</td>
<td>42.0</td>
</tr>
</tbody>
</table>

3. Table 3 provides costs by category and year. About 33 percent of the project cost will be spent for civil works to address the urgent need for office space, research laboratories and training centers. Less than one third will be spent for consultant and NGO services to assist MARF with the quick implementation of the project activities.

Table 3: Annual Project Costs by Category (US$ million)

<table>
<thead>
<tr>
<th>Category</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Works</td>
<td>1.05</td>
<td>3.6</td>
<td>4.1</td>
<td>3.6</td>
<td>1.66</td>
<td>14.01</td>
</tr>
<tr>
<td>Goods</td>
<td>1.68</td>
<td>2.03</td>
<td>1.89</td>
<td>0.89</td>
<td>0.28</td>
<td>6.76</td>
</tr>
<tr>
<td>Training</td>
<td>0.41</td>
<td>1.2</td>
<td>1.55</td>
<td>1.25</td>
<td>0.79</td>
<td>5.2</td>
</tr>
<tr>
<td>Services (including NGOs)</td>
<td>1.94</td>
<td>3.37</td>
<td>3.64</td>
<td>2.27</td>
<td>1.22</td>
<td>12.43</td>
</tr>
<tr>
<td>Operating Costs</td>
<td>0.8</td>
<td>0.5</td>
<td>0.65</td>
<td>0.75</td>
<td>0.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Total</td>
<td>5.87</td>
<td>10.69</td>
<td>11.83</td>
<td>8.76</td>
<td>4.85</td>
<td>42.0</td>
</tr>
</tbody>
</table>
### Annex 5: Initial Implementation Plan for the First Year
**Southern Sudan: Livestock and Fisheries Development Project**

<table>
<thead>
<tr>
<th>Description</th>
<th>Implementation Plan</th>
<th>Mechanism for Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional Development and Capacity Building</strong></td>
<td>Setting up basic systems (financial, procurement, general administration, staffing, etc) in MARF and the States to make these offices operational.</td>
<td>USAID financed Procurement Advisor to assist with the preparation of the bidding process for the recruitment of organizations/firms to provide capacity building and implementation support (CBIST TA) and technical support by a Technical Support Team (TST); CBIST to define roles and responsibilities and CBIST and TST to develop plan.</td>
</tr>
<tr>
<td><strong>Implementation support</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Base Line Survey</strong></td>
<td>Develop performance indicators based on baseline survey; identify training needs at all levels; design M&amp;E system</td>
<td>CBIST</td>
</tr>
<tr>
<td><strong>Manpower planning and personnel management</strong></td>
<td>HR survey and development of HR policy and planning</td>
<td>CBIST</td>
</tr>
<tr>
<td><strong>Management Training</strong></td>
<td>Training needs identification (based on HR Survey and medium-term development plans); training plan development; and training program (pre- and in-service and urgent short training) implemented</td>
<td>CBIST for organizational management training and TST for technical training.</td>
</tr>
<tr>
<td><strong>Technical training</strong></td>
<td>Training needs identification; training plan development;</td>
<td>TST to identify appropriate</td>
</tr>
</tbody>
</table>
and training program (pre- and in-service; urgent short and long term training) implemented organizations for training.

<table>
<thead>
<tr>
<th>Physical Infrastructure</th>
<th>Operational MARF and SDARF Offices</th>
<th>Construction and equipping of prefab office for MARF</th>
<th>Contract UNOPS or private contractors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Equipping SDARF offices (with rehabilitation work where required)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operational Laboratories</td>
<td>Construction and equipping of prefab for central lab (Juba) and rehabilitation and equipping of two regional labs (Wau and Malakal)</td>
<td>CBIST TA to help with design of facilities and identify critical equipment (with TST TA); assist with bid preparation and supervision of work; UNOPS/ private contractors for construction.</td>
<td></td>
</tr>
<tr>
<td>Operational Fisheries and Livestock Training Centers</td>
<td>Surveys to rehabilitate/develop the Marial Lou Livestock TC and the Fisheries Padak TC</td>
<td>CBIST TA will develop TORs and assist MARF to identify competent firms to carry out the survey</td>
<td></td>
</tr>
<tr>
<td>Improvement of Service Delivery</td>
<td>Livestock disease surveillance and control</td>
<td>Identification of prevalent disease and their impact; development of cost-effective disease control strategy</td>
<td>Animal Health expert in TST will develop TORs and assist MARF to identify competent individuals to carry out the study.</td>
</tr>
<tr>
<td></td>
<td>Enhancing capacity and expanding the community based animal health workers network</td>
<td>TST will develop TORs (including clear indicators) and assist MARF with the procurement of NGOs with excellent track records to carry out this activity for the first year. Program from second year onwards will be based on the development of a cost-effective disease control strategy.</td>
<td></td>
</tr>
<tr>
<td>Service delivery for fisheries</td>
<td>Refinement of the CAHW system (selection, incentives</td>
<td>TST</td>
<td></td>
</tr>
<tr>
<td>etc)</td>
<td>Development of a community based service delivery system</td>
<td>Fisheries expert in the TST will carry out the assessment and help to develop the system.</td>
<td></td>
</tr>
<tr>
<td>Livestock Marketing Support</td>
<td>Conduct a livestock marketing study to identify priority internal and trade markets, infrastructure support required and priority stock routes</td>
<td>Livestock Marketing Expert in TST will develop TORs and assist MARF to identify resources to carry out the study.</td>
<td></td>
</tr>
<tr>
<td>Market Potential</td>
<td>Training of traders and herders on livestock marketing</td>
<td>Livestock Marketing Expert in TST will prepare the training materials and develop training of trainers.</td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>Conduct a study on the potentials of peri-urban dairy industry and determine a set of activities to support its development</td>
<td>Dairy development specialist in the TST will carry out the study and develop the program.</td>
<td></td>
</tr>
</tbody>
</table>
Annex 6: Results Framework and Monitoring

SOUTHERN SUDAN:
LIVESTOCK AND FISHERIES DEVELOPMENT PROJECT

It is not possible to prepare a comprehensive Results Framework for this project at this time. Below is an initial framework matrix.

**Results Framework**

<table>
<thead>
<tr>
<th>PDO</th>
<th>Output/Outcome Indicators</th>
<th>Use of Output/Outcome Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>To improve the performance of the livestock and fisheries sectors in five selected states of South Sudan</td>
<td>Establish animal disease surveillance and control system (non existent at project start).</td>
<td>To assess number of veterinarians, vet pharmacists and CAHWs. and assessment of quality of services</td>
</tr>
<tr>
<td></td>
<td>Increase the number of cattle traded in market towns and border points by $x$ percent by the end of the project.</td>
<td>To assess the ability/capacity to improve marketing and sales of livestock as a proxy for measuring income generation.</td>
</tr>
<tr>
<td></td>
<td>Increase by $x$ percent the volume of fish that reaches main urban centers by the end of the project.</td>
<td>To assess the capacity to increase production, reach urban markets, and implement the necessary preservations techniques.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intermediate Results</th>
<th>Results Indicators</th>
<th>Use of Results Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>To improve service delivery for animal health</strong></td>
<td>Increase the number of animals vaccinated by $x$ in by the end of Phase I and by $y$ at the end of Year 5 (Phase II). Increase in the number of animals treated by $x$ by the end of Phase I and by $y$ at the end of Phase II.</td>
<td>To assess the ability to manage a program that is critical to increasing the survival chances of animals.</td>
</tr>
<tr>
<td><strong>To improve livestock marketing support</strong></td>
<td>One holding and auction yards/grounds, including inspection and certification services, are operating and functional by the end of Phase I and five by the end of Phase II.</td>
<td>To measure usefulness and effectiveness of markets and disease control centers.</td>
</tr>
<tr>
<td></td>
<td>Five sanitary slaughtering facilities in select towns operating, on average, by at least 50 percent</td>
<td>Measures availability of and capacity to manage, facilities to provide quality meat to the market.</td>
</tr>
</tbody>
</table>

---

10 These indicators and target outputs will be confirmed after a baseline survey and stakeholder consultation.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivering peri-urban dairy</td>
<td>At least two pilot dairy in operation by the end of Year 4 (Phase 2)</td>
<td>To measure the ability of the private sector to operate the facility.</td>
</tr>
<tr>
<td>Increasing fish production and access to marketing</td>
<td>Volume of marketable fish increased by ( x ) percent and access to markets in larger towns by ( y ) percent by the end of project</td>
<td>To measure the ability to develop the potential of fisheries resources and reduce fish harvest loss.</td>
</tr>
</tbody>
</table>
## Arrangements for results monitoring

<table>
<thead>
<tr>
<th>Output/Outcome Indicators (indicative, to be confirmed)</th>
<th>Baseline</th>
<th>YR1</th>
<th>YR2</th>
<th>YR3</th>
<th>YR4</th>
<th>YR5</th>
<th>Frequency and Reports</th>
<th>Data Collection and Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase the number of cattle traded in market towns and border points by $x$ percent in 5 years</td>
<td>n/a</td>
<td>n/a</td>
<td>Baseline assessment to be conducted before improving market infrastructure</td>
<td>30% (end of project assessment)</td>
<td>Market assessments</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Establish animal disease surveillance and control system (non existent at project start)  
- number of veterinarians  
- number of vet pharmacists  
- number of CAHWs  
- assessment of quality of services | n/a      | To be measured annually | End of project target to be determined 6 months after project effectiveness | Annually | Survey of served areas |
| Increase by $x$ percent the volume of fish that reaches main urban centers. | n/a      | Baseline assessment to be conducted before constructing processing and marketing facilities | End of project target to be determined 6 months after project effectiveness | Annually | Market Survey |

## Results Indicators (Indicative, to be confirmed)

| Increase the number of animals vaccinated by $x$ by the end of Phase I and $y$ by the end of Phase II. | n/a | Baseline assessment to be conducted before establishing health services | End of project target to be determined 6 months after project effectiveness | Annually | Administrative data |
| One holding and auction yards/grounds, including inspection and certification services, are operating and functional by the end of Phase I and five by the end of Phase II. | 0    | 0 | 1   | 5   | Annually | On-site verification |
| 5 sanitary slaughtering facilities are operating, on average, by at least 50% capacity by Year 5. | 0 | 0 | 1 | 3 | 5 | Annually | On-site verification |
Procurement Environment

1. The JAM identified public procurement system in Southern Sudan as non existent and the civil service itself as very weak and would need to be developed from a very low base. There were no official procurement procedures, institutional framework and capacity to support procurement, but the Government has now approved “Interim Public Procurement Regulations” for use by all public institutions. These Regulations provide a framework for institutional arrangements for decision-making, approvals and procedures for processing contracts. Other constraints that would affect procurement include: (i) severe lack of communications (postal and telecommunication services), (ii) poor physical infrastructure, (iii) limited media (e.g., to advertise), (iv) low capacity of local private sector (suppliers, consultants and contractors), and (v) low capacity of a supporting regulatory environment (e.g., customs, banking) that have barely started to emerge. As these constraints affect the absorption capacity of GoSS in the early days of the reconstruction and development program, JAM recommended a centrally managed procurement system as an interim measure. As soon as a more comprehensive procurement system is put in place and capacity of public entities is built, the next step will be to phase out the centralized arrangements and transfer the procurement responsibility to line Ministries and other arms of Government.

2. JAM concluded that Southern Sudan would require assistance to build capacity in public procurement systems as well as to carry out procurement tasks under programs financed by Government and the MDTF funds. The challenge for the donors and the GoSS is to put in place mechanisms that will ensure Government and Donor resources are used properly (achieve value for money) for the intended purposes with due care to economy and efficiency. Such mechanisms must also guard against the highly potential risk of corruption which could scheme off a lot of public funds and undermine the reconstruction and development programs.

3. The World Bank as Administrator of the MDTF has established a Monitoring Agent for monitoring procurement and expenditures on MDTF programs to ensure that funds are disbursed only for the purpose intended and in accordance with acceptable accounting, financial reporting and auditing standards. The Monitoring Agent will report to the Bank and be responsible for: (i) pre-screening and monitoring procurement, including progress on on-going contracts; (ii) pre-screening and recommending withdrawal applications to ensure that payments are consistent with the Grant Agreement and eligibility criteria; (iii) monitoring expenditures financed from the MDTFs, (iv) pre-screening the financial management capacity of potential grant recipients; and (v) monitoring the progress made by grant recipients in achieving fiduciary benchmarks. In addition, the Agent is expected to coach project staff on how to carry out properly any activities not working well.

4. A Procurement Unit has been established in MOFEP to oversee procurement tasks and a Procurement Advisor financed by LICUS Trust Fund is assisting the Unit. A second Procurement Specialist is expected to join the Unit soon. MOFEP is also advanced in recruitment of a Procurement Agent to carry out procurement tasks under MDTF projects and other GOSS financed contracts. The Ministry of Animal Resources and Fisheries (MARF) will benefit from the services of the Procurement Advisor, the Procurement Specialist and the Procurement Agent. MARF is expected to form a Procurement Committee and establish a Procurement Unit under the “Interim Public Procurement Regulations”.

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Implementation Arrangements

5. Procurement will be generally carried out by and/or as directed by the Procurement Agent, but the CBIST in MARF will include a competent Procurement Specialist who will begin to carry out specific procurement tasks under the project as well as build a Procurement Unit and capacity in the Ministry. MARF will assign counterparts to work with and be trained by the Procurement Specialist. It is expected that this mentorship approach will help develop the future MARF procurement unit. Once the Unit is established, the Minister of Finance will designate the MARF as a Procuring Entity, thus allowing it to process its procurement. More specifically, CBIST will collectively carry out procurement work such as preparing annual work plans/budget, procurement schedules of requirements, timing of needs, specifications, terms of reference for consulting assignments, supervision of contracts, and the Procurement Specialist will carry out specific tasks of the procurement process such as preparing bid and proposal documents, advertising, organizing for evaluations and reviews, documentation and record keeping, coaching staff etc. Procurement capacity of MARF staff will be enhanced through seminars, workshops and round table discussions. The use of various procurement methods and prior review thresholds are summarized in Table A: Thresholds for Procurement Methods and Prior Review.

Bank Guidelines and Standard Bidding Documents

6. Procurement of goods, civil works and employment of consultants will be subject to the provisions of the “Guidelines for Procurement under IBRD Loans and IDA Credits (May 2004)” and “Selection and Employment of Consultants by World Bank Borrowers (May 2004)”. The Bank’s Standard Bidding Documents (SBD) will be used for all contracts procured through International Competitive Bidding (ICB) and Limited International Bidding (LIB). The Bank’s SBDs will also be used for contracts under National Competitive Bidding (NCB) with appropriate modifications. The Bank’s Standard Request for Proposals (RFP) will be used for selecting consultants on the basis of Quality and Cost Based Selection (QCBS) and Least Cost Selection (LCS) methods. In the case of small contracts for works and goods, and contracts procured with Community Participation, simplified documents will be used with prior approval of the World Bank. Non-ICB and non-QCBS contracts will follow the Government’s Interim Public Procurement Regulations recently approved by GOSS, which provide for institutional arrangements for decision making and approval and managing of contracts, including payments.

Procurement of goods and works

7. **Procurement of works** will involve rehabilitation and construction of MARF, State and county buildings as well as laboratories, research centers, quarantine points, water points along stock routes, slaughter houses, fish landing and processing facilities. Market infrastructure construction/renovation contracts will be established on a ‘build and operate’ basis.

8. **Procurement of goods** will involve office equipment for MARF and five SDARF, equipment for field veterinarians and Community Animal Health Workers (kits, vehicles, mobile clinics, vaccines, cold storage units, etc.) and Community Fisheries Workers, laboratory and research equipments and equipment for market infrastructure developed.

9. **International Competitive Bidding** (ICB) will be used for contracts estimated to cost US$300,000 and above for works, and US$ 100,000 and above for goods. Pre-qualification of contractors will be used for contracts estimated to cost US$ 10.0 million and above.
10. *Limited International Bidding* (LIB) may be used as alternative to ICB or NCB procurement methods for goods in accordance with paragraph 3.2 of the Procurement Guidelines.

11. *National Competitive Bidding* (NCB) will be used for contracts below ICB thresholds following GoSS Interim Public Procurement Regulations. Given the low capacity of the contractors and suppliers in South Sudan, all contracts will be advertised nationally and regionally.

12. *Shopping* (referred to as *Selective Bidding* in works contracts) may be used as alternative to ICB and NCB for goods and works urgently needed, specialized goods and for all contracts estimated to cost less than US$20,000 for goods and US$ 50,000 for works equivalent per contract. The request for quotations shall be in writing and obtained from at least three suppliers. The quotations would be opened same time. The request for quotations will contain the following: technical specifications, drawings if needed, delivery time, payment conditions and any other information that may be help the suppliers to prepare competitive offers.

13. *Procurement from UN agencies:* Goods may be procured from the United Nations agencies in accordance with the provisions of paragraph 3.9 of the Procurement Guidelines, subject to prior approval of the World Bank.

14. *Community participation in Procurement* will be used as appropriate, in accordance with paragraph 3.17 of the Procurement Guidelines, through the application of simple methods of procurement, to be specified in a “Community Participation” manual that will be agreed with the Bank.

15. *Direct Contracting* will be used in cases consistent with paragraph 3.6 of the Procurement Guidelines.

**Procurement of Services**

16. *Procurement of Consulting Services* will involve technical assistance to support MARF in managing the project (CBIST and TST) and implement key components (policy work and training by institutions, engineering services for works, and development of services to herders and fisher folks through community-based activities by NGOs, survey and design for construction work by engineering firms). Consultant services will include recruitment of private firms and public institutions (such as research institutions, specialized private firms), Community Based Organizations, NGOs and UN agencies which possess specific experience relevant for project purposes.

17. *Quality-and Cost-Based Selection* (QCBS) in accordance with Section II of the Consultants Guidelines will be used for all major contracts under the project. Expressions of Interest will be sought for all contracts expected to cost more than $200,000, in accordance with para. 2.5 of the Consultant Guidelines, through advertising in UNDB online, in dgMarket, and in national and regional newspapers or magazines. For assignments for which regional firms or organizations may have a specialized expertise, this experience will be included in the evaluation criteria of the firms that express an interest in competing for the assignment. For such assignments prior experience in similar conditions as those prevailing in the Southern Sudan would be required as a criterion of qualification. In cases where a Conflict of Interest may arise or the Eligibility of a firm or organization to participate in the selection for an assignment is in doubt, according to the provisions of paragraphs 1.9(c) and 1.11 of the Consultant Guidelines, the prior approval of the Bank will be sought.
18. **Least Cost Selection (LCS)** may be used for assignments of a standard and routine nature for auditing and engineering services up to a maximum of US$200,000 per contract.

19. Selection based on **Consultants Qualifications (CQ)** may be used for assignments estimated to cost less than US$100,000 and for which the need for proposing and evaluating proposals would not be justified.

20. **Single-Source Selection** may be used for contracts on an exceptional basis for the selection of consulting firms and individuals, in accordance with paragraphs 3.8 to 3.11 of the Consultant Guidelines. The consultants to be chosen through Single-Source Selection will be identified in the procurement plan, as much a possible, and are likely to include NGOs and other organizations with working experience in South Sudan.

21. **Selection of Individual Consultants** will be in accordance with paragraphs 5.1 to 5.3 of the Consultant Guidelines. A standard form of contract for individual consultants will be used, with prior approval of the World Bank.

22. **Non consulting services** will consist of participation in internal and external training and workshops (including formal academic and professional training).

**Prior Review Thresholds**

23. The following will be subject to Bank’s prior review: (a) all contracts for goods equal to US$100,000 and above and works equal to US$300,000 and above; (b) the first contract for goods and the first contract for works under NCB; (c) all contracts awarded under Direct Contracting; (d) all Terms of Reference (TOR); (e) all contracts for consulting services equal to US$100,000 and above; (f) all contracts for individual consultants equal to US$ 50,000 and above; and (g) CVs for all contracts with IC below US$50,000.

24. **All other contracts** will be subject to post-review and procurement audit by the Bank. The project staff will maintain accurate records of all procurement activities and documents related to the Project. The procurement files will be maintained for review by the Bank's supervision missions and independent auditing. The CBIST will also consolidate procurement activities into Quarterly and Annual Progress Reports.

25. **Procurement Plan**: MARF will prepare a detailed work plan/budget for Years 1 and 2 from which procurement schedules and a procurement plan will be prepared by negotiations for all major contracts for goods and services, including selection of staff for the Project Implementation Support Team. Thereafter, annual procurement plans will be prepared by MARF consistent with annual work plans and budget. **It is expected that for the major contracts, advance processing will be done so that contracts would be signed as soon as the Grant Agreement is signed.**

26. **Procurement Risk.** Given the lack of procurement experience and adequate staffing in MARF, and possible limited interest in bidding by foreign contractors and suppliers, the overall procurement risk for the project is judged to be **HIGH.** On the other side, the presence of a Procurement Specialist and the CBIST, the availability of a Procurement Agent to support project procurement, the project is expected to guarantee reasonable implementation arrangements for whole of its duration.
27. **Frequency of Procurement Supervision**: Bank supervision missions will be carried out every 4 months in the first year and every 6 months thereafter. Two ex-post procurement review audits will be done during the first year and from thereon at least once a year.

**Table A: Thresholds for Procurement Methods and Prior Review**

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>Contract Value Threshold</th>
<th>Procurement Method</th>
<th>Contracts Subject to Prior Review</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Works</strong></td>
<td>US$300,000 and above</td>
<td>ICB</td>
<td>All Contracts</td>
</tr>
<tr>
<td></td>
<td>Below US$300,000</td>
<td>NCB</td>
<td>First contract</td>
</tr>
<tr>
<td></td>
<td>Below US$50,000</td>
<td>Selective bidding</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>All values</td>
<td>Direct contracting</td>
<td>All contracts</td>
</tr>
<tr>
<td><strong>2. Goods</strong></td>
<td>US$100,000 and above</td>
<td>ICB</td>
<td>All contracts</td>
</tr>
<tr>
<td></td>
<td>Below US$100,000</td>
<td>NCB</td>
<td>First contract</td>
</tr>
<tr>
<td></td>
<td>Below US$20,000</td>
<td>Shopping</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>All values</td>
<td>LIB</td>
<td>All contracts of US$100,000 and above</td>
</tr>
<tr>
<td></td>
<td>All values</td>
<td>Direct contracting</td>
<td>All contracts</td>
</tr>
</tbody>
</table>
| **3. Consultant Services**

Firms

<table>
<thead>
<tr>
<th></th>
<th>All Values</th>
<th>QCBS</th>
<th>All contracts costing US$100,000 and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below US$200,000</td>
<td>LCS</td>
<td>All contracts costing US$100,000 and above</td>
<td></td>
</tr>
<tr>
<td>Below US$100,000</td>
<td>CQ</td>
<td>First three contracts</td>
<td></td>
</tr>
<tr>
<td>All values</td>
<td>Single source</td>
<td>All contracts</td>
<td></td>
</tr>
</tbody>
</table>

Individual Consultants

<table>
<thead>
<tr>
<th></th>
<th>US$50,000 and above</th>
<th>Individual consultants</th>
<th>All contracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below US$50,000</td>
<td>Individual consultants</td>
<td>CVs</td>
<td></td>
</tr>
<tr>
<td>All values</td>
<td>Single source</td>
<td>All Contracts</td>
<td></td>
</tr>
</tbody>
</table>

¹¹ TORs for all contracts regardless of method of selection and value would be subject to prior review by the World Bank.
Annex 8: Detailed Financial Management Arrangements
Southern Sudan: Livestock and Fisheries Development Project

1. An assessment of the proposed financial management and disbursement arrangements has been carried out in accordance with the Financial Management Practices Manual issued by the Financial Management Board on November 3, 2005. The objective of the assessment is to determine: (i) the extent of preparedness by the Grant recipient’s implementing agencies with an acceptable financial management arrangement and a robust system, which will ensure that: (i) the project funds are used for intended purposes only in an efficient and economical manner; (ii) there is capability to generate accurate, reliable and timely periodic financial reports; and (iii) the entity and project assets are safeguarded. In the event such a system is not in place, it is necessary to develop a realistic time-bound action plan for strengthening the financial management system in readiness for project implementation.

PFM System

2. The MoFEP for the GoSS (the recipient of the grant) and the implementing ministry - MARF - were established in late October 2005. Both Ministries are in the process of being functional. Some key positions in MARF have been filled but more needs to be posted. There is no prior Bank experience with MARF, including a history of audit compliance.

3. The only existing assessment of the public financial management system was carried out as part of the JAM and concluded that the entire public financial management system needed to be built from the ground up. Since the JAM assessment, there have been several significant developments:

- UNICEF, USAID and the World Bank have provided support for public financial management. In particular, UNICEF’s Capacity Building Trust Fund (CBTF) which is disbursed through KPMG as the FM Agent has met pressing expenditures. USAID has supported PFM capacity building activities, including acquisition of an off-the-shelf IFMIS system (Freebalance) that is now operational in Nairobi. The World Bank through the Low Income Countries under Stress (LICUS) Trust Fund has provided equipment and three advisors in PFM, Procurement and Civil Service Reform.

- All CBTF transactions are booked in the Freebalance system. Although four SOFEP employees have received training in Freebalance, GoSS transactions are still to be booked through the IFMIS system.

- A World Bank administered MDTF has been established and Price-Waterhouse-Coopers (PWC) has been appointed as the Monitoring Agent (MA).

- Oil revenues have accrued to the GoSS, and these revenues have now started flowing to the south. Some book-keeping efforts are underway to account for the utilization / management of these revenues.

- On the Human Resources side, the transfer to Juba and the availability of more experienced accounting staff there is expected to improve the skill level of GoSS staff.

- Commercial banking facilities are beginning to develop with the Nile Commercial Bank opening its first two branches in South Sudan, outside of Juba.

4. Some of the challenges facing public financial management system in South Sudan are:

- GoSS is hardly one year old, and its structure therefore barely established;
• there is hardly any accountancy capacity in the local civil service;
• absence of basic infrastructure to support a robust and integrated financial management information system;
• lack of dependable budgetary process with track record of allocating and tracking public funds from internal and external sources; and
• absence of public oversight institutions of accountability to ensure governance and transparency are upheld to a reasonable standard.

Accounting Policies and Procedures

5. The following describes the basis of accounting, currency and the chart of accounts:

• **Basis of Accounting:** MDTF resources will be accounted for by the Project on a cash basis. This will be augmented with appropriate records and procedures to track commitments and to safeguard assets.
• **Currency:** Accounting records will be maintained in US Dollar. Local currency based transactions will be translated at the exchange rate ruling at the date the expenditure is incurred.
• **The Chart of Accounts:** will facilitate the preparation of relevant monthly, quarterly and annual financial Statements, including information on the following:
  - total project expenditures
  - total financial contribution from each financier
  - total expenditure on each project component/activity, and
  - analysis of that total expenditure into civil works, various categories of goods, training, consultants and other procurement and disbursement categories.

6. **Fixed Assets Register:** The PAA will prepare and regularly update a Fixed Assets Register, showing the asset identity reference, cost, date of purchase and location of the assets. The register should also show the estimated economic useful life of the assets and, where possible, the estimated replacement cost at the end of the economic life and residual value if any. The register must be updated regularly with new entries, movements between locations and disposals as they occur.

7. **Contracts Register:** A Contracts Register will also be maintained for all contracts with consultants and suppliers. The PAA will prepare Contract Status Reports quarterly. Control procedures over fixed assets and contracts with consultants and suppliers/vendors will be documented in the PIM.

8. **Annual financial Statements** will be prepared in accordance with IAS. All accounting and control procedures will be adequately documented.

Planning and Budgeting

9. Cash budget preparation will follow the procedures outlined in the PIM. Additionally, financial projections or forecasts for the life of the project (analyzed by year) will be prepared. On an annual basis, the MARF assisted by the PAA, will prepare the cash budget for the coming period based on the work program. The cash budget should include the figures for the year, analyzed by quarter. The cash budget for each quarter will reflect the detailed specifications for project activities, schedules (including procurement plan), and expenditure on project activities.
scheduled respectively for the quarter. The annual cash budget will be sent to the World Bank at least two months before the beginning of the project fiscal year. Detailed procedures for planning and budgeting will be documented in the PIM.

Financial Management Arrangements

10. **Basic Principles**: The fiduciary accountability systems being put in place will therefore provide assurance regarding use of funds both from the GoSS and the MDTF.

11. **Institutional arrangements for PFM**: In view of the high risk, weak capacity environment, the overall fiduciary framework being put in place is outlined below. This is comparable to fiduciary controls established in other post conflict environments.

- The MA will monitor actual expenditures to ensure that funds are being utilized for the purpose intended. The MA will ensure that fiduciary standards are complied with, and report on all cases of non compliance.
- KPMG, as the interim PAA, will be responsible for ensuring that reliable and robust accounting systems are in place to ensure proper accounting and reporting of transactions in accordance with International Accounting Standards. The PAA will take fiduciary responsibility for release of funds.
- A Procurement Agent (PA) will be recruited to ensure procurement is conducted in a transparent and accountable manner, and as per MDTF requirements.
- An External Audit Agent (EAA) will be selected through an international competitive recruitment process to provide an independent assessment of the reliability of the financial statements produced for the project. The EAA will undertake audits as per International Standards on Auditing.

12. A Project Disbursement Unit (PDU) has been established in the Treasury of the Ministry of Finance of GoSS. The unit would is staffed with a PAA providing computer assisted financial management services for all projects, based on an IFMIS platform running on accounting software called ‘Freebalance’ and offer clearly defined service standards to the various implementing agencies. The service standards have been incorporated into the each of the MOU between the PDU and individual implementing agencies.

13. The PDU is part of the GoSS Treasury, with responsibility for accounting for project related funding. It is understood that GoSS is separately seeking external assistance for developing the core treasury functions, including the overall budget formulation and budget execution process.

14. GoSS is in the process of recruiting a PAA through an international competitive selection process. Since the recruitment process will take time, GoSS proposed that, in the interim, KPMG discharge these duties. KPMG was selected by GoSS on the following considerations: (i) it is the only major accounting firm that had set up an office for its operations in South Sudan, and (ii) it is the FM Agent for CBTF since 2004. KPMG has already deployed its team for this assignment.

15. For the longer term strategy, there are plans in place for recruiting the PA and the EAA. Meanwhile, GoSS, with support of external development partners, will endeavor to put in place structures and systems in key institutions to ensure accountability of public resources. In addition to the above, under the LICUS Trust Fund, specialized support is being provided through a Procurement Expert and a PFM Expert who have, until now, been focusing on the budget
formulation process. Specialized experts are also to be contracted in for strengthening internal controls and set up risk based internal audit function in the government.

16. Detailed financial management procedures and internal control environment will be provided in Financial Reporting and Monitoring section. Simplified monthly, quarterly and annual reports will be prepared for the purpose of monitoring project implementation. The reports will be submitted to the PMA, GoSS, MOFP and the World Bank. Detailed reporting procedures and the format, contents and frequency of reports will be fully documented in the PIM.

- **Monthly:** On a monthly basis, the PAA will prepare and submit the following reports to GoSS, PMA and the World Bank:
  - Bank Reconciliation Statement for each bank account;
  - Monthly Statement of cash position for project funds from all sources, taking into consideration significant reconciling items;
  - Monthly Statement of Expenditure(where applicable) classified by project components, disbursement categories, and comparison with budgets, or a variance analysis; and
  - Statement of Sources and Uses of funds (by Major Category/ Activity);

- **Quarterly:** The following Financial Monitoring Reports (FMR) will be prepared by the PAA on a quarterly basis and submitted to GoSS, PMA and the World Bank:
  - Financial Reports which include a Statement showing for the period and cumulatively (project life or year to date) inflows by sources and outflows by main expenditure classifications; beginning and ending cash balances of the project; and supporting schedules comparing actual and planned expenditures. The reports will also include cash forecast for the next two quarters.
  - Physical Progress Reports which include narrative information and output indicators (agreed during project preparation) linking financial information with physical progress, and highlight issues that require attention.
  - Procurement Reports, which provide information on the procurement of goods, work, and related services, and the selection of consultants, and on compliance with agreed procurement methods. The reports will compare procurement performance against the plan agreed at negotiations or subsequently updated, and highlight key procurement issues such as staffing and building Borrower capacity.
  - SOE Withdrawal Schedule listing individual withdrawal applications relating to disbursements by SOE based method, by reference number, date and amount.

- **Annually:** The annual project financial Statements, which will be prepared by the PAA will include the following:
  - Statement of Sources and Uses of funds (by major Category/ Activity);
  - Statements reconciling the balances on the various bank accounts (including the Project Account) to the bank balances shown on the Statement of Sources and Uses of funds;
  - SOE Withdrawal Schedules listing individual withdrawal applications relating to disbursements by the SOE based method, by reference number, date and amount;
  - Notes to the Financial Statements.

17. Indicative formats for the reports are outlined in the Bank's: (a) Financial Monitoring Reports: Guidelines to Borrowers; and (b) the format will be fully documented in the PIM.
Flow of Funds and Banking Arrangements

18. A simplified fund flow arrangement has been planned for this project. There would be no Special Account for this project. It is envisaged that there will be two project accounts opened for the project. There will be pooling of the funds. One will be US Dollar Project Accounts in a reputed and stable commercial bank in Nairobi and a second Project Account in local currency located in a reputed and stable commercial bank in Juba. MDTF and GoSS contribution for the project would be disbursed directly into the US Dollar Project Account in Nairobi. The size of the initial deposits of funds into these accounts will be determined on the basis of an estimate of the anticipated expenditures for a period of four months. If necessary this advance could be increased on the basis of an estimate of the anticipated expenditures for a period of six months, on the basis of assessment by the World Bank. The PAA / GoSS will be responsible for managing these accounts, but MARF will incur expenditures under the project and initiate payments with all the supporting documentation on the basis of which PAA will effect the payment to providers of goods, works and services. The accounts will be replenished on a monthly basis to ensure the project has sufficient cash flow for meeting eligible project expenditures in a timely manner. The project will adopt traditional disbursement method based on the Statements of Expenditure (SOE). To ensure that the project is provided with adequate cash flow, the PAA will prepare and submit SOEs in support of periodic replenishment withdrawal applications. For large value payments of amounts above the minimum direct payment threshold to a single payee, the GoSS in collaboration with the PAA may request the World Bank to make direct payments to suppliers, contractors and service providers from the MDTF (Project Grant) account. Technically, GoSS and the PAA may also wish to use Special Commitment (SC) by opening irrevocable Letters of Credit with the US Dollar commercial bank. However, for this facility to be useful to the project with respect to procurement of goods, it will be important for the financing plan to be determined, which will guide the proportion of funding to be met from MDTF Grant proceeds for this project. The accounting for these payments would need to be reflected in the accounting records (accounting books) of the project that will be maintained by the PAA on behalf of MARF. Withdrawal applications for direct payment will be processed and submitted by the PAA in consultation with GoSS where the authorized signatories are likely to be based.

Flow of Funds

- Direct payments for large Contracts
  - GoSS contributions
  - Payments in US $
    - Project Account in Local Currency in Juba
    - Project Account in US $ Nairobi
    - MARF – at HQ

Various institutions, NGOs & contractors
19. The MDTF MA would monitor and report on the utilization of the entire project funds, including the compliance with fiduciary standards complied with and the reliability of the FM systems.

20. The local currency project account to be located in a commercial bank in Juba will receive funds from the US Dollar project account periodically. The amount to be transferred will be based on estimated average cash forecast for local expenditures for a period of three months. The PAA will be responsible for maintaining the records for all the transactions processed through this account. The expenditures will however be processed in consultation with MARF, which will also initiate the expenditures under the project to be paid either through this account or the US Dollar account in the case of foreign expenditures falling below the direct payment threshold as well as for the larger value individual transactions disbursed through the direct payment method.

21. All the bank accounts will be reconciled with bank statements on a monthly basis by the PAA. The bank reconciliation statements will be reviewed by designated officials, and identified differences will be expeditiously investigated and resolved at the earliest time possible, and in any event not later than the 20\textsuperscript{th} for the following month. Any unexplained transaction or suspected fraudulent transactions must be reported to the Task Leader and GoSS at the earliest opportunity. Bank reconciliation statements will form part of the required documentation supporting the monthly replenishment withdrawal applications. Details of the appropriate procedures and controls will be documented in the PIM to be compiled and issued by the PAA. This manual will be used by the PAA and GoSS for project implementation, to ensure that disbursements and fund flows are carried out in an efficient and effective manner. The PMA will also use the PIM as a reference document in its role of monitoring the implementation of the project.

22. Detailed banking arrangements, including control procedures over all bank transactions (e.g. cheque signatories, transfers, etc.); will be documented in the PIM.

23. The grant will be allocated according to the expenditure categories as follows:

\textbf{Allocation of Grant Proceeds to Expenditure Categories}

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount of the Grant Allocated (in US Dollars)</th>
<th>% of total Expenditures to be financed by the Grant</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Civil Works</td>
<td>3,700,000</td>
<td>30</td>
</tr>
<tr>
<td>(2) Consultants’ Services, including NGOs</td>
<td>11,500,000</td>
<td>100</td>
</tr>
<tr>
<td>(3) Training</td>
<td>2,800,000</td>
<td>60</td>
</tr>
<tr>
<td>(4) Unallocated</td>
<td>2,000,000</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>20,000,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

\textbf{Disbursement Arrangements}

24. \textbf{Disbursement method}: As stated above, it is proposed that the project will use SOEs as basis for disbursement in addition to direct method and special commitments as the case may be. The local currency account in a commercial bank in Juba will function as a secondary or subsidiary account holding project funds for local expenditures.
25. In routine reporting of project implementation progress, FMR will be used for reporting purposes. Such reports will be submitted to IDA within 45 days after the end of each reporting period, which quarterly for the purpose of this project. Details will be contained in the PIM to guide the process.

26. Proper skills of handling withdrawal applications of various types will be provided through training of PAA and also GoSS as needed during the initial phase of the project. Given the low capacity situation in South Sudan, hand holding of GoSS by PAA and other agencies will be useful in helping build local capacity over time.

**Risk Assessment and Suggested Mitigation**

27. **Strengths:** The transition to the formation of a Government of South Sudan (GoSS) has been relatively smooth. New institutional arrangements are being formalized in an organized and efficient manner. The availability of substantial quantities of oil resources is a huge advantage if they are used in an economically efficient, transparent and accountable manner. A particular area of strength is the willingness of GoSS to interact effectively with the international community at this formative stage so that lessons of good practices from Africa and elsewhere can be adapted quickly to the situation in South Sudan. The contracting of a reputable international accounting and monitoring agencies with experience of the Bank’s financial procedures is a strength.

28. **Weaknesses:** Institutional and governance capacity is weak, with basic PFM systems and procedures still to be established. The lack of adequate HR capacity is critical as can be expected in a post conflict situation. There is no familiarity with Bank procedures or guidelines. The banking system is virtually non existent, increasing the challenge of establishing a payment mechanism or entering into commercial transactions.

29. **Assessment:** Given the weak institutional and governance structures, no prior Bank experience with the proposed implementing entity or entities including a history of audit compliance and low financial management capacity, the overall level of risk is rated as “High”.

<table>
<thead>
<tr>
<th>Inherent Risk</th>
<th>Risk Assessment</th>
<th>Risk Mitigating Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Country level: This risk has been assessed as being high since governmental level institutional arrangements are still evolving. There is weak capacity in public financial management, in line with the weak overall civil service capacity. As this is a transition period, there are no clear financial regulations or accounting standards. The GoSS does not have a framework for annual external audits as yet.</td>
<td>√</td>
<td>As with other post conflict countries with weak capacity, risk is being mitigated through an interim arrangement of a framework of fiduciary agents and, to the extent possible, contracting out most of the implementation. The MA will monitor all expenditures out of the MDTF, the PAA to manage the actual accounting and financial reporting, and the EAA to undertake the audit. Domestic capacity is being built concurrently, through projects such as the Core Capacity Building Project, the Rapid Impact Emergency Project (RIEP) which has been approved, that will utilize both GoSS and MDTF resources and the capacity building component of this project.</td>
</tr>
<tr>
<td>2. Entity level: This risk has also been assessed as being high. The MoFEP and MARF have just been established in</td>
<td>√</td>
<td>The risk is being mitigated through the recruitment of staff in MoFEP who has experience of implementing Bank funded projects. In addition, MARF will contract an international organization to provide a CBIST which</td>
</tr>
</tbody>
</table>
### Risk Assessment

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>H</th>
<th>S</th>
<th>M</th>
<th>N</th>
<th>Risk Mitigating Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2005; the MFEP has just begun to be familiar with financial management system in the context of International Accounting Standards (IAS). MARF has not implemented any Bank or donor financed projects in the past.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>would have Procurement and Financial Management experts who are familiar with the international standards and the Bank’s procedures. The MARF team along with MoFEP will closely monitor project implementation and fiduciary compliance.</td>
</tr>
<tr>
<td>3. Project level: This is undoubtedly a complex project, with six components, many of which are to be contracted out for implementation to different contractors / UN Agencies and NGOs. Effective contract management will be critical to the success of this project.</td>
<td></td>
<td></td>
<td></td>
<td>√</td>
<td>Most of the project implementation is expected to take place through private contractors / NGOs / and possibly UN agencies (OPS) procured through World Bank Procurement Procedures. Some project activities, such as, rehabilitation and construction of market infrastructure and fisheries facilities will be phased in to allow for learning and testing the existing implementation and financial management capacity. Prior to funds being paid through the MARF, a capacity assessment exercise would be carried out by the PAA to confirm that the minimum capacity for accounting for project funds exists. A consultant will be contracted to certify all civil works before payments are made. Monitoring and evaluation of performance of the various contracted implementing agencies would be the responsibility of the CBIST which will measure performance against an agreed set of performance indicators. Three external advisors provided through the LICUS Trust Fund, attached to the MoFEP, for procurement, public financial management and civil service reform would also provide support for the effective implementation of this project. In addition MARF will recruit a financial management specialist with a strong background in capacity building, project implementation and monitoring and understanding of World Bank procedures.</td>
</tr>
<tr>
<td>Overall Inherent Risk</td>
<td></td>
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</table>

### Control Risk

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>H</th>
<th>S</th>
<th>M</th>
<th>N</th>
<th>Risk Mitigating Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Budget: Effective budget formulation and execution is still a challenge. It has a risk rating of High. Although GoSS prepared and approved a budget for the six months October 2005 – March 2006, and from April – December 2006, the GoSS is yet to satisfactorily execute a budget. One risk element is the amount of funding that will go through the budget. This is first time that MARF will be handling funds or maintaining accounts.</td>
<td></td>
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<td>√</td>
<td>Sufficient support is being provided to ensure that the budget formulation process is orderly and focuses on national priorities. International TA is being provided to support the budget formulation process through the Bank’s LICUS Trust Fund as well as by USAID. The PAA will put in place a mechanism to identify and analyze variances using the Freebalance accounting software. Corrective actions will be implemented. Budget adjustments will be approved by the PAA.</td>
</tr>
<tr>
<td>2. Accounting Policies and</td>
<td></td>
<td></td>
<td></td>
<td>√</td>
<td>Finalization of the project financial management manual</td>
</tr>
<tr>
<td>Risk Assessment</td>
<td>Risk Mitigating Measures</td>
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<td></td>
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<td>-----------------</td>
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<tr>
<td><strong>Procedures:</strong></td>
<td>will be one of the effectiveness conditions of the project. This is expected to be largely based upon similar manuals adopted for other trust funds, which are consistent with Bank requirements.</td>
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<tr>
<td>GoSS is still to finalize its financial policies and procedures. It is expected to do this in the next few months. The financial management manual for this project has still not been finalized and tested.</td>
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<tr>
<td><strong>3. Internal controls and Internal Audit:</strong></td>
<td>Based upon the experience in other post conflict countries, GoSS had been requested to consider contracting in capacity for supporting the effective implementation of internal controls and internal audit. It has been agreed with GoSS that two experts will support the Treasury in starting the process of building a robust system of internal controls and internal audit for all government ministries. For this project, internal audit requirements will be satisfied through requiring the PAA to provide capacity to ensure effective internal controls. The first internal audit report is expected by October 2006.</td>
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<tr>
<td>There is currently no internal audit department in GoSS and internal controls are weak since the financial regulations have still not been adopted and tested.</td>
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<tr>
<td><strong>4. Funds Flow:</strong></td>
<td>The risk of lack of adequate and or delayed counterpart funding is expected to be mitigated through adequate budget being provided for this contribution on an annual basis. Effort will be made to agree with GoSS and ensure the contribution from GoSS is released upfront at the beginning of each fiscal year or at least semi annually.</td>
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<tr>
<td>Transfer of oil resources on a regular basis is in the process of stabilizing. The accounting arrangements for these resources are being thought through. As competing demands build up for GoSS budgetary resources, it is possible that there could be delays encountered in the availability of counterpart funding.</td>
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<td><strong>5. Financial Reporting and Monitoring:</strong></td>
<td>Having in place a robust project financial management system will result in production of the required financial reports. Capacity building efforts will have to be given top priority at the MARF level to make this arrangement work. Using a PAA will assist in mitigating the risk at national level.</td>
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<td>This is an area of particular weakness, since reporting or accounting formats are neither finalized nor published.</td>
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<td><strong>6. Staffing:</strong></td>
<td>In the immediate term the human resources constraint would be addressed through contracting out some implementation and monitoring activities to institutions that have the capacity to implement adequate fiduciary controls. In the longer term, this challenge will be met through capacity building initiatives utilizing GoSS’s own resources with support from institutions such as the World Bank (Core Capacity Building Project) and agencies like USAID. Because of its importance as the core human capital for the MARF, development of GoSS capacity will be a critical implementation and sustainability factor for the project.</td>
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<td>HR capacity to implement and monitor the project implementation is particularly weak both at the ministerial, state and county levels. Integration of staff in Juba, attraction of nationals in other countries and professionals from neighboring countries such as Uganda and Kenya will help alleviate the shortage in some critical skill areas, but severe gaps are expected to persist for some time.</td>
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<td><strong>7. External Audit</strong></td>
<td>GoSS has agreed to contract out this service through retaining an External Audit Agent recruited through an</td>
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<td>There is no external audit capacity</td>
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</table>
### Action Plan

30. The following actions are to be implemented as specified.

<table>
<thead>
<tr>
<th>S/N</th>
<th>ACTION</th>
<th>By Whom</th>
<th>By When</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Open Designated US Dollar Project Account and Local Currency Project</td>
<td>PAA / GoSS</td>
<td>Effectiveness</td>
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<tr>
<td></td>
<td>Account with reputable and stable commercial banks in Nairobi and Juba</td>
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<td></td>
<td>respectively</td>
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<td>2</td>
<td>Demonstrate that the Project Implementation Manual (PIM) used by</td>
<td>PAA / GoSS</td>
<td>Within 6 months of</td>
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<td></td>
<td>PAA is readily available</td>
<td></td>
<td>Effectiveness</td>
</tr>
<tr>
<td>3</td>
<td>Identification of External Audit Agency</td>
<td>GoSS /PAA</td>
<td>2nd Quarter after</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>effectiveness</td>
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</tbody>
</table>

### Supervision Plan

31. As this is a high risk project, it will be supervised on a six-monthly basis by a Bank accredited FMS. Supervision activities will include review of SOEs; review of annual audited financial statements and management letter as well as timely follow-up of issues arising; annual review; participation in project supervision missions as appropriate; and updating the FM rating in the Implementation Status Report.

### Audit Arrangements

32. **Internal Audit.** In view of the difficulty of establishing a robust and modern risk based computer assisted internal audit function in GoSS, at the Ministry of Finance and Planning level, it is considered exceptionally prudent for the PAA to hire contracted individuals specifically to play this role, and report to GoSS and MOFP. The reports will be made available to World Bank supervision missions and to EAA.

33. **External Audit.** The Project's financial statements will be audited in accordance with International Standards on Auditing (ISA) by an independent auditor. The audit reports and financial reports will be submitted to the Bank within 6 months of the end of the fiscal year. In accordance with the audit policy, the auditor may issue a single comprehensive report indicating his opinion on (i) the financial statements expressed in their succinct report, the auditors will be asked to review in depth all expenditures and internal controls procedures used for their preparation during the period under review, in order to express a separate opinion on them, (ii) the eligibility and propriety of expenditures claimed using the SOE procedures; and (iii) The administration of
the cash assets of the project, i.e. bank accounts. In addition the auditor will be expected to prepare Management Letters giving observations and comments, and providing recommendations for improvements in accounting records, systems, controls, risk prone areas, fraud risk and compliance with financial covenants in the MDTF Grant agreement.

34. It is the responsibility of GoSS to appoint independent auditors acceptable to the Bank. GoSS is also responsible for: (i) preparing or cause the preparation of accurate and timely Project financial statements in accordance with IAS; (ii) presenting the Project financial statements to the auditor annually, and (ii) submitting to the Bank the audited Project financial statements together with management letter and response thereto. To this end, GoSS will ensure that audit ToR’s as well as the auditors proposed that are satisfactory to World Bank. The suggested audit timetable is as follows:

- TOR and appointment of an independent audit firm acceptable to MDTF/World Bank by June 30, 2007.
- Audit report to be submitted six months after the closing of the fiscal year.
Map of Sudan

Livestock and Fisheries Development Project
MARF MDTF Southern Sudan

- Upper Nile
- Unity
- Jonglei
- Eastern Equatoria
- Central Equatoria (Bahr El Jabel)

Fresh water marsh

Nile and main tributaries

FAO Dynamic Atlas