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EXPANDING AGRICULTURE AND FOOD SECURITY ACTIVITIES IN SOUTHERN SUDAN

ASSESSMENT REPORT FOR USAID/SUDAN ECONOMIC GROWTH TEAM

JUNE 2009

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ACRONYMS

ACT	Agriculture, Competitiveness and Trade project
ACTESA	Alliance for Commodity Trade in Eastern and Southern Africa
AGCI	African Global Competitiveness Initiative
AMED	Agriculture Markets and Enterprise Development
ASARECA	Association for Agricultural Research for Eastern and Central Africa
AU	African Union
Boma	Administrative sub-division of a payam
BRAC	Bangladeshi Microfinance Institute
BRIDGE	Building Responsibility for Delivery and Government Services
CAADP	Comprehensive Africa Agriculture Development Plan
CAEW	Community Agricultural Extension Worker
CAHW	Community Animal Health Worker
CBO	Community-Based Organization
CES	Central Equatoria State
CFSAM	Crop and Food Security Assessment Mission
CO	Contracts Officer
COMPETE	Competitiveness and Trade Expansion Program (USAID/East Africa)
COMESA	Common Market for Eastern and Southern Africa
COTR	Contracts Officer's Technical Representative
CPA	Comprehensive Peace Agreement
CRS	Catholic Relief Services
DG	Democracy and Governance
DRC	Democratic Republic of the Congo
EAC	East African Community
EC	European Commission
ECA	Economic Commission for Africa
ECS	Episcopal Church of Sudan
EES	Eastern Equatoria State
EG	Economic Growth
EMMP	Environmental Mitigation and Monitoring Plan
ETOA	Environmental Threats and Opportunities Assessment
EU	European Union
FACTS	Foreign Assistance Coordination and Tracking System
FAO	Food and Agriculture Organization
FEWSNet	Famine Early Warning Network
FFP	Food for Peace (USAID)
FY	Fiscal Year
GFSR	Global Food Security Response
GoNU	Government of National Unity
GOSS	Government of Southern Sudan
GTZ	German Technical Assistance
Ha	hectare
IBAR	Interafrican Bureau for Animal Resources
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
ICT	Information and Communications Technology
IDP	Internally Displaced Person
IEE	Initial Environmental Examination
IEHA	Initiative to End Hunger in Africa

IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
ILRI	International Livestock Research Institute
IGF	Innovative Grant Facility
IQC	Indefinite Quantity Contract
IR	Intermediate Result
LRP	Local and Regional Purchase
MAF	Ministry of Agriculture and Forestry
MARF	Ministry of Animal Resources and Fisheries
MDG	Millennium Development Goals
MDTF	Multi Donor Trust Fund
M&E	Monitoring and Evaluation
MLI	Market Linkages Initiative
MSME	Micro-, Small, Medium Enterprise
MYAP	Multi-Year Assistance Program
NARO	National Agricultural Research Organization (Uganda)
NEPAD	New Plan for Africa's Development
NGO	Non-governmental Organization
NPA	Norwegian People's Aid
OFDA	Office of Foreign Disaster Assistance (USAID)
OP	Operational Plan
Payam	Administrative sub-division of county
PERSUAP	Pesticide Evaluation Report and Safe Use Action Plan
P4P	Purchase for Progress
PMP	Performance Monitoring Plan
PO	Producer Organization
RATES	Regional Agricultural Trade Expansion Support
RATIN	Regional Agricultural Trade Intelligence Network
Re-SAKSS	Regional Strategic Analysis and Knowledge
RFTOP	Request for Task Order Proposal
SDG	Sudanese pound (currency)
SIFSIA	Sudan: Institutional Capacity Programme Food Security Information Action
SFSA	Support for Food Security Activities
SME	Small and Medium Enterprise
SOW	Statement of Work (or Scope of Work)
SPCRP	Sudan Productive Capacity Recovery Program
SSARP	Southern Sudan Agriculture Revitalization Project
SSLDP	Southern Sudan Livelihoods Development Project
SUMI	Sudan Microfinance Institution
TO	Task Order
UNDP	United Nations Development Programme
USAID	U.S. Agency for International Development
USDA	U.S. Department of Agriculture
USG	U.S. Government
VAM	Vulnerability Assessment and Mapping
WB	World Bank
WES	Western Equatoria State
WFP	World Food Program

EXECUTIVE SUMMARY

Objective of Assessment Report

USAID/Sudan requested that an external team conduct an assessment to explore options and priorities for expanding its agricultural and food security programming in Southern Sudan with FY09 and future funds. The assessment report and its recommendations would be the basis for developing a statement of work for USAID/Sudan's new agricultural productivity and marketing project.

Methodology of Assessment

The team conducted interviews with a wide range of stakeholders in Southern Sudan and in the region that included donors, international organizations, USAID officials from various offices and projects and NGOs. Field visits were conducted to each of the three Equatoria States during which the team met with government officials, farmers, farmers' groups, traders, shop keepers, manufacturers, processors, NGOs and ongoing projects.

The team developed its set of recommendations for USAID interventions using all these sources of information as input into our deliberations, while at the same time taking into consideration various USAID parameters and priorities. A half-day workshop was held with GOSS and State officials to present tentative recommendations and elicit feedback to further refine the document.

Brief Overview of Agriculture in Southern Sudan

Agricultural potential in Southern Sudan is high with about 90% of its total area considered suitable for agriculture, 50% of which is prime agricultural land. Soil and climate conditions allow for a wide variety of food and cash crops. Most small-holder systems farmers grow a wide range of sorghum landraces, with minor crops of maize, bulrush millet, finger millet and upland rice according to location. Other crops grown include groundnuts, cassava, green grams, cowpeas, beans, sesame, pumpkins and tobacco. Crop production cultivation is almost exclusively by manual means with rudimentary basic tools and the area of land cultivated is determined by family labor availability (principally women); and by the minimum acreage required for assurance of basic household food supply. Cropping areas are typically cultivated under a shifting regime due to declines in soil fertility after successive crops. Livestock is a major sector in the economy of Southern Sudan and a major source of livelihood to the majority of the population. About 75% of the assessed households own livestock.

Cassava is the most important contributor to the household food economy providing at least half of the carbohydrate ration. Southern Sudan has produced about 90% of its cereal needs in 2007, and 100% in 2008 (CFSAM, 2007 & 2008). Rural incomes are quite diversified, reducing exposure to risk.

Challenges to Agriculture: Principle challenges facing the development of Southern Sudan's agricultural sector include: low/no use of improved technologies, lack of inputs including seeds/planting material/improved breeds, fertilizers, mineral blocks and tools, poor rural infrastructure that hampers access to markets, low literacy and numeracy rates, lack of financial services, weak agricultural and livestock research and extension services, poor quality animals, lack of animal health services, lack of water and pasture for livestock that causes conflict with other resource users, pests and diseases of both crops and livestock, labor shortages and lack of irrigation. While these constraints apply to both men and women farmers, women are more likely to have a greater degree of difficulty than men in accessing inputs and services for a variety of reasons; yet they are major participants in agricultural systems. Public

sector capacity to provide services and develop policy, legal and regulatory frameworks is weak. Private sector is hampered by lack of business and management skills.

USAID Programs

USAID/Sudan's current strategy focuses on supporting the implementation of and reducing threats to the Comprehensive Peace Agreement (CPA), including providing peace dividends that help maintain the CPA's viability and addressing the root factors that fuel conflict. Because large numbers of Sudanese are returning to their original homes in rural areas, USAID/Sudan is increasing its focus to increase economic opportunities for these returnees through improved agriculture and infrastructure that will stimulate both production of and market demand for agricultural goods to lay the foundation for increasing rural livelihoods and resiliency.

Relevant Regional Initiatives and Projects

It will be important and beneficial for the new project to collaborate with several regional initiatives dealing with agriculture, trade, markets and food security. The **Comprehensive Africa Agriculture Development Program** of the African Union provides a framework and analytical process for African nations to identify the high priority investments for agriculture. The **Common Market for Eastern and Southern Africa** is one of the larger trade blocks and offers preferential trade regimes for member countries such as Sudan. One of COMESA's top priority programs is the **Alliance for Commodity Trade in Eastern and Southern Africa, ACTESA**. ACTESA aims to support CAADP's food security and markets pillars through improving and increase trade of food staples. USAID/East Africa is supporting two large projects, one in regional trade and a second in food security. The **Competitive Markets and Trade Expansion (COMPETE)** project works with COMESA and supports trade facilitation, improving and increasing regional trade and value chain competitiveness of food staples and other commodities. The **Support for Food Security Activities** contract will focus on providing USAID missions in East and Southern Africa a mechanism through which they can access services and technical assistance on a wide variety of food security activities. The **USAID Global Food Security Response** will provide significant resources to priority missions, many in Africa, to increase emphasis on agriculture production and marketing systems development and sustainability, with a special focus on women, children and the very poor in agriculture and on nutrition. USAID's Famine Fund has approved a specific activity to increase smallholders and vulnerable farmers' access to markets through the **Market Linkages Initiative**, which has identified the Northern Uganda-Southern Sudan border as a priority project. The World Food Program, supported by the Gates Foundation and collaborating with USAID is piloting the **Purchase for Progress (P4P)** that aims to stimulate smallholder agricultural production by purchasing its food requirements locally and strengthening the farmers' link to market opportunities.

Recommendations for the USAID/Sudan Agricultural project

USAID/Sudan, through this new agriculture project, aims to expand on previous investments, bringing them to scale in order to have broader impact through increased productivity, storage, processing and commercialization of smallholder production in both local and regional markets.

The Results Framework is presented below and represents the basic structure and logic of the new program based on the current situation, the priorities of GOSS and USAID/Sudan's objectives.

Assistance Objective: *Increase food production and trade in targeted areas of Southern Sudan*

Component 1: *Increase productivity in selected agricultural commodities*

Illustrative Expected Results:

- Both men and women producers will have adopted numerous technologies
- Members of producer organizations will be able to develop income statements, determine their costs of farming and will be able to use market intelligence to make decisions on marketing their produce.
- Producer organizations (POs) will have competence to bulk individual member orders and produce to take advantage of economies of scale. Producer organizations will be able to negotiate contracts for purchases and sales.
- POs will set up savings and loan systems within the group, and eventually access finance from financial institutions.
- There will be an increase in the number of private service providers serving smallholders and who will be able to provide a certain level of information about use of their products
- Public sector does not compete with the private sector.

Component 2: *Increase trade in selected agricultural commodities*

Illustrative Expected Results:

- Critical points, such as drainage problems, eroded areas or bridges along priority feeder roads will be repaired to facilitate trade. Public sector and communities will undertake maintenance systems so that feeder roads remain passable.
- Men and women farmers' products will be competitive in Sudanese markets, and there will be increased quantities in markets. In the longer term, Sudanese agricultural products will be competitive in regional markets.
- PO members will have access to a wider array of market services such as transport, processing, grading and drying, and there will be increased numbers of enterprises supplying these services.
- POs will be able to negotiate for services based on bulking up members' produce and guaranteeing quality and quantity. As a group, it is expected that they access storage services either owned by the group or contracted with a private entrepreneur.
- Financial institutions will develop products such as equipment leasing, trade finance that will inject new capital into the agricultural sector.
- Widely available market information decreases collusion in markets

Component 3: *Improve capacity to support market-led agriculture*

Illustrative Expected Results:

- Micro-, Small, Medium Enterprises (MSMEs) in targeted sectors will have improved business practices such how to assess the need for, and effectively manage finance, stock/inventory management, basic bookkeeping, management and growth of clientele and marketing practices. Traders will be "professionalized" in their operations.
- Policies, legislation and regulations issued by government will be elaborated with input from stakeholders, including private sector (large, medium, small) and producers.
- The roles and activities of the public sector and the private sector is clearly articulated and widely disseminated.

- Public sector officers will understand their role as regulator and facilitator of private sector functions, and will have an appropriate level of skills and knowledge of the sectors they regulate.

Focus of the Project

The project will initially focus on the high potential greenbelt zone of the three Equatoria States. In order to achieve meaningful results, it will be important that the project is focused, both geographically and by commodity. Selection criteria were developed and used to identify possible areas for project activities and to determine commodities.

Commodities Selection Criteria:

- Importance/contribution of the commodity to food security
- Relative numbers of farmers producing the commodity
- Size and potential of market demand for the commodity
- Availability of technologies and improved practices
- Farmer familiarity with the commodity

Geographic Selection Criteria – for areas within the three Equatoria States:

- Security: The situation in Southern Sudan is still volatile and ever changing with respect to security, and poses problems for project implementers and their ability to access project sites.
- Agricultural potential: Project sites should be selected based on their high agricultural potential in order to have the best chance for successfully and profitably increasing surplus production.
- Proximity to sizeable markets: Project sites should not be so distant from markets as to make it cost ineffective to produce surpluses for the market. These markets should have sufficient population in the market shed to have a sizeable demand for agricultural products, thus providing incentives to producers for surplus production.
- No duplication:
 - Ensure that there is no duplication/overlap of same/similar activities in same geographic area.
 - The USAID project may be located where other agriculture projects are being implemented, but USAID’s activity will be adding value and not duplicating efforts of other projects.

Tentative geographic areas and commodities are proposed based on the above criteria and on subsequent discussions with government officials at State and local levels.

Geographic Focus

- Central Equatoria Counties: Morobo, Kajo Keji, Yei
- Eastern Equatoria Counties: Magwi, Ikotos, Budi
- Western Equatoria Counties: Maridi, Mundri, Tambura (if security permits)

Commodity and Programmatic Focus

It is recommended that the project focus on a combination of selected food staple crops, oilseeds, cash crops, livestock, market development and feeder roads. Suggested commodities are:

- Ground nuts
- Sorghum

- Rice
- Cassava
- Maize
- Sesame
- Livestock (cattle and small ruminants)
- Horticulture (commonly consumed: tomato, cabbage, onion, okra)

I. PURPOSE OF ASSESSMENT REPORT

USAID/Sudan's funding for its Economic Growth portfolio has been primarily used to improve road infrastructure to help Southern Sudan start its recovery process. Recently, with a promise of significant additional funding, the Mission is at the early stages of designing interventions to support the recovery of the agricultural sector and to support the Government of Southern Sudan's goal of increasing food production, USAID/Sudan requested that an assessment take place to explore options and priorities for expanding its agricultural and food security programming with Fiscal Year 2009 funds. The assessment report and its recommendations would be the basis for developing a statement of work for USAID/Sudan's new agricultural productivity and marketing project.

2. METHODOLOGY OF ASSESSMENT

The Scope of Work for the design team clearly articulated the Mission's expectations that the team would carry out extensive consultations with stakeholders in and outside of Sudan – GOSS at all levels, NGOs, donors, international organizations and the private sector, especially farmers and farmers' groups.

The team stopped in Nairobi, Kenya to meet with the USAID/East Africa Office to get USAID regional perspective on developing South Sudan's agricultural sector. The team also met with other organizations, including the African Union Interafrica Bureau for Animal Resources (AU IBAR), the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and the International Livestock Research Institute (ILRI) that have regional responsibilities and projects with which Southern Sudan could link.

In Southern Sudan, the team gathered information from a wide variety of sources and stakeholders over the course of three weeks. The focus of questions was on a) how to boost agricultural productivity and increase market access for large numbers of small farmers in the Equatoria States, to contribute to the Government of Southern Sudan's priority of increasing food production; and b) identify gaps where USAID assistance could add high value. The team used a value chain approach to explore relationships along the crops and livestock chains and identify gaps. It also gathered information on the role and the ability of Southern Sudan public, private and NGO sectors to provide services to the agricultural sector.

Key donors, donor groups, non-governmental agencies and other international organizations were interviewed to gather information on types of interventions, experiences, and lessons learned relating to developing the agricultural potential in the Equatoria States. The team also strived to determine what gaps exist in current activities that a new USAID program could fill. In some cases the team received documents from various agencies that provided more information. These were passed on to USAID/Sudan to build up their library and information portal.

At the same time, the team reviewed a wide range of documents to obtain more analytical information about agricultural systems, poverty, gender and other topics relevant to our design task.

Several days were spent in the field where we visited selected counties to gain an understanding of the existing conditions, practices and institutions operating at farmer, county and state levels. The team met with government officials at the state and county levels to gain information on government priorities and ongoing activities. We visited several projects that were or are currently working with farmers to glean lessons learned and best practices. We also randomly interviewed farmers to learn about their practices, how they access services and markets, and the constraints they face. Lastly, we visited several markets and interviewed many of the women petty traders selling agricultural commodities to determine origin, quality and quantity of produce, and to determine what constraints they face in marketing. In one town,

we held a meeting with the local Chamber of Commerce to get business persons' perspectives on doing business in the rural peri-urban areas.

As the team developed its set of recommendations for USAID interventions, we used all these sources of information as input into our deliberations, while at the same time taking into consideration various USAID parameters and priorities.

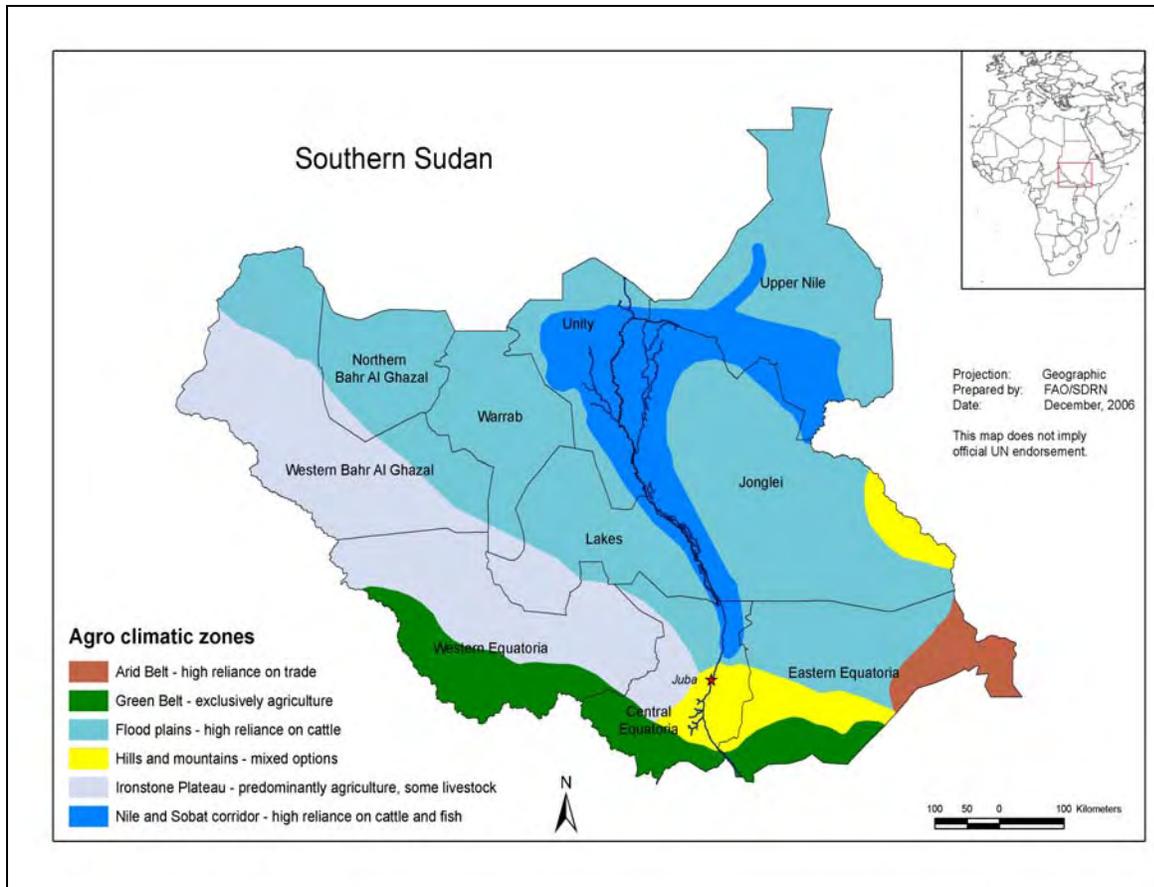
The team has produced notes with highlights of each meeting held while in Nairobi and South Sudan, found in Annex 4. A full list of persons and organizations contacted can be found in Annex 2.

3. BACKGROUND

A. Agricultural Overview of Southern Sudan

Southern Sudan covers an area of about 640,000 square kilometers and includes stretches of tropical and equatorial forests, wetlands (including the Sudd swamps), savannah and mountains (see graph below for agro-climatic zones). The high agriculture potential Greenbelt is in the southern states of Western Equatoria, Central Equatoria, and Eastern Equatoria. Southern Sudan is entirely within the Nile River basin and shares borders with five countries (Ethiopia, Kenya, Uganda, Central African Republic, and Democratic Republic of the Congo). Southern Sudan is culturally, geographically and religiously diverse and well endowed with natural resources, including water, wildlife, forest, oil and minerals. However, since the independence of Sudan in 1956, Southern Sudan has been a battleground for two civil wars (1955-1972, 1983-2005) that resulted in egregious suffering, loss of life and opportunities, widespread poverty, greatly diminished capacity and food insecurity (NSCSE and UNICEF, 2004).¹

¹ NSCSE and UNICEF 2004 cited in Guvele, Cesar. *Who and where are the poor in Southern Sudan? A Review of the Literature*. April 2008. ICARDA/ARC/USDA/UMAP



The level of poverty is extremely high and Southern Sudan consistently ranks among the lowest countries in the world in terms of most standard development indicators. Economic livelihoods are largely dependent upon subsistence farming and pastoralism. Public services are weak, leaving people in rural areas isolated in terms of access to basic services.

The overall situation in Southern Sudan is characterized by a fragile peace, an almost complete lack of infrastructure and basic services, a depressed economy, and nascent governance and rule of law structures with significant and urgent capacity-building needs. Translating the Comprehensive Peace Agreement (CPA) into actions and programs that will facilitate sustainable post-conflict recovery, governance and delivery of services is and will be an immense challenge to the Government of Southern Sudan (GOSS) and its development partners. Conditions are improving as GOSS and donors move ahead to implement a range of programs to address these challenges.

A USAID Assessment of its Economic Growth portfolio in September 2007 noted the major constraints in Southern Sudan to be:

- Uncertainty about peace or a resumption of war
- Limited government capacity, weak business environment and rampant corruption
- Minimal infrastructure (e.g., roads, water, electricity, ICT)
- Weak markets and non-existent market information systems
- Informal regional and internal trade linkages
- Unclear land tenure and demarcation
- Weak or non-existent capacity to provide services to develop agriculture and off-farm opportunities (e.g., extension services, agricultural research)

- High level of food insecurity
- Many returnees with few or no assets

Agriculture in Southern Sudan constitutes about one-third of Gross Domestic Product (down from 42% in 2000). Currently approximately 97% of government revenues come from oil, over half of which is paid for government salaries, leaving few resources for development activities, particularly at the state, county, payam and boma levels. Evidence from a recent Diagnostic Trade Integration Study suggests profit margins for farmers are particularly squeezed by the appreciation of the Sudanese pound, in addition to the adverse effects of supply-side bottlenecks. Given that the agricultural sector employs 67% of the population, mainly in the form of small-scale subsistence farmers, the declining competitiveness of the sector is a major concern for prospects for sustainable growth.²

A quick review of markets in major urban centers indicates that most agricultural commodities come from Uganda and, to a lesser extent, Kenya and the Democratic Republic of the Congo (DRC). This has created a situation where trade flows are one way – into Sudan. The high prices (and high demand) in Southern Sudan for agricultural commodities have resulted in price increases in Kampala. In order for Southern Sudan to be competitive in the region, significant improvements have to be made in increasing productivity, reducing post-harvest losses and reducing transaction costs, particularly transport.

Agricultural systems in Southern Sudan

Cultivated area in Southern Sudan has historically ranged between a minimum of one percent and a maximum of two percent of the total area (i.e. 650,000 – 1,300,000 ha).³ According to FAO-WFP (Crop and Food Supply Assessment Mission for Southern Sudan-CFSAM 2009), about 1 million ha were put under cultivation in 2008, and increase from 2007 levels likely due to increasing numbers of returnees. Harvest of the “traditional” (non-irrigated) sector for 2008 was estimated to be 1.25 million tons of cereal crops. Sorghum is the main cereal, followed by millet and maize, with an average yield of 1.01 tons/ha (but ranging from 0.75 tons/ha in Bahr el Ghazal to 1.5 tons/ha in Yambio). These figures are for the traditional (non-irrigated) sector. Average yields for Africa range from 1.04 to 1.14 tons/ha.⁴

The 2009 CFSAM report provided a theoretical surplus of 47,000 tons, but quickly noted that “the surplus is in reality a theoretical construct as the current road infrastructure and marketing network preclude meaningful movement of grains from the myriad of small hand-cultivated, household farms in surplus areas in the south to most of the deficits areas located mainly in the north.” There is some grain that is held at the homestead, mostly the less perishable crops.

Agricultural potential in Southern Sudan is high with about 90% of its total area considered suitable for agriculture, 50% of which is prime agricultural land. Soil and climate conditions allow for a wide variety of food and cash crops.

Southern Sudan’s agricultural production is principally based on small, hand-cultivated household units belonging to larger family aggregations. Regarding cereals, in most small-holder systems farmers grow a wide range of sorghum landraces, with minor crops of maize, bulrush millet, finger millet and upland rice according to location. Other crops grown include groundnuts, which make a significant contribution to the household food economy replacing sorghum as the main staple in poorer sorghum-growing years

² World Bank. *Interim Note for the Republic of Sudan*. March 2008. Report No. 43036-SD

³ World Bank. Final Proposal for a Multi-Donor Trust Fund Grant to the Government of Southern Sudan for the Support to Agriculture and Forestry Development Project (SAFDP). August 2007.

⁴ FAO. The World Sorghum and Millet Economies: Facts, Trends and Outlook. Document Repository <http://www.fao.org/docrep/W1808E/w1808e02.htm#TopOfPage>

when the rains begin later than usual; and providing a regular staple and cash crop in the higher localities with sandier soils. Green grams, cowpeas, beans, sesame, pumpkins and tobacco add to the biodiversity of the northern farming areas of Southern Sudan.

Crop production cultivation is almost exclusively by manual means with rudimentary basic tools and the area of land cultivated, which is also related to average allocated land ranging from 1 to 4 feddans (0.4 to 1.7 hectares), is determined by family labor availability (principally women); and by the minimum acreage required for assurance of basic household food supply. Cropping areas are typically cultivated under a shifting regime for two to three years or until yields prove to be in considerable decline, at which stage the land is fallowed and a new arable area is cleared, the vegetation burnt and cultivation commenced. In some cases, the move to new land involves the movement also of the family home; in others, a permanent home location is maintained and only the cropping plots rotated.

The standard practice is for crops to be grown in mixed and/or sequential plantings. The main cereal crops, sorghum and millet, are usually grown with sesame and pulses; and root crops, principally cassava, is often inter-planted with groundnuts, maize and pumpkins or other vegetables. The inter-crops may be planted to coincide with weeding of the main crops, or following on from an early harvest. Mixed cropping has advantages of complementary growth between crops, spreading or mitigation of risks, including those of weather and pests and diseases, labor saving and better ground cover, hence soil conservation. However, it can also entail considerable competition and less than optimal plant spacing, which can reduce yields and overall productivity.

Agricultural Contribution to Household Food Requirements

In the south and central areas, although groundnuts and the other crops are also grown in quantity, cassava is the most important contributor to the household food economy providing *at least half* of the carbohydrate ration. Minor crops of sweet potatoes, yams, coffee, mangoes, papayas and teak are also grown for home and some localized commercial use. In average figures, Southern Sudan has produced about 90% of its cereal needs (CFSAM, 2007)⁵, which range from 60 to 120 kg per capita per annum, varying according to the availability and access to animal products, cassava, groundnuts and wild foods. (Note: CFSAM 2008 figures show that Sudan produced 100% of national needs.)

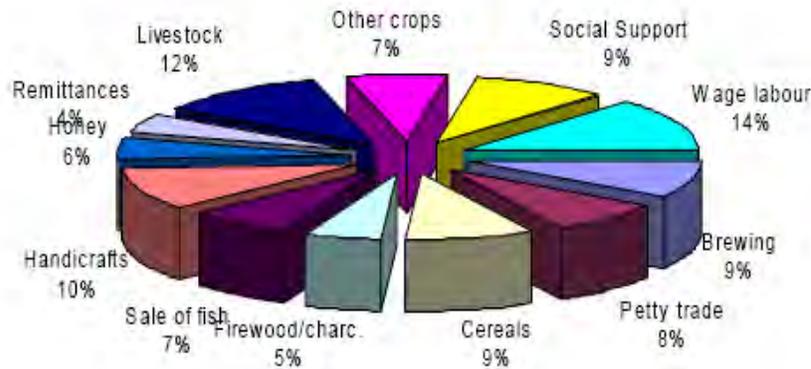
According to respondents in the WFP-FAO-MAF (2006) assessment, households obtained most of their food from: own production (53%); markets (32); barter (5%); gifts (4%); and borrowing (3%). Food aid as a source of food contributes less than 1%. Labor exchange and hunting/fishing/collecting wild foods contribute 1% each. As the economy improves and more employment opportunities are created, labor exchange will be replaced by wage labor and trading in barter will be replaced by money transactions.

Rural Incomes

Sources of household income in Southern Sudan are not highly diversified as most income is from farm related activities. However, within the farm sector itself, the income sources are diverse (see graph below). High diversity of income sources implies reduced exposure to risk. (WFP-FAO-MAF 2006).

⁵ Southern Sudan may produce a significant percentage of its food needs, nonetheless food insecurity and malnutrition levels are very high. Many factors contribute to this apparent paradox, including lack of income to purchase food, lack of roads, poor market access and high transport costs.

FIGURE 1: SOURCES OF INCOME IN RURAL SOUTHERN SUDAN



Source: WFP-FAO-MAF, (2006), Figure 11

In terms of household expenditures, households spent approximately 22% of their incomes on staple and non-staple food purchases. High dependency on staple food purchase carries high risk of market shocks especially for the poor households. Social events, shelter and household assets take 15% each of the expenditures. Roughly 13% was spent on clothing. The remaining 20% was spent on social services like health (11%) and education (9%).

Challenges Facing Agricultural Development

The World Bank noted the following in its “Interim Strategy Note” (March 20, 2008):

To enhance the livelihoods of the poor, reforms in both **irrigated and traditional rain-fed agriculture** need to be pursued. The agricultural sector will be a major source of sustained growth for the economy, particularly in light of the major macroeconomic and sectoral policy changes introduced to improve production incentives in the sector since 1992. There remain substantial inefficiencies in agricultural production and marketing in each of the major crop and livestock producing subsectors, in some cases because of the intrusion of government. These inefficiencies should be addressed through improved support services, technical and institutional change, further deregulation of some specific markets, land reform, strategic infrastructure development, and close attention by the government to **control and mitigate environmental degradation**. The emphasis of strategies for improved efficiency should be toward the traditional rain-fed areas in order to achieve rapid reduction in rural poverty. With agriculture, forestry and natural resources representing the mainstay for the livelihoods of the large majority of Sudanese, the development of this sector is central to ensuring food security, equitable wealth distribution, and restoration of peace. Key challenges in the sector include overcoming a legacy of public bias toward large-scale public irrigation rather than the rain-fed agriculture practiced by the poor, improving access to more reliable domestic water through rainwater harvesting, improving resilience in the face of shocks, addressing environmental degradation, improving marketing efficiency, and strengthening capacity for agricultural support services and technology adoption.

According to a recent FAO/WPF assessment (February 2009), a major obstacle to progress remains the state of the transportation infrastructure. For example, the cost of transporting ten tons of produce from Yambio to Juba is SDG 3,000 (approx. \$1,154), which makes it uncompetitive with surrounding countries. An absence of grinding mills (maize to maize flour) or processing plants (fresh cassava to tapioca/gari) that might add value to the products, compounds the problem. This poses a major problem for the movement of both people and commodities throughout the south, particularly during the rainy season. It also serves as a disincentive to produce surplus crops, as farmers find it expensive and very

difficult to transport surpluses to markets. Because of this, farmers in fertile areas often do not produce to capacity, even when there are food shortages in surrounding states. Rehabilitating existing infrastructure and building new, especially feeder roads would not only open up markets (improving livelihoods and food security), but it would improve access to health care, which could have a dramatic impact on both morbidity and malnutrition rates. Another issue noted by the assessment is that there is a growing tendency among the youth to leave their rural homesteads and settle in the towns leaving older members of the family to take care of the farming activities thus creating labor shortages at critical periods of cultivation.

These findings suggest the need to focus on increasing food production at the household level and improving markets as primary options for redressing the chronic food insecurity in Southern Sudan. Such a strategy might go a long a long way towards reducing poverty.

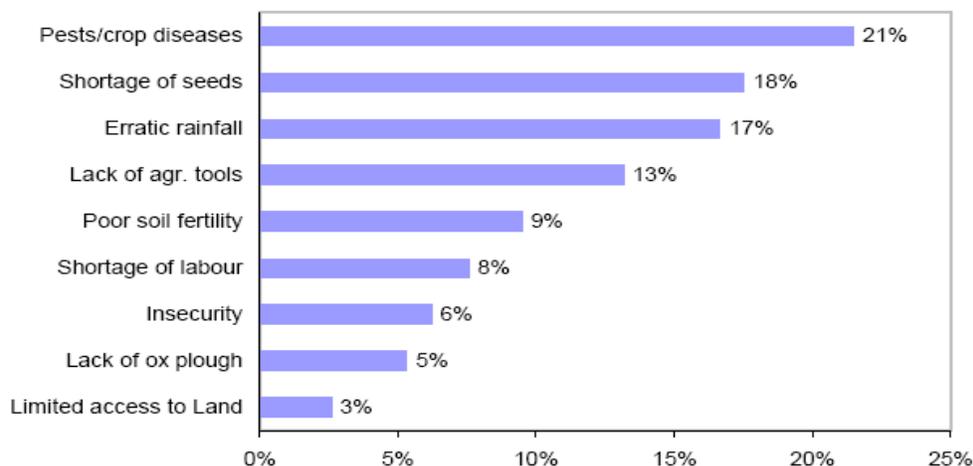
According to an IFAD agricultural project design document, the major constraints to development of the agricultural sector are⁶:

- reliance on outdated and low performing **planting material and seed** based on local cultivars or landraces of the principal crops, most of which have degenerated and for which there has been no opportunity in recent years for improvement;
- the **rudimentary tools and methods of agricultural work** and the virtual absence of improved production techniques; both hampering increase of cultivated area and crop intensification;
- the prevalence of **pests and diseases** and the scarcity of the inputs and technical information to manage them;
- **climatic adversity** (droughts and floods, or sometimes lack of the natural flooding of a river plain);
- **cattle** herd maintenance parameters are compatible to current use values; however, **poor** productivity parameters and particularly, **lactation yields**;
- lack of means and services to address **animal diseases** causing high mortality rates;
- little or no access to **livestock inputs and technical means** like spray pumps, mineral blocks, etc.;
- lack of and access to **fisheries input and technology supply** (fishing gear, processing equipment, boats for fishing, boats for transport);
- weakness or almost total absence of **agricultural support services** and communications infrastructure to facilitate their provision;
- lack of **capacity** and training of public service providers, and of fishers, livestock keepers and farmers;
- an increasing **competing demand for resources** (land for farming and grazing and, water for domestic purposes, irrigation and cattle);
- the lack of **marketing** system and adequate markets, so that commercialization of farm produce is negligible and the whole rural economy is neither market-oriented, nor even monetized; and lack of **marketing facilities and poor infrastructure** in the livestock (health services, holding grounds, slaughter slabs, hygiene facilities) and fisheries (including landing points) sector; transport facilities; appropriate processing technologies (crop and fisheries);
- The results of **conflict and insecurity** in the disruption or destruction of people's way of life and means of livelihood.

⁶ Government of Southern Sudan: Southern Sudan Livelihoods Project – Design Document; Working Paper 2: Agriculture, Livestock and Fisheries Overview and Community Development Options, IFAD.

Crop production in Southern Sudan faces numerous challenges. A 2006 survey done by the Ministry of Agriculture and Forestry with FAO and WFP, asked farmers what their primary constraints are to improving their crop production. Figure 2 below presents the results.

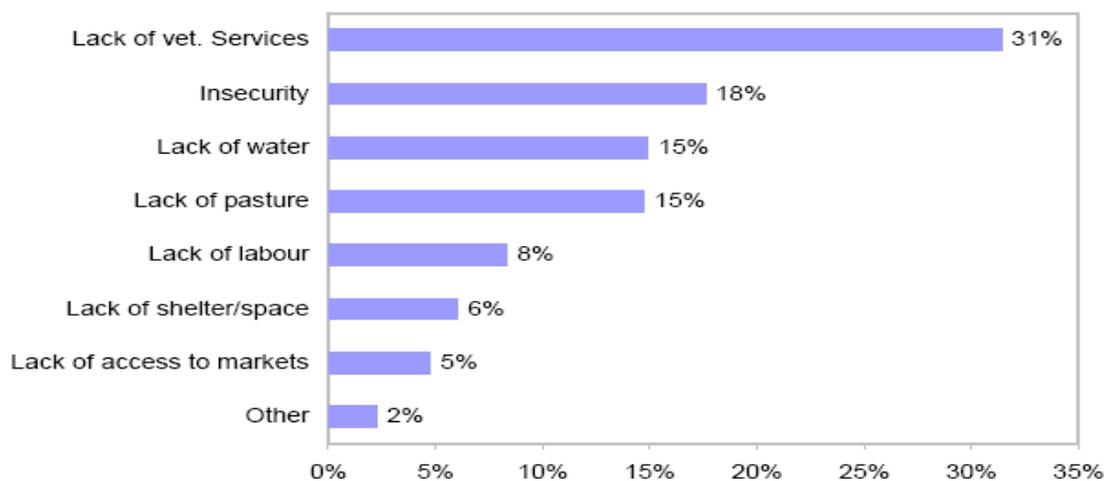
FIGURE 2. CONSTRAINTS TO CROP CULTIVATION IN SOUTHERN SUDAN



Source: WFP-FAO-MAF 2006, Figure, 2.

Livestock is a major sector in the economy of Southern Sudan and a major source of livelihood to the majority of the population. About 75% of the assessed households own livestock. The main livestock constraint, according to livestock producers is lack of veterinary services reported by 31% of the assessed households (see below).

FIGURE 3. CONSTRAINTS TO LIVESTOCK PRODUCTION IN SOUTHERN SUDAN



Source: WFP-FAO-MAF 2006, Figure 3

Millennium Development Goals (MDGs) for Southern Sudan

According to a Government of National Unity (GoNU) five year plan (2007-2011), to which the GOSS contributed, the plan aspires to achieve the following Millennium Development Goals (MDGs):

- Reducing poverty rate to 30%

- Basic education accessible to 80% (no gender discrimination); secondary education also to 80% and enabling 70% access to higher education
- Reducing child mortality by 50%
- Reducing maternal mortality by 50%
- Reducing malaria and tuberculosis by 80%
- Increasing access to information (IT) sources to 50% of population
- Providing potable water to 80% of population
- Raising rate of participation in coming elections to 80%

Although poverty in Sudan has a wide geographic spread, the lengthy civil war has created a distinct socio-economic differentiation between the North and the South. The human development indicators in Southern Sudan are significantly worse than in Northern Sudan. All of southern Sudan states, except Western Equatoria, are classified as food deficit and with very low coverage of social services. Furthermore, the disparity in gender development accounts for 95% of the Human Growth Index (HGI).

TABLE I. HUMAN POVERTY IN SOUTHERN SUDAN: MAGNITUDE AND DISTRIBUTION:

State	Human Poverty Index (HPI)	Rank (national wide)
Lakes	73.5	1
E. Equatoria	71.1	2
Unity	69.6	3
Northern Bahr Ghazal	67.4	4
Warap	67.0	5
Jonglei	65.9	6
Western Bahr Ghazal	65.2	7
Upper Nile	62.7	8
C. Equatoria	53.8	10
W. Equatoria	51.8	12

Source: Adapted from IFAD Sudan Country Strategic Opportunities Program - COSOP 2009). HPI in W. Darfur is 57.7 and in Khartoum is 14.2; ranking 9 and 25, respectively

In spite of overwhelming challenges, USAID is a committed partner in meeting the MDGs in Southern Sudan. The USAID program in the three Equatoria states in Southern Sudan will pay particular attention to MDGs 1 and 2 (eradication of extreme poverty, promotion of gender equity and empowerment of women). The reasons are compelling as shown in the table below:

TABLE 2: MEETING THE MDGS IN SOUTHERN SUDAN: SELECTED CHALLENGES

	Southern Sudan	2015 MDG Target
MDG1:Poverty and Hunger		
Estimated poverty incidence (% of total population)	90%	45%
Prevalence of child malnutrition (underwt for age; % under 5)	48%	24%
Prevalence of acute child malnutrition (underwt for height; % under 5)	21%	11%
MDG3: Gender Equity		
Ratio of girls to boys in primary education	36%	100%
Ratio of literate females to males (% age 15- 24)	35%	100%
Seats in parliament (national liberation council)	18%	

Source: Adapted from IFAD Sudan Country Strategic Opportunities Program - COSOP 2009)

Achievement of key MDG indicators is extremely unlikely, largely due to a scarcity of critical resources and the recent resettlement of large numbers of Internally Displaced Persons (IDPs) and refugees.

B. USAID Approaches and Programs

I. Current USAID/Sudan Strategy

Sudan is the U.S. government’s highest priority country in Africa due to its importance for counterterrorism and regional stability, as well as the magnitude of human rights concerns and humanitarian crises. USAID/Sudan’s current strategy focuses on supporting the implementation of and reducing threats to the CPA, including providing peace dividends that help maintain the CPA’s viability and addressing the root factors that fuel conflict. The program aims to contribute to the goals articulated in the Strategic Framework for Africa of “averting and resolving conflict” and “promoting stability, recovery, and democratic reform.”

USAID/Sudan's fragile states strategy sought to stabilize Sudan and was therefore organized around the principle threats to the CPA. While these critical threats are largely political, the underlying or root causes are often associated with environmental and natural resource management issues. The strategy responds to the significant challenges and many opportunities in supporting the Southern Sudanese transition from war to peace. USAID’s program seeks to assist in achieving a just and lasting peace through successful implementation of the CPA.

USAID/Sudan has also used USAID’s Economic Growth Strategy for Post-Conflict Countries guidance which emphasizes the need to quickly stabilize returning populations by provision of services that will quickly result in economic gains, to develop its Economic Growth portfolio. Because most returnees go back to rural-based livelihoods, agriculture becomes a key focus sector. The strategy also emphasizes the need to get principal infrastructure re-built to open up areas and markets to drive growth. It notes that approaches to achieve these objectives may require initially unsustainable, subsidized interventions to get the necessary momentum built for peaceful transitions. However, these must be time bound.

USAID/Sudan is now adding a strong agricultural productivity and marketing focus to the existing portfolio, recognizing that returnees and other rural residents must see tangible benefits from the CPA. Addressing the infrastructure constraints has indeed opened up isolated areas and stimulated some economic activity, albeit small, and dominated by imports of Ugandan and Kenyan products. The challenge now is to stimulate both production and market demand for agricultural goods to lay the foundation for increasing livelihoods and resiliency. To rapidly achieve increased production the mission strategy has selected to invest in the highest potential areas of the three Equatoria States.

2. Past and Current USAID Investments in Economic Growth

USAID humanitarian assistance has invested in the food security sector in Sudan for more than 15 years. USAID's Office of Foreign Disaster Assistance (OFDA) has funded agricultural inputs for displaced and returnee households, farmer training and extension, and emergency livestock health activities (community-based vaccinations and disease treatment, including privatization of some services). USAID's Office of Food for Peace (FFP) has funded emergency food aid and, more recently, targeted food aid (food for work and food for training).

USAID has funded a program with USDA/University of Missouri from 2000-2008 to supported its programs in Southern Sudan with the objective of "promoting increased agricultural productivity, natural resources conservation and capacity building in Southern Sudan"⁷. For the period prior to the CPA, the USDA program conducted studies and surveys of various productive sectors:

- Agriculture: marketing constraints and impact of conflict on market flows, impact of USAID's agricultural revitalization project, post harvest grain losses case study, impact of Peace Markets in the transitional zone, study on women traders.
- Natural resources: baseline survey of Southern National Park, impact of conflict on wildlife resources, food security and livestock, effects of IDP camps on forest resources, shea tree survey and mapping, land and plant resources surveys, Nile Basin Initiative and the role of Southern Sudan.
- Capacity Building: gender study, gender based violence study, survey on human resources in Southern Sudan.

After the CPA, USAID realigned the USDA program to more directly support its Democracy and Government program and its Economic Growth/Food Security program, and to strengthen the GOSS. The USDA program focuses its capacity building support to GOSS on four ministries: Agriculture and Forestry, Animal Resources and Fisheries, Industry and Mining and Cooperatives and Rural Development. The USDA has supported with studies and technical assistance efforts on customary land use and practices, engineering support to WFP for road infrastructure, setting up the Sudanese North American Diaspora Database, developing an analytical agenda for food security, supporting work for land policy and law, and support for the population census.

USAID has supported agriculturally oriented projects in Southern Sudan for several years. These prior investments in agriculture and food security have been dispersed, with many small discrete activities aimed at increasing production for household subsistence and local markets. There is now a need for USAID to go to scale with its investments with the goal of stimulating an agricultural transformation that can sustainably reduce poverty in Southern Sudan.

The current USAID/Sudan Economic Growth (EG) Program evolved from assistance activities that started in 1998. The initial programs, the Sudan Transitional Assistance for Rehabilitation (STAR) Program and the Economic Rehabilitation Program (ECREP), focused on improving local governance and stimulating economic activity in Southern Sudan. This focus expanded in 2002 with the implementation of the Southern Sudan Agricultural Revitalization Program (SSARP) that included activities to develop market-oriented agriculture production, to provide credit to micro and small-sized enterprises, and to help the Government of Southern Sudan (GOSS) establish economic ministries and programs. USAID also entered into an agreement with the U.S. Department of Agriculture to access expertise in agricultural policy research and analysis to begin building Southern Sudanese capacity and lay the groundwork for policy development and implementation. During this period USAID funding for a

⁷ University of Missouri/USDA website: <http://cafnr.missouri.edu/iap/sudan>

World Food Program (WFP) “emergency roads and de-mining program” brought USAID into a lead role in the infrastructure sector. In 2004 the Sudan Field Office (SFO) consolidated these activities under the Sudan Interim Strategic Plan (ISP) for 2004-2006 in a Strategic Objective to “establish a foundation for economic growth and food security.”

The 2006 USAID/Sudan Strategy Statement shifted from a sectoral focus and from direct support to develop economic institutions, agricultural production, and generalized economic growth. This strategy was a cross-cutting multi-sectoral approach to support the implementation of, and offset the threats to, the CPA. To address the new strategic focus the current EG program evolved into two sets of activities: infrastructure development and improved livelihoods. USAID implemented the Agricultural Marketing Enterprise Development Program (2005-08), the Livestock Development and Dairy Cooperatives Program (2005-08), and capacity building for the Government of Southern Sudan (GOSS) Ministry of Agriculture and Forestry (2003-05). In FY08, the Mission programmed \$5.7 million for agriculture through the Building Responsibility for the Delivery of Government Services (BRIDGE) Annual Program Statement, and an additional \$750,000 to establish a Famine Early Warning Network (FEWSNet) program in Sudan. BRIDGE is a cross-sectoral integrated development program being implemented in the northern tier states of Southern Sudan and the Three Areas. Agricultural programming under BRIDGE includes agricultural extension and training, provision of seeds and tools, and support for agricultural processing and marketing.

3. Linkages to Other USAID Programs

a. USAID/Sudan Programs

1. Previous and ongoing EG programs

i. Infrastructure

USAID is rehabilitating roads, building bridges, and electric generating systems across Southern Sudan and the Three Areas. For enhanced trade, USAID is re-engineering and resurfacing the major transport route from Juba to Nimule, a border crossing to Uganda, as well as a major trade corridor in the southwestern “breadbasket” of Sudan. USAID is building capacity at the national and state levels to manage infrastructure projects and establish transparent procurement procedures. Through technical training provided to the private sector, several small awards have been made to Sudanese construction firms to maintain and develop feeder roads. These roads are providing critical links for the movement of agricultural and trade goods. USAID will be providing electricity generation in market towns of the South and the Three Areas. USAID assisted with the development of the first electricity cooperative which is successfully managing revenue collection and electrical services in the town of Yei.

ii. Agriculture

USAID has supported sustainable agricultural production through technical assistance to producer organizations and government extension services to enhance production, management, accounting and marketing. These programs have targeted women, who comprise 80% of the agricultural labor force, by helping to develop women’s cooperatives. Under the BRIDGE program, USAID is providing support for extension services, training, and provision of seeds and farming implements to assist returnees in the vulnerable states bordering northern Sudan.

USAID is helping the GOSS to develop land tenure laws and policies through an extensive stakeholder process, as secure property rights are the basis for agricultural production and economic growth. These efforts are helping to secure land rights and reduce conflict, while improving access to land for agricultural production.

iii. Environment

USAID helped to build capacity in the forestry sector by training officials in proper management of forest concessions, and agro-forestry extension. Wildlife officers have been trained in wildlife protection and biodiversity conservation at the Boma Wildlife Training Center, a government facility that was revitalized through USAID support. Government officials and NGO workers have been trained in environmentally sound development practices, including environmental impact assessment. Beginning in 2009, USAID will support a landscape-level biodiversity conservation program aimed at protecting Sudan's rich wildlife resources while enabling communities to benefit from sustainable natural resource management.

iv. Microfinance and Business Development

USAID support resulted in the creation of the first multi-branch financial institution, Sudan Microfinance Institution, in post-conflict Southern Sudan. SUMI has disbursed more than \$2.7 million in loans to 6,000 clients with a repayment rate of 98 percent. Two-thirds of the loans have been to women. In 2009, USAID launched a new program to continue its support for microfinance institutions in Southern Sudan through technical assistance for sound financial management and operations. USAID has provided training and small grants to fledgling small enterprises in Southern Sudan, enabling them to expand and become fully operational. Support went to small businesses working in the information technology, catering and construction sectors.

v. Policy

The US Department of Agriculture, working with many Sudanese researchers, has conducted studies to determine the impact of various policies and programs on poverty reduction, agricultural markets and food security. Researchers have done modeling of the economy, and studied commercialization of subsistence/recovery agriculture, impact of road improvement on commodity prices and marketing margins.

2. Health

The USAID Health program supports three broad areas: improving maternal and child health; preventing and controlling infectious disease; and increasing access to clean drinking water and sanitation. The program is expanding urgently-needed services, renovating health facilities and constructing boreholes and pit latrines. HIV/AIDS, tuberculosis, malaria and polio are the focus for the infectious disease program. The water and sanitation program seeks to improve and strengthen sector systems by working with Government, local community based organizations and the private sector to increase access to safe drinking water and sanitation with a special focus on promoting sustainability and ownership through community engagement.

3. Education

The USAID Education program focuses on primary education, girls' education, teacher training and institutional development. Activities target out-of-school youth, women, girls, returnees, ex-combatants, and other vulnerable and marginalized groups. Sudanese citizens have greater access to improved education services and greater access to English language instruction. They also have greater confidence in the government's ability to deliver these services. Of particular relevance to the agricultural sector are the teacher training and interactive radio instruction and the program to promote girls' education. The former could be used for transmitting messages and training about agriculture to rural, isolated areas, while improving girls' literacy rates will enable them to seek a wider variety of economic activities including commercialized agriculture.

4. Democracy and Governance

In support of the implementation of the CPA, USAID is working with the GOSS to develop the core institutions and systems necessary to meet citizen needs. This assistance is being expanded to Southern state governments along the north-south border and in the Three Areas. At the same time, USAID is supporting the development and strengthening of means to enable citizen participation in governance; including civil society organizations, political parties, media, and access to information, civic education, and dialogues between government and citizen groups. The program supports implementation of key political processes mandated by the CPA, including the census, national elections (now scheduled for February 2010), popular consultations in Southern Kordofan and Blue Nile states, and the 2011 referendum on unity for Southern Sudan and Abyei. This holistic assistance encompasses support for the administration of these processes, civic participation, and international observation.

Of particular relevance to the agricultural project are the activities that support civic participation, anti-corruption and media and information. Civic participation focuses on marginalized groups and provides community centers as meeting places and information centers to help build capacity for these groups to effectively participate in decision making. These centers will not only help rebuild some of the destroyed social capital, but could also be used for transmitting agricultural information and training. Anti-corruption will be important for all levels of society including farmer groups/cooperatives. The DG program is expanding the number of FM radio stations and distributing wind up radios that will enable more rural citizens to access information, including agricultural material.

5. Food for Peace (FFP)

The objective of the FFP program is to improve food security and support the return of displaced persons to Southern Sudan and the Three Areas. The program is implemented by both WFP and NGOs. It aims to meet basic emergency needs and recovery opportunities in areas densely populated with IDP and refugee returnees, as well as those of relative stability. While the greater percentage of food assistance in these areas is recovery-based, there remains a significant need for emergency response – especially in volatile areas. FFP-donated food security activities benefited approximately 1.6 million people in Southern Sudan and the Three Areas in 2008. Activities include school feeding; Food-for-Recovery programs that support community initiatives such as the building of schools and other common assets; and Food-for-Training programs, which build vocational skills and increase literacy.

6. Office of Foreign Disaster Assistance (OFDA)

USAID/OFDA works in Southern Sudan and the Three Areas, to support transition emergency programs to long-term development organizations, while continuing to support recovery programs in areas of highest need. USAID/OFDA funding priorities include health, food security and agriculture, economy and market systems, and water, sanitation, and hygiene. USAID/OFDA supports programs to transport and assist Internally Displaced Persons (IDPs) returning to Southern Sudan. USAID/OFDA maintains an emergency response capacity.

b. USAID Supported Regional Initiatives

1. CAADP

In 2002 African Ministers of Agriculture approved a major initiative for agriculture: the Comprehensive Africa Agriculture Development Programme (CAADP), which was prepared by the FAO in cooperation with a NEPAD Steering Committee. Under the CAADP there are four pillars:

- Extending the area under sustainable land management and reliable water control systems
- Improving rural infrastructure and trade-related capacities for market access

- Increasing food supply and reducing hunger
- Agricultural research, technology dissemination and adoption

CAADP provides a framework for decision making for investments in agriculture. To support this decision making process, the Regional Strategic Analysis and Knowledge Support System (ReSAKSS) was set up. Re-SAKSS is an Africa-wide network of regional nodes supporting the Common Market of Eastern and Southern Africa (COMESA), the Economic Community of West African States (ECOWAS), and the Southern African Development Community (SADC), in collaboration with the International Food Policy Research Institute (IFPRI) and the Africa-based centers of the Consultative Group on International Agricultural Research (CGIAR), to facilitate the implementation of CAADP.

The ReSAKSS nodes offer high-quality analyses to improve policymaking, track progress, document success, and derive lessons for the implementation of the CAADP agenda. ReSAKSS is jointly funded by the USAID, the UK Department for International Development (DFID), and the Swedish International Development Cooperation Agency (SIDA). The nodes are implemented by the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), the International Institute of Tropical Agriculture (IITA), the International Livestock Research Institute (ILRI), and the International Water Management Institute (IWMI), in collaboration with regional and national partners.

The GOSS is currently in the early stages of developing a CAADP compact, although the situation is complicated by the fact that CAADP is intended for the whole country. The CAADP process will require GOSS to undertake a thorough analysis of the existing state of agriculture, identify gaps and, consulting heavily with all stakeholders, identify priorities for investments in the sector. An approved compact then becomes the unifying document against which development partners pledge their assistance, and becomes the basis for monitoring progress towards achieving the Millennium Development poverty reduction goals.

2. COMESA/ACTESA

Sudan is a member of the Common Market for Eastern and Southern Africa (COMESA). COMESA was requested by the Africa Union/NEPAD/CAADP partnership to put in place a practical program that would enhance trade in regional staple crops as a way of enhancing regional food security and assisting to link smallholder farmers to reliable commodity markets. In response, COMESA developed the Alliance for Commodity Trade in East and Southern Africa (ACTESA). ACTESA directly supports pillars two and three of CAADP. USAID/East Africa has worked closely with COMESA on the development and implementation of the ACTESA program and is a major partner on the USAID/East Africa program below.

3. USAID/East Africa Support for Food Security Activities (SFSA)

The USAID/East Africa mission is establishing an Indefinite Quantity Contract (IQC) called the Support for Food Security Activities (SFSA). This is a new mechanism for USAID missions in this region to undertake food security-related activities and programs in a timely manner. Tasks to be implemented under this IQC will develop production, marketing and trade in staple food crops and livestock products as a means of enhancing food security. The geographic scope of the SFSA program is COMESA, which includes Sudan. The objective of this IQC is to provide a mechanism for all USAID missions in the region (servicing the COMESA member states plus Tanzania) to engage in agricultural productivity, agricultural market facilitation, value chain development, trade facilitation and regulatory and policy reform, humanitarian assistance projects and other activities that promote food security. It will also serve to build up a regional knowledge base based on experience in addressing production, marketing, value chain and trade constraints to economic growth, and pro-market provision of humanitarian assistance.

Activities and programs implemented through the SFSA IQC will support the implementation of the CAADP and the efforts of key African institutions to increase investments in agriculture and promote regional trade and integration. SFSA contractors will be expected to partner with public and private African organizations at the regional and national levels, including NGOs, private firms, farmer organizations.

4. Global Food Security Response (GFSR)

The Global Food Security Response is a broad, U.S. government response to mitigate the immediate impacts and address the underlying causes of the recent increases in global food prices. It is closely aligned with the African-led CAADP and programs supported by other development partners. The response comprises three interrelated pillars that support each other to target the immediate consequences and the underlying causes of this emerging crisis:

- Provide an immediate humanitarian response by increasing emergency food aid and expanding non-food assistance
- Undertake urgent measures to address causes of the food crisis by increasing agricultural productivity, alleviating transportation, distribution and supply-chain bottlenecks, and promoting sound market-based principles; and
- Address a global policy agenda to address the systemic causes of high food prices, including support for trade liberalization and increased use of advanced agricultural technologies.

Activities under the Global Food Security Response will address the underlying causes of food insecurity in the region, removing barriers to the trade of staple foods, and reducing the time and cost of regional trade. Activities may also include implementing local and regional purchase (LRP) of food aid, and providing food aid and other forms of humanitarian assistance, both through direct distribution as well as through voucher or cash transfer systems. Local purchase refers to the process of buying food aid commodities in the same country where the food aid is distributed; regional purchase is the purchase of these commodities in a different country in the same region. The ability to procure food aid commodities locally and regionally offers an exceptional opportunity to meet humanitarian needs in an efficient and timely fashion, fill pipeline gaps prior to the arrival of food shipped from the U.S., and increase the total amount of life-saving food aid U.S. assistance resources can provide in response to the current food security crisis. In addition to its value as a tool for rapid humanitarian response, local and regional procurement has the potential to strengthen and expand commercial markets, stimulate local and regional production, and strengthen market institutions and services, ultimately reducing emergency food aid requirements.

5. USAID/EA Food for Peace Famine Fund

Under the Famine Fund Market Linkages Program, USAID's support to COMESA's new ACTESA, activities will include providing technical assistance and training to:

- Enhance the capacity of farmer organizations to link producers with markets;
- Help build market institutions that serve the vulnerable smallholders in selected cross-border market sheds.

Starting in areas where innovative market institutions and policy and regulatory reforms are already being tested by other partners, activities will support and disseminate innovations that allow smallholder farmers to participate in markets in ways that will increase their food security and incomes. The effort will develop networks that facilitate sale of staple foods through market channels in areas with good agricultural potential, but recurring food security crises. Fast-track pilot activities will be located in strategic cross border zones where areas of production that can be linked with demand in other countries.

Efforts to link increased productivity with market possibilities that can be tested through a vast network of community-based organizations (CBOs) and farmer groups to find scalable interventions rapidly. This creates an opportunity to link any agricultural program into the work that is currently underway in Uganda, particularly Northern Uganda.

6. USAID/East Africa COMPETE Program

The purpose of the Competitiveness and Trade Expansion (COMPETE) program is to enhance economic growth and food security in Eastern and Central Africa by stimulating increased trade and competitiveness in both regional and global markets. COMPETE is headquartered in Nairobi and will be one part of the USAID/East Africa's new regional Agriculture, Competitiveness and Trade Activity (ACT).

COMPETE builds upon the achievements of two regional projects that came to an end last year and will integrate the goals of two Presidential Initiatives. The Eastern and Central Africa Competitiveness Hub (ECA Hub) has improved the policy and regulatory enabling environment and has reduced barriers to trade as part of the African Global Competitiveness Initiative (AGCI). The Regional Agricultural Trade Expansion Support (RATES) program - working in partnership with four regional agricultural trade associations, COMESA and the EAC - has facilitated trade in four commodity value chains as part of the Initiative to End Hunger in Africa (IEHA).

Although COMPETE has a focus on COMESA, there is a particular focus on the Northern Corridor, which starts at the port of Mombasa in Kenya through Uganda, Rwanda, Burundi and the eastern part of the Democratic Republic of the Congo. This builds upon the work that the ECA Trade Hub did in earlier years, which creates an opportunity for Southern Sudan to link into and exploit regional markets, particularly through the Kenya and Ugandan borders.

7. Purchase for Progress (P4P)

The Gates Foundation, UN World Food Program (WFP) and USAID have been collaborating on a WFP pilot program that aims to strengthen smallholder producers links into markets through an innovative approach involving WFP's food procurement process. In the P4P program, WFP develops market based approaches to procure its food requirements (for humanitarian purposes) that support smallholders' production. Thus food aid purchased locally provides incentives for increased local production, and can help build markets for producers. Southern Sudan's high agricultural potential can become a major food aid supplier, through market based interventions such as P4P, and this demand could be the necessary impetus to stimulate Southern Sudanese farmers to produce surpluses for such a market.

8. Other Donor and International Organizations Support to the Agricultural Sector

The agricultural sector (including crops, livestock, fisheries and forestry) is supported to a large extent by the Multi Donor Trust Funds (MDTF), whereby donors provide 50% and GOSS provides the remaining 50% to fund specific programs. The current MDTF programs relevant to agriculture include:

- Livestock and Fisheries Development Project
- Support to Agriculture and Forestry Development Project, and
- Sudan Microfinance Development Facility
- Sudan Productive Capacity Building Project

Many of these projects have been hampered by the downturn in the Southern Sudanese economy, resulting in a lack of GOSS counterpart finance. These programs, once they begin implementation, will have a high degree of complementarity with USAID's proposed program. The agricultural project will

support research and the expanded use of improved technologies that will directly support the USAID program. The Sudan Productive Capacity Program is a capacity building program funded by the EC, already on-going in one USAID targeted state (Western Equatoria). It provides funds for constructing local government offices, vehicles and equipment. The USAID project will benefit to a more limited degree from the Microfinance Facility which could address some finance needs of petty traders. The Livestock project will revitalize the animal health worker system and provide laboratory support and capacity building to GOSS, and will rehabilitate livestock markets and stock routes. The USAID program can build on these interventions once they are implemented, and work to develop private sector skills in business and marketing along the livestock value chain.

A more detailed description is found in Annex 1.

4. CURRENT SITUATION

The following section describes what the team has observed and learned during its brief time in country about smallholder production and marketing.

It is clear that Southern Sudan is still in the early years of recovery, with many Sudanese only recently returned in the Equatoria States. Returnees are struggling to re-start their lives as productive members of their communities. NGO resettlement programs have played an important role in this process as they provide seeds and tools to help kick start these households' agricultural livelihoods. However, many of the youth have lost farming skills or are not interested in farming; it is predominantly the older generation who have the knowledge and drive to start farming

Land. It is estimated that 90% of Southern Sudan's land is arable, with close to 50% being high potential for agriculture. While to date, there appears to be little problem with the traditional and customary land allocation system, several experts expressed concern that increasing numbers of settlers moving into Southern Sudan could strain this system. In addition, GOSS at national and state level are encouraging commercial investors to develop more land for agriculture (including forestry). Opening up of new land poses potential threats to sustainable use of the resource base, and it will be critical for GOSS to develop an approach to undertake and implement land use planning to avoid degradation of the natural resource base. The USAID project on land tenure will begin laying basis for that process to start.

Related to land use is the extensive charcoal making activities throughout the areas the team visited. Depletion of forest cover will be a major concern as rural populations increase and as agriculturists expand area under cultivation to meet food needs and produce for the market. Local government officials typically expressed priority for expanding land under cultivation as the first step towards increasing production, and did not place emphasis on increasing productivity to achieve the same objective.

The right to use land within a village is linked to the customary kinship structure which is still practiced and works effectively. There is a system of customary "chiefs of land" at all levels of society (family, village, boma and payam) responsible for distributing land and resolving conflict. The chiefs are also responsible for regulating the use of the common land reserved for grazing, fishing, hunting and gathering, etc. Land use rights for agricultural land are transferred from generation to generation within a family. However, once there is clear evidence that a family no longer utilizes a plot, then it returns to common property. Where possible, chiefs have returned the same plots of land originally vacated by IDPs – if not; a similar piece of land is allocated. The uncultivated land generally requires a considerable amount of land clearing work and, if needed, villagers would gather together to help a family to prepare new fields. (IFAD SSLPP Working Paper on Agriculture)

Soil fertility. While most officials and farmers claim that the soils of the greenbelt have no fertility problems, farmers in fact practice rotational farming, leaving sections to fallow when crop yields start declining. There is very little if any use of chemical fertilizers or pest control products among smallholders. There was some mention of communities allowing livestock herders to graze on fields in order to have access to manure to enrich the soil.

Labor is limiting the amount of land that can be brought under cultivation, especially with the initial re-opening of the land. Agricultural yields are some of the lowest in Africa by all reports, although the Greenbelt of the Equatorias has higher yields than other southern States. Thus, farm families push to cultivate larger tracts of land in order to produce enough for basic household needs, and there is strong desire to access tractors for expanding cultivated area. However, questions arise about the labor requirements for weeding and harvesting expanded areas using rudimentary hand tools.

To address the labor constraint, farmers and government are looking at **mechanization**, particularly tractors and ox plows. There are issues with the ability of farmer groups to maintain and cover operation and replacement costs of tractors, and there is a lack of well trained private sector operators, mechanics and suppliers. Ox plows are in high demand in many areas, however they are not suitable for all soil types. Ethiopia has developed some technologies for vertisol land preparation that should be considered for Southern Sudan.

Low crop productivity is found throughout the region, despite the high potential. As noted above, lack of use of fertilizers, plant protection products, land preparation and soil fertility issues explain part of these low yields. There is almost no use of improved varieties except perhaps in cassava and groundnuts where farmers have brought in the widely available improved varieties from Uganda. Management practices (crop spacing, broadcast sowing, etc) also limit optimal yields. Farmers save their own seed but may not be selecting seed from the plants with the best characteristics. There is almost no commercial seed distribution, and NGOs, FAO and government continue providing seeds, dampening private sector operators from entering this business. Low productivity also implies relatively lower competitiveness in markets.

A wide variety of crops is grown, often intercropped. Cassava is very widespread, planted with maize and other root crops. Other crops include groundnuts, sorghum and sesame. Government-run agricultural research has all but collapsed. An empty building in Yambio is the only evidence of what once was the Yambio Agriculture Research Center. The government is making efforts to reach out to the GoNU and the Sudan Agriculture Research Center (ARC) HQ in Northern Sudan with regards to the Yambio station. It is in contact with Uganda's National Agriculture Research Organization (NARO), the Association for Strengthening Agricultural Research for Eastern and Central Africa (ASARECA) and a consortium of International Agricultural Research Centers led by ICRISAT.

For the latter, MAF and MARF have signed a memorandum in 2005 with this consortium. The consortium, called the Consortium of Agriculture Research and Rehabilitation for Southern Sudan (CARRSS), is made up of 15 autonomous research organizations, each with a different agro-ecological and/or agricultural commodity focus. CARRSS has prepared a funding proposal that is in the final stages of negotiation with MAF and MARF. The objective of this program will be to "promote a sustainable and dynamic engagement" for capacity building, joint research between CARRSS and the two ministries.⁸ The research agenda is comprehensive: agricultural productivity; technology transfer and dissemination; post harvest handling, agro-processing, value addition and marketing; natural resources

⁸ Steffen, Philip et al. *From Relief to Development: Towards a USAID Food Security Strategy in Southern Sudan*. August 2007. USAID

management; institution building; pro-poor policies and rural infrastructures.⁹ Activities must take into account the linkages between research, extension and market demand. Furthermore, “Agricultural research should support the development and implementation of agricultural development policy, understand and respond to the needs of farmers (as opposed to the priorities of donors), and promote an interdisciplinary approach.”¹⁰

There is **limited on-farm storage**, a reflection of low levels of production and poor post harvest handling. Farmer Training Centers had examples of improved local storage facilities. There are traditional on-farm seed storage facilities consisting of thatch and mud construction. It is common for crops to be stored over the kitchen fire as one way to decrease pest infestations. There are no data on storage and post harvest losses, but they are assumed to be “high”.

Gender. Both women and men are highly involved in agriculture, but have different roles. Some anecdotal evidence suggests that these traditional roles may have changed due to increased numbers of female headed households. Traditionally men prepare land for planting, although the team observed some women preparing land, and heard of women with their oxen being trained how to plow. Women usually plant, weed and both men and women may harvest. Both also can participate in marketing. However, women traders (50% of traders in some markets studied by the USDA program) have poor marketing skills (price determination, differentiation between capital and profit), low access to capital, little product diversification, low volumes.¹¹

However, **distances to market centers often preclude women** from taking their produce to markets. In one study the mean distances to markets in two counties ranged from 13.7 miles to 20.3 miles.¹² With such distances, it is often a male relative who goes to market, decreasing women’s participation and potential benefits. Typically, women’s time is spent on cultivation, household chores and child care. While women do have some economic activities, including beer making and petty trade, these are generally fairly low income activities.

Road conditions are for the most part difficult, and in the rainy season many are impassable. Even some of the improved feeder roads are not able to be used during the rains. According to WFP there are serious problems with controlling axle weight limits which further stress the roads.

Markets have low volumes of agricultural products. According to one FoodNet study, some 55% of farmers in the study sample were more than 6 kilometers from the nearest market.¹³ It is almost exclusively women traders who sell agricultural products in markets; interviews with women traders revealed that very few were marketing their own produce. In large markets (Nimule, Yei) a large percentage of goods is imported from Uganda. There are some processed products including sorghum and maize flours, dried and smoked fish. There are no standardized measures. Prices among the petty traders appear to be the same throughout the market place. Women told the team that they are not harassed by market officials. The market spaces they rent are extremely basic, and many have no

⁹ Jones, Richard. *Background on the CGIAR Consortium of Agricultural Research and Rehabilitation in Southern Sudan (CARRSS)*. Power point presentation. ICRISAT undated.

¹⁰ ICRISAT. “Inaugural Meeting of the Consortium for Agricultural Research and Rehabilitation in Southern Sudan (CARRSS), the Secretariat for Agriculture and Animal Resources (SAAR), the Ministry of Agriculture and Forestry (MAF) and the Minister of Animal Resources and Fisheries (MARF). Summary of the Meeting, Yei, 24-27 October 2005.” (Nairobi: ICRISAT), [no date]. Cited in Steffen et al 2007.

¹¹ Williams, Hannah. *The Empowerment of Women Traders in Rashad County*. 2003. USDA PASA

¹² Itto, Ann *Baseline Study on the Status of Women in New Sudan*. July 2004. USAID

¹³ FOODNET/CRS/SSARP *Market Opportunities Identification for Selected Crops in the Equatoria Region of Southern Sudan – Phase II*. March 2005. USAID’s S. Sudan Agricultural Revitalization Project

shelter/plastic cover. The rent charged is small (SDG 200/day at Nimule, SDP 100 at Yei, for example). At the end of market day, women often store the unsold produce with the more formal shop keepers in the market at exorbitant cost. There are no market storage facilities.

According to the USAID Southern Sudan Agricultural Revitalization Project (SSARP),¹⁴ trade is relatively efficient in the Equatoria region. Traders purchase from farmers and sell to wholesalers who then sell to retailers in the market. The chain is relatively short, perhaps because volumes are low. This means the margins between farmer and consumer should be relatively lower compared to other countries with more traders in the marketing chain. Lack of access to transport is cited as the most important constraint for traders.¹⁵ For traders importing goods, the major complaint was numerous taxes (Customs, State, County, Commerce) that when added together became very costly (7.5 Sudanese pounds/50kg bag). Traders in the market who have formal stores complain that they have no security on their stores – the government could remove them at any time. Some traders told us that they are also very constrained by lack of capital to build up their business.

There are *no formal market information systems* except those used by some of the international organizations (WFP Vulnerability Assessment Mapping (VAM), FEWS Net) for monitoring food security. Traders can access price information through contacts with other markets, but there does not appear to be a system to regularly transmit information down to farmer group level. FAO, through its Sudan Institutional Capacity Programme: Food Security Information for Action (SIFSIA) is supporting the development of market information that will be tailored for farmers and traders.

At least in one market, traders set up a Committee made up entirely of traders to manage the market. They maintain the accesses to the market using funds collected from traders using the market. The County owns the market and collects fees from traders for use of the market.

Livestock is found in most communities, with a predominance of cattle, sheep and goats. The team observed several large herds of cattle being brought in from Uganda by traders to be sold either for milk or meat. Farmers complain about crop damage from loose livestock (Ugandan cattle in transit and locally owned livestock). There has been little if any breed or animal management improvement. During the war, NGO programs set up a system of Community-based Animal Health Workers (CAHWs) to provide basic health services (de-worming, some vaccinations) on a partial cost recovery basis. CAHWs have been relatively successful in terms of providing some health services to farmers, but now that NGOs have shifted out of relief and reintegration, CAHWs have found that their supply chain has disappeared. Some CAHWs have successfully set up businesses, but it is clear that the total *number of CAHWs has decreased* due to the lack of NGO support and discontinuation of subsidized drug supply. The government has officially recognized CAHWs as legitimate service providers, but with budget deficits, the government is unable to absorb them on the government payroll. The challenge is to make them sustainable in their own right.

The team did not find any livestock markets although reference has been made to them.

According to Aklilu (2002) “...past attempts to improve the efficiency of the livestock markets in Sudan consisted of establishing 11 major market centers with weighing scale facilities and auction yards, holding grounds and boreholes along traditional trekking routes and the provision of bulk trains (with 40 wagons) for livestock transport (subsidized heavily by the government). The Livestock Marketing and Meat Commission (LMMC), which was in charge of this operation, also tried to introduce open auction systems in the markets along with collecting weekly price information. The open auction system could

¹⁴ Ibid.

¹⁵ Ibid.

not succeed due to the sabotage of brokers and because livestock purchases are based on the trust (credit) system (open auction entails immediate cash payment). Fixed Government domestic meat prices and fixed exchange rates at the time were also barriers to the LMMC achieving its objectives.” Tax regimes on livestock, both in local markets and especially for export markets are disincentives to producers. Taxes are levied by both the federal level and local levels. Aklilu reports that export tax could be as much as 27% of the sale price.¹⁶

Major concerns in the livestock sector are unhygienic slaughter facilities and meat handling/transport systems, unenforced standards and weak government inspectorate services. There are major concerns with **control of diseases** both in transboundary trade and transmission to humans. The SSARP Marketing Opportunities Identification report¹⁷ states that there are high marketing margins implying inefficiencies along the chain. These include trader collusion, poor quality animals, high transport costs, official and informal taxes, weight loss and disease as animals are trekked, lack of water on trade routes, lack of marketing information, lack of value added products (hides, skins), lack of trade skills and insecurity. Many have also commented that the lack of good road infrastructure has resulted in decreased incentives to commercialize cattle. Among some cultures, cattle are held as social capital rather than as an economic asset for the market

Fish. *Aquaculture* is not widely practiced, but there are small NGO-supported projects that have been started recently with farmer groups. There is little knowledge at farmer level, but there appears to be local demand for fish. *Lake and river fish folk* use only rudimentary equipment, and are often constrained by lack of boats, landing sites, improved equipment and preservation and marketing services. Lack of adequate infrastructure and cold storage forces local level rudimentary preservation techniques or immediate consumption. There are no organized cool chains for transport. Quality of preserved fish (dried, smoked, salted) is low, although there has been some improvement with the introduction of better smoking methods. Local markets have dried and smoked fish, and in larger markets the fish was predominantly imported from Uganda.

Financial services are not readily available for the majority of the rural population. The Sudanese Microfinance Institution, SUMI (started by a USAID project) is operating in many rural areas, but they are highly selective of their clientele. For example, they do not lend to carpentry or construction businesses or to agriculture. The majority of clients are micro-entrepreneurs, and there is no lending for agricultural activities including inputs, tools, etc. Many farmer groups and some traders stated that access to loans is one of their top priorities. Some NGOs (e.g., Norwegian People’s Aid (NPA), BRAC, a Bangladeshi MFI) have provided finance to organized groups, often as a grant that becomes a revolving fund to provide continued finance to members.

There is a tradition of **group formation** in some areas of southern Sudan for land preparation and harvesting, but in many communities affected by the conflict, social capital/institutions have broken down, making such cooperation more challenging. Group formation and cooperation however provides an important base to build up more commercially oriented farmer associations and cooperatives. Much work has been done by NGOs to form farmer associations, groups and cooperatives, but these groups have received little if any training on the business of farming. Building capacity of these groups to move towards a more business approach will require several years. *Lack of business skills, numeracy and*

¹⁶ Aklilu, Yacob, Patrick Irungu and Alemayehu Reda. April 2002. *An Audit of the Livestock Marketing Status in Kenya, Ethiopia and Sudan (Volume I)* pg 60 Pan African Programme for the Control of Epizootics (PACE) and Organization of African Unity/ Interafrican Bureau for Animal Resources.

¹⁷ King, Alan. Market Opportunities Identification in Southern Sudan – Phase 2 Livestock and Livestock Products. June 2005. USAID SSARP and Veterinaires Sans Frontieres/Belgium.

literacy are major challenges to develop market-led agriculture in southern Sudan. On the positive side, the returned youth who have some level of education can be tapped to overcome this problem.

Conflict over natural resources was referred to by many development workers and in project documents. Tension between agriculturalists and pastoralists is not new to Africa or to Sudan, but with the recent large influx of cattle and the low off take rates, the problems seems to be exacerbated by the onset of peace. USAID is supporting work on land tenure systems to understand traditional systems and assist the GOSS with implementing the newly passed Land Act that, *inter alia*, allows customary law in rural communities. The customary law seems to be adequate to date for dealing with returnees wanting to claim their original land. However, land use planning will be an important step in ensuring sustainable use of land and in mitigating current and future land/water/forest use-based conflict.

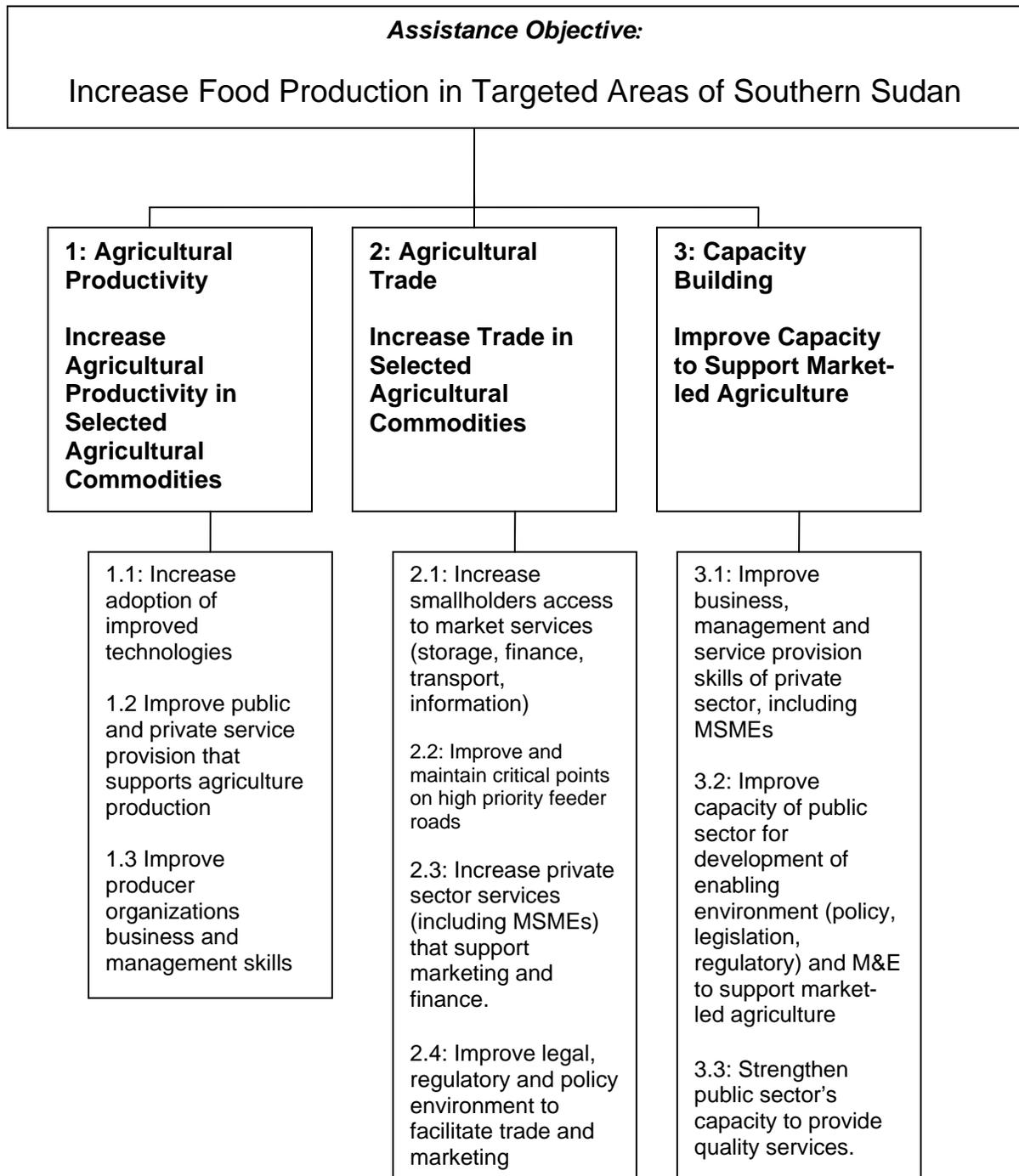
Other Considerations:

- ***State and County.*** State and county officials will be the primary partners in implementation, from planning to implementation, monitoring and evaluation.
- ***Community relations.*** Prior to project implementation it will be critical to involve State and then local government to build consensus and understanding of the project's approach. Local government officials will be critical to establishing relationships with the community authorities and members. Project emphasis will be on improving productivity of agriculture through forming and strengthening farmer groups so that members can improve their access to inputs and markets. The project will not necessarily work with every member of the community – farmers and farmer groups will elect to participate. Working and building trust with traditional and customary leaders will be key to project success and sustainability.
- ***Environment and natural resources management*** are the underpinning of sustainable agricultural development and will need to be incorporated into the planning and implementation process. Of concern is the current tendency to expand the area of land under cultivation rather than intensify production on smaller areas. While some extension will be necessary, this should be done on the basis of land use planning to ensure the best use of natural resources and avoid over exploitation.
- There is a need to strengthen ***government capacity for policy formulation***, implementation and monitoring and information collection and management, for the national and state levels. At the State level there is also a need to strengthen capacity to develop strategies and priorities and to monitor and evaluate programs, while at the County level, implementation must be strengthened. The capacity at the state, county and payam level needs to be built to support the immediate needs of the agricultural sector through specific short term skill development training.
- ***Commercial, large scale investment in agriculture.*** One of GOSS' strategies to increase food production is through encouraging private investors in agricultural production. Access to land and guarantees for both the investor (guaranteed length of time for use of land) and the community (guarantee that there will be benefits to community members) will need to be worked out with assistance from the government.

A. Opportunities for USAID Agricultural Investments

This section presents initial recommendations, taking into consideration what was learned in the field, in discussions with key informants and reviewing the literature. The overall goal of the proposed project is to contribute to the GOSS priority to increase food production. The suggested Results Framework below is designed to contribute to the GOSS' objective to increase food production.

I. Results Framework



2. The need to focus

In order to demonstrate clear impact, USAID will need to focus the program geographically, initially in the areas with the highest chance for success to build momentum. The project will also limit itself programmatically in terms of numbers of targeted commodity chains and supporting interventions. The following discussion provides a set of criteria that the team has used to develop recommendations for the program.

i. Selection Criteria

The Association of African Research for Eastern and Central Africa (ASARECA), with assistance from the International Food Policy Institute (IFPRI) uses a methodology and modeling to identify agricultural commodities and non-commodity investments that are most likely to result in the widest and most equitable reduction in poverty. Based on the results of using this methodology, ASARECA developed its Strategic Plan to identify agriculture research priorities in the region. The criteria used in the IFPRI methodology are based on “development domains” as determined by agricultural potential, access to markets (measured by time to market), and the density of population (as a measure of land availability). These three variables are evaluated in terms of being High or Low. The Greenbelt of the Equatoria States falls in the category of High agriculture potential Low market access, and Low population – HLL. The drier pastoral areas would be characterized as LLL. For both of these development domains, agriculture will be the driver of growth, although progress will be slower in the LLL areas.

The ASARECA/IFPRI work goes into more details on specific sets of interventions most likely to have the greatest impact on poverty reduction.

- Commodity selection should be based on large numbers of producers and large numbers of consumers (i.e., non-niche commodities) in order to impact on the largest number of people.
- Use of technologies to boost productivity of several commodities will be key to achieving impact. Commodities likely to have the broadest impact are the staple food crops, livestock, oilseeds, and fruits and vegetables.
- For HLL and LLL domains, gains in productivity will be less, unless investments are concurrently made in markets and infrastructure.
- Focus on intensive production in HLL areas, especially on non-perishables with high demand in the region. In LLL areas, livestock are the source of livelihoods, and interventions should focus on animal health, nutrition, range (pastoral) and pasture (non-pastoral) management and natural resources management.
- Strengthen markets and infrastructure to connect HLL regions to high demand centers.
- Link agriculture to non-agricultural through agro-industries, for processing and distribution. In some cases, cottage industry development may be possible.
- Tap into regional approaches, especially in Research and Development training, infrastructure development and market opportunities.

For the specific agricultural productivity and marketing program for Sudan, the team believes the additional criteria below are useful to supplement the ASARECA criteria.

Commodities:

- Importance/contribution to food security
- Relative numbers of farmers producing the commodity
- Size of market demand
- Level of available technologies and practices

- Farmer familiarity with the commodity

Geographic Areas within the three Equatoria States:

- Security: The situation in Southern Sudan is still volatile and ever changing with respect to security, and poses problems for project implementers and their ability to access project sites.
- Agricultural potential: Project sites should be selected based on their high agricultural potential in order to have the best chance for successfully and profitably increasing surplus production.
- Proximity to sizeable markets: Project sites should not be so distant from markets (either in actual distance, or in time it takes to travel to markets, despite actual distance) as to make it cost ineffective to produce surpluses for the market. These markets should have sufficient population in the market shed to have a sizeable demand for agricultural products, thus providing incentives to producers for surplus production.
- No duplication:
 - ensure that there is no duplication/overlap of same/similar activities in same geographic area. The USAID project may be in the same counties as other similar projects, but may cover different payams and bomas.
 - The USAID project may be located where other agriculture projects are being implemented, but USAID’s activity will be adding value and not duplicating other project efforts. For example, many projects work on production, but not on marketing, market linkages, private sector business development.

ii. Tentative Geographic Areas and Commodities

Based on these criteria and on discussions held with government officials at State and local levels, the team proposes the following:

Geographic Focus

- Central Equatoria Counties: Morobo, Kajo Keji, Yei
- Eastern Equatoria Counties: Magwi, Ikotos, Budi
- Western Equatoria Counties: Maridi, Mundri, Tambura (if security permits)

Commodity and Programmatic Focus

In line with the options outlined in accordance with HHL and LLL development domains it is recommended to focus on a combination of selected food staple crops, oilseeds, cash crops, livestock, market development and feeder roads. Suggested commodities are:

- Ground nuts
- Sorghum
- Rice
- Cassava
- Maize
- Sesame
- Livestock
- Horticulture

3. Approaches:

- Market-led production. While many of the selected crops are currently for own consumption, it is critical that productivity increases will be competitive in end markets. The initial target markets may be local (town) or Juba, but many commodities have the potential for eventual export to neighboring countries. The initial objectives should be to increase productivity, and meet the quality demanded by the Sudanese markets. In the future, work would need to focus on meeting African regional standards in order to export within the region.
- Promote, develop and support businesses all through the selected value chains in order to achieve sustainability. Identify and build on incentives for private service providers to become involved in agriculture.
- Use innovative business models to identify incentives for actors along the value chain to improve their performance and to link to other actors (e.g., provide services to non-traditional clients) in the value chain to enhance sustainability.
- Women's participation. This project will work with both men and women. But it puts a particular emphasis on ensuring that women have equitable access to project benefits – training, finance, marketing, technologies, etc. because of the important role they play in agricultural and marketing systems.
- Youth will soon dominate the demographics of the population. Most lack the interest and skills in farming. There is a need to remove the stigma of farming as dirty work, and to demonstrate the profitability of farming as a business. School age children should be a prime target for exposure to agriculture.
- Partnership approach at all levels during project design, planning, implementation, monitoring and evaluation. This is particularly important at the local and community levels.
- Implementation at the County level. GOSS priority is for focusing on implementation and capacity building at State, County and lower levels.
- Producer organizations will be used as the entry point for reaching large numbers of farmers. There are many organizations already in existence – as associations, self help groups, cooperatives. The project will aim to increase groups' abilities to understand farming as a business, including how to be competitive in markets (input and output). Literacy and numeracy training will likely be required.
- Judicious use of grants/soft loans: Time-bound small grants, soft loans or starter packs may be necessary to share risk and to kick start activities that will in time become fully commercial. These subsidies should be provided before or after the point of actual commercial transaction to the extent possible to limit market distortions. It is imperative that the exit strategy is clearly developed prior to implementing these non-sustainable interventions.
- Public private partnerships, including larger scale commercial investments/contract farming, information dissemination technologies, market infrastructure development.
- Feeder roads. Prioritize critical points along roads linking surplus areas to large markets. The project will link to other organizations rehabilitating roads such as USAID and WFP.
- Program flexibility to take advantage of emerging opportunities or discontinue non-performant approaches/interventions.

B. Illustrative Expected Results

Strategic Objective: Increase Food Production in Targeted Areas of Southern Sudan

By the end of the project, it is expected that smallholders will have increased their productivity in the selected commodities, and that production levels have increased beyond household consumption needs. Surpluses are marketed in local and Juba markets.

Component. 1: Increase Agricultural Productivity in Selected Commodities

Both men and women producers will have adopted numerous technologies such as improved post harvest practices to reduce losses, agronomic practices that increase productivity and production, use of improved varieties, improved seed selection from own seed, upgraded livestock quality, use of animal health services and improved herd/flock management, nutrition and breeding practices, soil fertility management, pasture/grazing area management to maintain quality fodder.

Due to increased demand from producers for services such as input supplies, animal health products, there will be an increase in the number of private service providers. These service providers will be enabled to provide a certain level of information about use of their products, thus supplementing public services. Public service providers will have increased knowledge of available technologies and produce extension materials that can be easily accessed and used by producers. The public sector will test Sudanese landraces and improved varieties from the region for efficacy and appropriateness for destination in certain agro ecological zones. This information will be made widely available to public and private users (farmers, seed enterprises, NGOs). Radio programs are sponsored by public sector and have content that is directly relevant and timed to be easily accessed by producers, especially women. Farmer exchanges, Agricultural Fairs, Demonstration Farms, farmer field days, farmer field schools will be some of the mechanisms used to expose producers to new ideas and technologies. Public services do not crowd out or replace private sector services. There will be increased numbers of public-private partnerships that benefit actors all along the value chain.

Producer organizations will have active members, and will have women in many of the management positions. The POs will be able to articulate their objectives as a group. Members will have skills that enable them to develop income statements, determine their costs of farming and will be able to use market intelligence to make decisions on marketing their produce. The group will have competence to bulk individual member orders and produce to take advantage of economies of scale. Producer organizations will be able to negotiate contracts for purchases and sales. They will be able to set up savings and loan systems within the group, and eventually access finance from financial institutions.

Component. 2: Increase Trade in Selected Commodities in Target Areas

By more efficiently producing a surplus, men and women producers will be competitive in Sudanese markets, and there will be increased quantities in markets, initially in those that are most accessible. In the longer term, Sudanese agricultural products will be competitive in regional markets.

Because producers are organized into business-based associations, PO members will have access to a wider array of market services such as transport, processing, grading and drying. The producer organizations will be able to negotiate for services based on bulking up members' produce and guaranteeing quality and quantity. As a group, it is expected that they can access storage services either owned by the group or contracted with a private entrepreneur.

Critical points, such as drainage problems, eroded areas or bridges along priority feeder roads will be repaired to facilitate trade. Public sector and communities will undertake maintenance systems so that feeder roads remain passable.

There will be increasing numbers of SMEs providing a wide range of services that support (directly or indirectly) the agricultural sector, including trade, transport, storage, processing (milling, new product development, packaging, drying, butchery, animal health services and health products, animal feeds, tractor services, mechanics, implement manufacture, etc). Financial institutions will develop products such as equipment leasing, trade finance that will inject new capital into the agricultural sector.

Component 3: Improve Capacity to Support Market-led Agriculture

By the end of the project, MSMEs in targeted sectors will use improved business practices such as how to assess the need for, and effectively manage finance, stock/inventory management, basic bookkeeping, management and growth of clientele and marketing practices. Traders will be “professionalized” in their operations.

Policies, legislation and regulations issued by government will be elaborated with input from stakeholders, including private sector (large, medium, small) and producers. These will provide incentives for private sector to invest in agriculture, while providing for public sector supervision to ensure a “level playing field”. The policy environment will be such that the role and activities of the public sector is clearly articulated and widely disseminated. There will not be abrupt policy or regulatory changes without due consultation with stakeholders. Based on a sound analysis of M&E results, government will make decisions on course corrections, and will use M&E as input for policy and regulatory changes.

Public sector officers will understand their role as regulator and facilitator of private sector functions, and will have an appropriate level of skills and knowledge of the sectors they regulate. There will be consistency (“rule of law”) in enforcement of legislation and regulations. The public sector will perform certain public functions such as vaccination campaigns, laboratory testing, grading, public health inspection, or contract with the private sector do carry out these functions under public sector supervision.

Annex I: Detailed Findings on Crops, Livestock and Rural Finance in the Three Equatoria States

Detailed Findings

Crop farming:

Prior to the war, farmers had a highly diversified cropping system, including cash crops such as tea, coffee and cotton. Farmers are now slowly beginning to re-establish this kind of diversity.

The major food crops cultivated in Southern Sudan are: sorghum, cassava, maize, ground nuts and rice. Common horticultural crops are onion, okra, molokhia, cabbage and tomato, banana, mango, pineapple, avocado and citrus.

The FAO-WFP-CFSAM data (See Tables below) indicates that the majority (80-90%) of the households in the three Equatorial states is engaged in farming. Although the data did not show the labor distribution among the household members, impressions from field visits is that women conduct most of the farming (some land preparation, planting, weeding, shared harvesting, shared marketing). There was also note of young male returnees moving to urban areas rather than staying on their land to farm, although officials stated that many are now returning due to lack of economic opportunity in towns. According to the FAO report, 2008 crop production in the Equatoria region has increased due to favorable rainfall and returnees opening more land.

Land is not currently a limiting constraint, but acreage under cultivation remains very small (between 0.65 and 1.22 ha/hh). Many farmers are now bringing more land into cultivation in order to increase their production. There is a strong demand for mechanized land preparation that the government is attempting to meet through the provision of tractors. Some work has been initiated by NGOs for ox plows where soil types permit. State governments have expressed interest in having investors develop large commercial farms with the proviso that communities rights are protected and that the investor provide social benefits to the communities. Support for smallholder agricultural intensification is less clear, with varying opinions about the use of chemical fertilizers in particular.

The food production situation has shown an improvement between 2007 and 2008 according to FAO-WFP CFSAM reports. While E. Equatoria remains a food deficit State, there is surplus production in the other two States. However, and in spite of the increase in crop production, there are considerable amounts of grains, legumes and vegetables imported from Uganda and sold in markets in Juba and major towns. Eastern Equatoria is generally food deficit. Even with surplus production, access to adequate food is often limited by lack of income to purchase, distance of markets and cost of transport to markets.

TABLE I: FOOD DEFICIT/SURPLUS STATUS BY STATE

Food surplus/deficit (tons)	2007	2008
W. Equatoria	77 938	120,909
C. Equatoria	(4,893)	23,492
E. Equatoria	(31,856)	(22,152)
Total SSudan	(84,668)	47,238

Source: FAO-WFP CFSAM

Livestock Farming

Livestock contribute to the food, cash income, emergency savings and social needs of most of the rural population in Southern Sudan. Estimates of livestock population in Southern Sudan range from 8 to 10.5 million of cattle, 8 to 10.5 million sheep and 8 to 11.5 goats (Sudan Operation Lifeline, 2006; FAOSTAT 2008). Livestock production is a major livelihoods asset and practice in Eastern Equatoria, and to a lesser

extent in Central Equatoria. More than 75% of families raise livestock in Eastern and Central Equatoria, with most of the cattle-based systems are in the flood plains of the two states. It is estimated that the threshold for pastoralist-based food security is 15 head of cows, or 40 female sheep/goats. However, smaller numbers are raised under the mixed crop-livestock farming systems (e.g., ironstone plateau, hills and mountains zones, and greenbelt).

Current reports (e.g. FAO-WFP-FCSAM) estimate that livestock numbers are stable in southern Sudan, in spite of cattle raiding and poor health services. There are considerable numbers of imported meat-type cattle from Uganda trekking via the Juba Nimuli road. Conflict related to grazing and tension between pastoralists and cultivators is noted as a significant problem concerning the policy makers in Juba.

The most important threat to animal agriculture in the three Equatoria states is health related. Southern Sudan was declared rinderpest free. There are, however, claims of the reappearance of Foot and Mouth Disease (FMD), and incidents of Rift Valley Fever in Eastern Equatoria and East Coast Fever in Central and Eastern Equatoria. Contagious bovine pleuropneumonia (CBPP), contagious caprine pleuropneumonia (CCPP), black quarter (BQ), pest des petits ruminants (PPR), anthrax and Hemorrhagic Septicemia (HS) are present in all states. Most of the Equatoria states, except parts of western Equatoria are tsetse free areas.

Although the southern livestock keepers are mostly capable herders, they lack knowledge of productivity enhancing practices. Commercialization of livestock is constrained by poor access to veterinary drugs, poor access to markets and poor breed quality. There is debate as to the extent that pastoralists are not commercially oriented because of traditional concepts of wealth as measured by herd size, and the need for cattle as dowry. However, there are indications that cash is replacing cattle for dowry offerings.

The use of Community Animal Health Workers (CAHWs) as front line animal health service providers was initiated by several NGOs pre- and post-CPA. The system has succeeded in delivering basic health services to the livestock producers, and CAHWs played a key role in the eradication of Rinderpest from Southern Sudan. However, the CAHWs lack business skills and most NGOs did not provide them with a sustainable model when the supporting NGOs/funding sources disappeared. With the withdrawal of NGO support and government inability to put CAHWs on the payroll, drop out rates are likely to rise. Compounding the problem, the GOSS lacks the capacity to establish norms and policies that regulate and assure security and competitive access to drugs and treatment in order to stimulate private drug sales and to break the monopoly of the public sector veterinarians.

There are reports of movement of large numbers of cattle from Uganda to Juba and other major markets (e.g. Yei) along the major de-mined roads. According to the herders and the Ministry of Animal Resources and Fisheries (MARF) officials, Ugandan cattle are imported to meet the demand for meat in the large and small towns. Ugandan cattle fetch higher sale prices in Sudan than in Uganda. The local breeds are not sold for consumption because of poor market access and poor quality of the local animals culled for sale.

The FAO-WFP Crop and Food Security Assessment Report of 2009 reported that livestock prices have stabilized since 2007, indicating absence of emergency sales. However, the traditional exchange of goats for sorghum have been constrained during the last months as a result of sharp increases in sorghum and other cereal prices compared to livestock prices.

Slaughter is through the traditional abattoirs. Where government abattoirs exist (e.g. Juba), cleanliness and hygiene are extremely poor, indicating a lack supervision and of enforcement of standards. Even if abattoirs were run by the private sector, it is doubtful that government has the capacity to supervise and enforce standards. Disease surveillance, monitoring and diagnosis systems are weak in Southern Sudan. The MARF is understaffed and under-trained.

Livestock policy areas:

- Need to develop livestock market facilities, revitalize stock routes, dipping facilities. Management entity needs to be determined (public, private or shared)
- Natural resource conflict early warning and mitigation/management
- Privatization of livestock production and veterinary services, such as:
 - Breeding herds and artificial insemination
 - clinical veterinary services and control non-notifiable diseases
 - sale of veterinary drugs
- removal of veterinary drug subsidies and monopoly on distribution and sale of drugs so that the community health service providers can compete and pursue successful businesses providing year-round animal health services
- Developing and enforcing legislation that protect consumers
- Upgrading of the livestock value chain, diversify and add value to products
- Commercialization of the traditional livestock systems with the purpose of improving product quality and the reduction of the number of less productive animals

Fisheries

Fresh fish is a rare commodity in Juba, Nimuli, Yei and Torit markets, and most fish sold in these markets is dried or smoked fish either imported from Uganda or from local rivers. The preservation techniques could be further improved to result in a higher quality product. Particularly with fresh fish, poor hygiene and cleanliness and lack of cool/cold storage facilities are major concerns.

River fishing is constrained by lack of improved fishing equipment. The traditional spear fishing is rudimentary and dangerous. This sector would benefit greatly from building sustainable systems to increase fisherfolk access to improved equipment, boats and technologies, beach landing points, organized marketing and improved fishing and business skills. Particularly for fisherfolk in the vicinity of Juba, transport would be relatively easy to organize, compared to other more isolated areas of fishing livelihoods. Development of cool/cold chains would be needed for longer distances.

Aquaculture could present some promise although this is not a tradition among most farmers. There is high interest and, given the amount of fish found in most markets, high demand for fish. For areas that have poor road network and market access, a fisheries project would face constraints of transporting production in a timely manner. It would also require intensive training and technical support on a new commodity with which most farmers are not familiar.

Rural Financial Services

Rural finance faces major constraints in serving the agricultural sector due to the uncertain nature of rainfed agriculture and the small scale of USAID's typical target groups. Rural finance is not limited to providing finance to farmers for productive purposes, but can also be targeted to other points along the value chain. Trade finance, wholesalers finance to retailers, inventory credit, and warehouse receipts are all forms of rural finance that are currently the focus of much of the development world.

Southern Sudan has only minimal economic activity in the rural areas, and it will be a major challenge to support rural finance directed to smallholder agriculture. To date there are only a few Microfinance Institutions (MFIs), and none is lending to the agricultural sector. Most finance is directed to petty trade and low risk microenterprises that rapidly turn over their loans.

While many farmers cite the need for credit to purchase agricultural inputs very few have done the analysis to determine total costs versus likely returns, factoring in interest rates, costs of all inputs and costs of transport and marketing. There is little understanding of these business concepts at farmer, government or NGO levels. Financial institutions are also very limited in their understanding of agricultural systems, and do not have suitable techniques to assess and mitigate risk.

A third confounding factor is the widespread use of grants and subsidized loans, revolving funds and other mechanisms being applied under many of the recovery activities in Southern Sudan. While there may be scope for some kinds of subsidized risk sharing, most of these programs have not built in exit strategies. Several projects actually provide capacity building to communities to prepare successful grant applications, and therefore the concepts and acceptance of business finance is further eroded.

TABLES

CROP FARMING

State/County	Population 2008	No. of Households (hh) (population/6)	% of Farming hhs	Number of farming hhs	Average area per hh (ha/hh)	Total area (ha)
West Equatoria	854 817			122 293	1.22	149 621
Returnee (07/08)*	16 882	2 814	50	1 407	0.5	703
Tambura	106 136	17 689	90	15 920	1.1	17 512
Yambio	256 333	42 722	90	38 450	1.3	49 985
Ezo	93 507	15 585	90	14 026	1	14 026
Maridi	178 121	29 687	90	26 718	1.2	32 062
Mundri	203 838	33 973	80	27 178	1.3	35 332
Central Equatoria	725 798			77 728	1.11	86 246
Returnee (07/08)*	20 182	3 364	50	1 682	0.5	841
Juba	70 610	11 768	80	9 415	1.2	11 298
Juba Town	105 062	17 510	20	3 502	0.63	2 206
Yei	293 609	48 935	60	29 361	1	29 361
Kajo-Keji	158 814	26 469	90	23 822	1.2	28 587
Terekeka	77 521	12 920	90	11 628	1.2	13 954
East Equatoria	840 496			108 804	0.73	79 397
Returnee (07/08)*	22 228	3 705	77	2 853	0.5	1 426
Torit	194 898	32 483	85	27 611	0.63	17 395
Budi	156 769	26 128	90	23 515	0.63	14 815
Magwi	128 021	21 337	90	19 203	0.7	13 442
Ikotos	153 900	25 650	90	23 085	0.84	19 391
Kapoeta	184 680	30 780	50	15 390	0.84	12 928
TOTAL	9 447 916	1 574 653		1 247 974		1 001 638

Note: Returnees are included at the State level and not at the county level.

Source FAO-WFP CFSAM 2008/9

SOUTHERN SUDAN – ESTIMATED CEREAL DEFICIT AND SURPLUS BY STATE IN 2008

Cereal Deficit States		Cereal Surplus States	
State	Amount in tonnes	State	Amount in tonnes
North Bahr el Ghazal	- 51 551	Warrap	30 027
Upper Nile	- 25 366	West Bahr el Ghazal	390
Unity	- 22 813	Lakes	17 147
Jonglei	- 22 847	West Equatoria	120 909
East Equatoria	- 22 152	Central Equatoria	23 492
Total	-144 729	Total	191 965

**SOUTHERN SUDAN – ESTIMATED CEREAL AREA, YIELD, PRODUCTION,
CONSUMPTION AND BALANCE (TRADITIONAL SECTOR) IN 2008/09**

State/County	Population mid-2009	Area-harvested (ha)	Yield (t/ha)	2008 cereal production (tonnes)	2008 net cereal Production (tonnes)	Consumption (t/year)1/	Surplus (+)/ deficit (-) (tonnes)
West Equatoria	877 042	149 621	1.36	272 163	217 730	96 821	120 909
Returnee (07/08)*	17 321	703	1.5	1 055	844	2 252	-1 408
Tambura	108 896	17 512	1.7	29 771	23 817	11 979	11 838
Yambio	262 998	49 985	2	99 970	79 976	28 930	51 046
Ezo	95 938	14 026	1.3	18 234	14 587	10 553	4 034
Maridi	182 752	32 062	2	64 124	51 299	20 103	31 196
Mundri	209 138	35 332	1.7	60 064	48 051	23 005	25 046
Central Equatoria	744 669	86 246		132 364	105 891	82 399	23 492
Returnee (07/08)*	20 707	841	1.2	1 009	807	2 692	-1 885
Juba	72 446	11 298	1.4	15 817	12 653	7 245	5 409
Juba Town	107 794	2 206	0.8	1 765	1 412	11 857	-10 445
Yei	301 243	29 361	1.5	44 041	35 233	33 137	2 096
Kajo-Keji	162 943	28 587	2	57 173	45 738	17 924	27 815
Terekeka	79 537	13 954	0.9	12 558	10 047	9 544	502
East Equatoria	862 349	79 397		86 880	69 504	91 656	-22 152
Returnee (07/08)*	22 806	1 426	0.9	1 284	1 027	2 965	-1 938
Torit	199 965	17 395	1.1	19 134	15 307	19 997	-4 689
Budi	160 845	14 815	0.9	13 333	10 667	16 084	-5 418
Magwi	131 350	13 442	1.5	20 163	16 131	13 135	2 996
Ikotos	157 901	19 391	1.1	21 331	17 064	20 527	-3 463
Kapoeta	189 482	12 928	0.9	11 635	9 308	18 948	-9 640
TOTAL Sudan	9 654 611	1 001 638		1 251 176	1 000 941	953 703	47 238

Source: FAO-WFP CFSAM Feb 2009.

LIVESTOCK

LIVESTOCK POPULATION IN THE THREE EQUATORIA STATES

State/County	Cattle	Sheep	Goats	Chiecken
West Equatoria	66,819			
Tambura/lbba	14,734			
Yambio/Nzara	1,410			
Ezo	773			
Maridi	8,512			
Mundri	38,430			
Mvolo	3,000			
Central Equatoria	910,067	1,325,257	1,188,617	477,168
Returnee (07/08) <input type="checkbox"/>				
Juba				
Kajo-Keji				
Terekeka				
Yei				
East Equatoria	661,713	1,002,016	963,053	453,567
Returnee (07/08) <input type="checkbox"/>				
Torit				
Budi				
Magwi				
Ikotos				
Kapoeta				
TOTAL Southern Sudan	10,560,058	10,868,234	11,536,205	5,595,230

Source OLS, 2006

Annex 2: Donor and International Organizations Programs in Support of Agriculture

OTHER DONOR AND INTERNATIONAL ORGANIZATIONS IN AGRICULTURE

Project	Issues Addressed - Brief Description	Geographical Coverage	Status
MDTF			
Livestock and Fisheries Development Project	<p>\$42 million intervention to improve the performance of the livestock and fisheries sectors.</p> <p>The project includes four components:</p> <p>a) Institutional Development and Capacity Building to prepare GoSS and state key policies, build technical and managerial skills of MARF and SDARF;</p> <p>b) Improvement of Service Delivery for Animal Health through reviving CAHWs network developed under OLS, finance laboratory rehabilitation,</p> <p>c) rehabilitate livestock markets, restore stock routes, and peri-urban dairy development; and</p> <p>d) Development of Fish Production and Marketing through training and provision of equipment.</p>	5 Eastern States of Southern Sudan	<p>Approved in Nov. 2006.</p> <p>The first series of contracts with NGOs for animal health provision (training of CAHWs) signed end of 2007 (VSF Belgium and Germany and Vetwork).</p> <p>Technical Assistance to prepare preliminary policy work hired.</p> <p>Mid-term evaluation is pending</p>
Support to Agriculture and Forestry Development Project	<p>\$43 million</p> <p>Supports recovery of agriculture and forestry subsectors by (i) facilitating the rapid introduction of new technologies (seeds, planting materials, tools, etc.) and (ii) building functional capacity in MAF and in States which are not supported by other donors.</p> <p>As a pilot activity, around 15 000 to 20 000 households will receive support (training and grants) – it is estimated that around 730 farmers' groups and 260 forestry producers will receive such support.</p>	<p>CB support to MAF, and to states and counties not covered by EC-funded SPCRP.</p> <p>29 counties to be served under the pilot.</p>	<p>Approved by the MDTF Oversight Committee in November 2007.</p> <p>NGO that will implement the community-based empowerment activity has been identified (NPA). Activities have not yet started.</p>
Sudan Microfinance Development Facility	The Facility is designed to support the establishment of new/ reinforce existing microfinance institutions through dissemination of best practices, technical assistance and training, and financing.	National	Service provider under recruitment for the management of the Facility
European Commission			
Sudan Productive Capacity Recovery Programme (SPCRP)	<p>The SPCRP in Southern Sudan is a Euro 40 million project of which the duration is five years. SPCRP activities are grouped into two major components:</p> <p>- A Capacity Building Component to build capacity of public and private institutions at the state and county level.</p> <p>- Support to Rural Livelihoods through financing and implementing investment projects. This will include two sub-components: a) 4 model investment projects, 4 in Northern Sudan and 4 in Southern Sudan; b) a micro-projects (support to groups of farmers) to be implemented In</p>	5 western states of southern Sudan	<p>Recruitment of key project staff (FAO) completed at the end of 2007.</p> <p>GTZ selected to implement 3 of the 4 model projects (Wau - Tambura market access not yet identified).</p>

Project	Issues Addressed - Brief Description	Geographical Coverage	Status
	<p>phase II.</p> <p>The four model projects are: (1) Aweil Irrigation Rehabilitation Project (Eur 5.7M), (2) Tambura-Wau Market Access (Eur 6M), (3) Bahr el Ghazal Livestock Marketing Project (Eur 5.3M), and (4) Nyal-Shambe-Terekaka Fisheries Production and Marketing Project (Eur 4.9M).</p>		
Sudan Institutional Capacity Project Food Security Information for Action (SIFSIA);	<p>The EC-Funded Project (Eur 20 Million national, over 5 years) aims to develop an integrated food security, vulnerability and market information system. SIFSIA is supplying data for the Food Security Council (key members include MoFEP, MAF, MARF and MAARIs) to pass decisions regarding policies and actions that should reduce food insecurity in Southern Sudan. The Project will be implemented by the Southern Sudan Centre for Census, Statistics and Evaluation (SSCCSE), with FAO support. It will report to a Food Security Council.</p> <p>Project Activities are grouped into 3 Main Components:</p> <p>1/ Food security policy and planning making systems component: establishment of a Food Security Council, each composed by a Technical Secretariat and four technical sections; and capacity building through mainly 'on the job' training.</p> <p>2/ Baselines and information systems component: a 'Household food consumption and welfare survey', and establishment of three information systems: agricultural and livestock market information system; agricultural production monitoring and forecast system; and natural resources monitoring and mapping system.</p> <p>3/ Food security research and capacity building fund: finance small scale interventions in food insecure areas.</p>	National	<p>Project management (FAO) was recruited early 2007;</p> <p>First activities (training, workshops, newsletter and CFSAM) have been financed.</p>
Recovery and Rehabilitation Programme, phase I and II	<p>Objectives included linking recovery and development with the adoption of a participatory approach, sustainability in the capacity building of local Gvt agencies, ensuring synergies with other donors.</p> <p>Approach: clear linkages between project and local development plans.</p>		<p>On-going (mid-term review conducted for phase I) and planning is on-going for phase II</p>
FAO			
Seeds and Tools distributions	<p>Every year, as part of its emergency operations, FAO procures and distributes seeds and tools through its network of NGOs.</p>	Sudan	Yearly
Sudan Institutional Capacity	<ol style="list-style-type: none"> 1. food security policy and planning 2. Baselines and information systems 3. Food Security research and capacity building 	Southern Sudan (a similar program is in Northern	Commenced in 2006

Project	Issues Addressed - Brief Description	Geographical Coverage	Status
Programme: Food Security Information for Action (SIFSIA)	4 year program funded by the EC under Sudan Productive Capacity Recovery Program	Sudan)	
EC/UNDP			
Local Government Recovery Programme	<p>Main objective: effective public institutions at GoSS, State, local levels with clearly defined roles and responsibilities.</p> <p>Main activities include: (i) preparation and ratification of legal and policy framework for decentralization; (ii) capacity building of lower tiers of Gvt; (iii) development of participatory planning and the piloting of the Local Government Funds.</p> <p>Budget: USD 10.5 million</p>	22 counties	Launched in 2006
IFAD			
Southern Sudan Livelihoods Development Project	<p>\$29.9 million, funded by IFAD, Dutch govt, GOSS, beneficiaries</p> <p>Objective: increase food security and incomes from farm and off-farm activities.</p> <p>Main activities: Component 1: Community Development - will build local capacity for planning, strengthen community groups by providing grants for micro-projects, and contract with an NGO for service delivery. Component 2: Enabling Services & Market Infrastructure - will support water, rural feeder roads and market improvements; build capacity at the County level; assist with mitigation natural resources based conflict; and provide monitoring and evaluation/oversight. Component 3: Project Management – setting up PMU</p>	<p>Terekeka in C. Equatoria Magwi in E. Equatoria and Bor in Jonglei</p> <p>Two additional counties in the same livelihood zones will be identified by end of second year of implementation.</p>	Implementation not yet started.

Source: author modified from IFAD's Southern Sudan Livelihoods Development Project, Project Design Document Vol 1. 2009.

Annex 3: Organizations and Persons Contacted

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Government of Southern Sudan		
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Dr. John Kanisio, Dir. Gen Planning,
Investment & Marketing, & his senior staff

Central Equatoria

David Lokonga Moses, Commissioner

Edmond Gogo, A/Commissioner Ag.

A/Commissioner Cooperatives

Crenscio Towongo, Seeds and Tools

Distribution Program

David Bala, Director

Ezekia Jonathon, Exec Dir., & Senior Staff

County Sr. Inspector of Ag

Fisheries Director

Commissioner Muki Batali Buli and

Senior Agricultural and Cooperative officials

Farmers Groups

Oxen Plough manufacturers

Animal Health workers

Farmer Training Center

Chamber of Commerce

Torit, Eastern Equatoria

Col. Massimino Allam Tiyaha, Commissioner

HE State Minister of Agriculture Dr. Betty Achien Ogwaro

Lawrence Otika Joseph, Director General Agriculture

Ministry of Agriculture senior officials from Departments of:

Min. An. Resources & Fisheries

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Yei County

Yei County

Yei County

FAO, Yei County

Crops Training Center, Yei County

Morobo County

Morobo County

Morobo County

Kaju Keji

Kaju Keji

Kaju Keji

Kaju Keji

Kaju Keji

Kaju Keji

Torit County

Eastern Equatoria State

Eastern Equatoria State

Eastern Equatoria State

- agriculture
- fisheries
- animal resources
- research and extension
- environment and tourism
- forestry
- cooperatives

Yambio, Western Equatoria

HE Ms. Jama Nuunu Kuumba, Governor

Western Equatoria State

HE Prof. Mathew Udo State Minister of Agriculture
and DG and Director level staff

Western Equatoria State

HE Charles Abdu Ngmaunde, State Minister of Finance

Western Equatoria State

HE William Ngelam, Minister of Physical Infrastructure

Western Equatoria State

HE Grace Daliro, Minister of Social Development

Western Equatoria State

Annex 4: References

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Annex 5: Meeting Notes

DATES: May 4, 2009, May 5, 2009

PARTICIPANTS:

USAID/EA:

Peter Ewell, Regional Economic Growth and Investment

David Rinck, Regional Food for Peace (FFP)

Kaarli Sudsmo

USAID/Washington:

Tom Hobgood, USAID/W Africa Bureau

Jeff Hill, USAID/W Africa Bureau

Susan Bradley, Democracy, Conflict and Humanitarian Assistance (DCHA)/W

Meg Brown

Ahmed Sidahmed

PURPOSE: To get the regional perspective on agriculture and economic growth activities and how S Sudan's new ag program will relate to regional activities.

DISCUSSION HIGHLIGHTS:

- Global Food Security Response is USAID's very large new initiative to address the food crisis.
- Strong Africa focus.
- Components include ag productivity, Trade, including regional, Policy Environment, and increasing economic opportunities for the ultra poor. Incorporates natural resources and climate change.
- Perhaps add on element dealing women in agriculture to adapt systems to improve access to services and improve child nutrition.
- CAADP (Comprehensive African Agriculture Development Plan, from the AU) will be the centerpiece of USAID's investments in agriculture development.
- ACTESA (Alliance for Commodity Trade in ESA) is a COMESA wide framework coming out of CAADP. There is a Market Linkages Program to link small farmers to markets. One target area is the Uganda- S Sudan border with its large numbers of people emerging from crisis. Warehouse receipts ideally, but not ready for this. Work with farmer groups, traders, MIS
- Also funding for support to the northern spur of the Northern Corridor for Uganda – S Sudan.
- Ag inputs – growing work on use of market-friendly vouchers to increase farmer access.
- Constraints to regional trade – ex., livestock and disease
- Jeff Hill noted: Purpose of Title II is to get production going at farmer level
- Lots of concern from Kenya, TZ on volumes of exports into S Sudan and implications for food security in region
- WFP has a role to develop demand (food staple)
- S Sudan needs to integrate into the region
- Need to look to ASARECA for ag research – mandate to support ECA countries incl Sudan.
- Use Mozambique and Uganda as models for building markets, policy, capacity.
- Infrastructure needs to support and serve ag in S Sudan.
- Susan Bradley: S Sudan MYAP – could this focus on nutrition? Should consider having food for work in food deficit areas. Is local procurement possible?

DATE: May 4, 2009

PARTICIPANTS: African Union/Interafrican Bureau for Animal Resources (AU/IBAR)
Nairobi
Dr El Sawalhy Director, and Drs. Cagnolati and El-Helepi, responsible
for livestock standards and sanitation
Ahmed Sidahmed
Meg Brown

PURPOSE: Discuss animal health issues in Sudan and AU IBAR's activities, particularly the
Community Animal Health Workers (CAHWs)

DISCUSSION HIGHLIGHTS:

- AU-IBAR has been involved in livestock improvement, transboundary disease eradication, Campaign to contain Asian Influenza (AI) and the community animal health workers (CAHWs) model over several years supported by EU, FAO, ADB, AU and others. However, it was noted that AI does not affect animal trade
- Currently the organization is coordinating an EU supported program aiming to assist 47 African countries, including Sudan, establish norms and standards for disease surveillance, reporting, etc. according to OIE, CODEX and IPPC standards
- The Somali Livestock certification System to enhance trade is in progress and has some implications on Sudan
- Rinderpest has been eradicated from the continent (Sudan was the last). The most important diseases are Pneumonia affecting small ruminants (CCPP) and cattle (CBPP)
- Livestock trade between the southern Sudan border states (Kenya, Congo, CAR, Uganda and Ethiopia) is most significant with Uganda where purchased livestock (mostly cattle) are sold at Juba and other major markets. IBAR officials attributed the influx of Ugandan livestock to SSudan to herd capitalization (for marriage and prestige) and to debt payment. The current trade flows are a reversal of livestock movement until 2002 (Aklilu, 2002) which was mostly from SSudan to Kenya, Uganda and CAR.
- IBAR officials indicated the prevalence of livestock flows from Northern Sudan to SSudan. This was contradictory to the information gathered from the federal Undersecretary of the Ministry of Livestock at the GONU who was visiting AU-IBAR. According to the Undersecretary there is no influx of livestock from the North to the South other than those moving on the seasonal grazing routes. A number of livestock are coming from the south for sale at the livestock markets in the North.
- There are institutional and animal service delivery constraints in SSudan due to the limited number of veterinarians, absence of diagnostic laboratories.

DATE: May 4, 2009

PARTICIPANTS: International Livestock Research Institute (ILRI) - Nairobi
Dr. John McDermott DDG and Epidemiologist,
Dr. Steve Staal Director of the marketing program
Dr. Tom Randolph livestock marketing economist
Ahmed Sidahmed
Meg Brown

PURPOSE: Discuss livestock research, health, marketing and opportunities for Southern Sudan

DISCUSSION HIGHLIGHTS:

- The Equatoria states have less cultural bonds to viewing livestock as social capital compared to other parts of Sudan. There are mixed crop-livestock systems in all Equatoria States.
- There is great potential for feeding livestock in SSudan from crop residues in a mixed crop livestock system. There is a need to upgrade sorghum and maize in particular. Agro-forestry is also an important as a source of fodder for livestock.
- Developing livestock marketing infrastructure is the most important driver for the sector, but difficult to do in Sudan due to large distances and sparse population. There are also problems of low off-take rates. Northern Sudan could be an important market destination. Rift Valley fever will remain in Sudan for some time, therefore Gulf states market is not a viable option for the foreseeable future.
- Use of a GIS based system can help determine where it makes sense for investment in livestock production. Look for favorable production zones (ag potential) and areas of less disease; overlaying these with local markets and road networks allows for more strategic investment decisions.
- ILRI receives funding from the Gates Foundation to develop “overlying factors” to make smallholders ready for markets. The concept is centered on organizing hubs of services. Farmers are organized in groups, bulking input orders, receiving extension services and group output marketing. Service providers are strengthened for providing fodder, improved (cross-bred) breeding, disease, oilseed by products for animal feeds.
- ILRI has developed a natural preservative for fresh milk that extends its life for several hours. This has recently been approved by the US Food and Drug Administration for use in milk consumed by the public. This has important implications for Africa’s smallholder dairy development.
- Animal health is a problem. There are tensions between government and NGOs about delivery of services. Most prevalent diseases are Peste de Petits Ruminants (PPR) and Trypanosomiasis East Coast Fever, Rift Valley fever, heart water, brucellosis. There are inadequate supplies of vaccines and little/no diagnostic laboratories. Currently vaccine is supported by EU sourced from South Africa.
- The capacity of the GOSS to make livestock related policy decisions is limited, and Ministry of Animal Resources and Fisheries’ capacity should be built through training and exchange visits.
- ILRI could be of help to the USAID program through knowledge sharing, supporting evidence based diagnostic capacities, and assisting the government in developing livestock development strategies.

DATE: May 4, 2009

PARTICIPANTS: Regional Strategic Analysis and Knowledge Systems Support (Re-SAKSS) Node for East and Southern Africa
Located in International Livestock Research Institute
Dr. Joseph Karugia Coordinator of Re-SAKSS
Ahmed Sidahmed
Meg Brown

PURPOSE: Gain an understanding of the data available, especially for Southern Sudan and what kinds of decision making can be done using the available information

DISCUSSION HIGHLIGHTS:

- ESA –ReSAKSS: Knowledge sharing and strategic analysis at country level through posted Country focal points. This regional strategic exercise is supported by COMESA, SADC, ASARECA (e.g. developing strategies for East Africa) and others. Overall global coordination rests with IFPRI. The aim to add value by providing knowledge based recommendations.
- Sources of information: country databases. Verification and feedback: through presentations to source countries,
- Challenges: adding value to available knowledge by providing strategic analysis. Identify analytical gaps, Act as think tank for governments and donors
- Examples of products:
 - Themes: Non-Tariff trade barriers; common external tariff for COMESA; regional food security and vulnerability assessment; monitoring development issues; trends (indicators) reports.
 - Tools: *Development Domain Tools* that provides assessments of agricultural potential and impact on poverty reduction based on three country and regional data/ information sources: Agriculture and Natural Resources; Human Population Density, and Access to Markets and Trade. The tools are packaged in a way that allows for individual use in identifying investment potentials
 - GIS pool: developed by IFPRI to provide knowledge about certain commodities that help in policy decision making, what commodities to grow and where to grow them, etc.

DATE: May 5, 2009

PARTICIPANTS: International Center for Research in the Semi-Arid Tropics (ICRISAT):
Dr. Richard Jones
Kate Longley
Ravi Prabhu
Meg Brown
Ahmed Sidahmed

PURPOSE: To discuss the consortium of International Agricultural Research Centers who propose to assist GOSS with building capacity and increasing access to technologies for Southern Sudan

DISCUSSION HIGHLIGHTS:

- The proposed project with the ICRISAT-led consortium is under the MDTF managed by the World Bank. The negotiations have moved forward more slowly than anticipated so the project has not started.
- Would cover 3 agro-ecological zones in S. Sudan, and look at agriculture, forestry, livestock and fisheries.
- Will include: constraints to ag production, technology transfer, post harvest handling, processing and marketing, natural resources management, pro-poor policies, and some rural infrastructure.
- Will develop a Collective Plan of Action with GOSS
- There is prior experience with working in post-conflict areas (Afghanistan, Rwanda, Mozambique)
- This would be part of a regional approach in East and Southern Africa.
- Kate Longley has done work in S. Sudan looking at post-conflict social issues, and notes that there is often a lack of social cohesiveness that can affect programs that use farmer organizations as the entry venue. There are often issues of debts among community members that affect group dynamics.

DATE: May 7, 2009

PARTICIPANTS: Carmelita Maness, USAID/Sudan
Lokosang Lemi, USAID/Sudan
Ahmed Sidahmed
Meg Brown

PURPOSE: Road trip to see the USAID-funded Juba-Nimule construction by Louis Berger and to see farmers and markets along the way.

DISCUSSION HIGHLIGHTS:

Juba Nimuli road under construction by Louis Burger.

- The road connects Juba with Uganda and passes through two livelihood zones: The mixed options mountainous and hills zone and the exclusively cropping areas of the greenbelt
- The population density close to the road is sparse; a reflection of the density of mining along the road and uncertainty about peace
- Most people met were women petty traders at Nimuli market, shop keepers selling mostly Ugandan commodities and foods

Nimuli market:

- Most of the petty traders are women (heads of households or married)
- All of the food items sold are from Uganda (directly or from Juba)
- The commodities on sale include almost all food crops (sorghum, finger millet, maize, sesame, ground nuts, cassava, and vegetable crops such as red pepper, onions and cabbages).
- Fresh fish caught from the Nile is the only food local commodity. Dry fish is also imported from Uganda

Juba –Nimuli road

- Vast uncultivated lands, very few livestock, large quantities of bamboo and wood cuttings are displayed for sale (for home construction and for fuel). Also there is a relatively significant amount of charcoal and brick making
- A farming family was interviewed. The head of the family is a woman who is raising seven children and using a hand hoe to cultivate small areas of cassava and potatoes. The family returned from Ugandan refugee camps.
- The interviewed family and a neighbor expressed willingness to purchase improved seeds and to cultivate more land if they have cash.

DATE: May 8, 2009

PARTICIPANTS: Dirk Jan Omtzigt, Senior Economic Advisor, Joint Donors Fund
Lokosang Lemi, USAID/Sudan
Ahmed Sidahmed
Meg Brown

PURPOSE: To learn about donor harmonization and joint funding, including the MDTF

DISCUSSION HIGHLIGHTS:

- The Joint Donor group is made up of Canada, Britain, Netherlands, Norway, Sweden and Denmark. 1 Office and 1 GOSS counterpart to improve efficiency and coordination.
- MDTFs were set up to have one system for donor programming, and to increase GOSS ownership. Several MDTFs: Basic Services, Capacity Building, Humanitarian, Microfinance, Agriculture and Forestry, Livestock and Fisheries.
- MDTF is in principle 50% GOSS funds, 50% donor funds.
- Basic Services MDTF is working relatively well, but there are many problems with other MDTF implementation. Procedures are complicated, low capacity at GOSS, World Bank “hands off” management of the process.
- Challenges: hiring of family members in ministries, procurement bottlenecks, inflated payrolls, 45% budget on security. Financial crisis that has decreased GOSS oil revenues by 65%, and GNU not releasing agreed upon budget levels to GOSS.
- Specific points on Equatoria states:
 - E.E. – low yields, low road density with poor market access.
 - W.E. - high insecurity, expensive transport, bad roads. Timber is the only viable commodity. Trunk road is finished, but now need feeder roads.
- Livestock – due to uncertainty, wealth is stored in animals. Developing slaughterhouses is therefore not a viable option at this time since there is no marketing.

DATE: May 8, 2009

PARTICIPANTS: Robin Denny, Agricultural Advisor to the Episcopal Church of Sudan (ESC)
Ahmed Sidahmed
Meg Brown

PURPOSE: Discuss ESC's work to improve agriculture in Southern Sudan.

DISCUSSION HIGHLIGHTS:

- The planning vision for the 25 dioceses North and South is to establish a mix of large and small food security projects that aim to fill the hunger gap; to provide the church community members with training on how to increase agriculture production.
- ESC works with the church community in developing small agricultural programs that intend to provide them food and to the ESC income
- The strategy is to provide them the hand tools they normally use, and seeds
- In western Equatoria ESC aims to work on a 2x2 km sq area. Tasks include small shrub clearance.
- ESC will start with 10- 20 acres in Magwi and Yei counties. Crops include maize, sorghum, ground nuts, citrus and other fruit trees, coffee and palm nut. The idea is to sell produce to high price fetching market in Juba
- Labor is not contracting farming based but church community members work and get some of the produce.
- The plan includes farmer training program , especially on-the-job,
- Assistance to individual dioceses includes: training, advising in development needs, supporting projects such as tree nursery and demonstration gardens and networking with NGOs and government institutions
- ESC is seeking funding partners.

DATE: May 8, 2009

PARTICIPANTS: Lee Bonyai, private commercial farmer
Ahmed Sidahmed
Meg Brown

PURPOSE: To get the perspective of a commercial agricultural investor in southern Sudan

DISCUSSION HIGHLIGHTS:

- Lee does syndicate farming, large scale (200,000 acres and above) in all 3 Equatoria States
 - Eastern: 150,000-200,000 acres sorghum, maize, small plots of potatoes, onions, tomatoes,
 - Central: many horticultural products, sorghum, wheat, maize
 - Western: 100,000: fruits, teak, mahogany
- He provides all inputs, irrigation, high level technology and does organic farming. He sources seeds from East African Seed Company.
- Had a joint venture with GOSS, but GOSS funds did not materialize after they were budgeted. He is now using exclusively private funds.
- His approach is to work closely with Government and also the community. He provides some social infrastructure (schools, clinics). He also trains local members of the community, and forms the farmers into groups. He targets the youth.
- His model is to hire local labor, but to also train local farmers in better farming techniques. It is essentially contract farming. The chief allocates land to the farmers who receive assistance from Lee. He then buys their produce and markets it with his. He recoups his costs, including marketing, from the sale of farmers' produce. Youth are supposed to contribute 30% of their earnings to the community for investment. Lee gives 3% to the community. Exit strategy is that Lee picks the best farmer to take over his operations.
- Lee has requests from Angola for beans, from Kenya and Uganda for maize,

DATE: May 8, 2009

PARTICIPANTS: John Aloyo, World Bank Senior Rural Development Specialist AFTAR
Lokosang Lemi, USAID/Sudan
Ahmed Sidahmed
Meg Brown

PURPOSE: Discuss Multi Donor Trust Fund (MDTF) progress

DISCUSSION HIGHLIGHTS:

- MDTF main focus: responding to food crisis, high food prices, invest in stable food crops (sorghum, cassava, beans, sweet potatoes) and livestock, and in infrastructure seeking highest return in terms of poverty reduction; and the creation of small safety nets to the HHs specially addressing increasing food prices.
- MDTF plans to work in harmony with other donor supported activities through a donor subgroup for agriculture
- MDTF covers 5 states (CES, EES, Jongoli, Unity and Upper Nile)
- The Fund contributes 50% and GOSS 50% to each specific program. The current MDTF programs relevant to agriculture include:
 - Livestock and Fisheries Development Project started 2007
 - Support to Agriculture and Forestry Development Project,
 - Sudan Microfinance Development Facility,
 - Sudan Productive Capacity Building Project
- ***Livestock and Fisheries Development Project started 2007 (LFDP)*** : with following planned tasks; Institutional development at grassroots level, provision of inputs and transport equipment; training state level professional staff in planning, improved policy and marketing; service delivery by out sourcing to NGOs to train and equip CAHWS. Also support to community facilitators at the Payam and Boma level. Problems being tackled include animal disease control and improvement of slaughter houses. Capacity development also includes support to livestock market tracts (provision of water, resting areas and health care). Policy improvement in 2009 includes public sector reform (e.g. job reclassification) and decentralization. The Fisheries component will include rehabilitation, training and capacity building but did not take off yet. The LFDP is now under evaluation
- ***Support to Agriculture and Forestry Development Project.*** A major goal is to enhance cropping through provision of improved seed. The Consortia led by ICRISAT is expected to help, but MOU to support research was not signed yet. The forestry support include developing a forestry framework, community based forestry management, and regulatory mechanisms that support forest conservation and protection.

DATE: May 8, 2009

PARTICIPANTS: Food and Agriculture Organization (FAO)
Ali Said, Chief Technical Advisor of the Sudan Institutional Capacity
Program: Food Security Information for Action (SIFSIA)
Elijah Mukhala IS & CB Specialist SFISIA
Ahmed Sidahmed
Meg Brown

PURPOSE: Discuss FAO activities in Southern Sudan, particularly information systems, food production data

DISCUSSION HIGHLIGHTS:

- SFISIA is a GOSS program funded by EU (Euro 10.5 million, four years project) and implemented by FAO
- SFISIA is dealing with Information. The major aim is to help GOSS put together basic infrastructure and systems for Food Security Information and Analysis (FSI/A)
- SFISIA involves the 10 States and 5 GOSS organization (MAF, MARF, MoH, Commission for Census, Statistics and Evaluation, Relief and Rehabilitation Commission)
- Institutional Arrangement: SFISIA Steering Committee; SFISIA Technical Committee FS Technical Secretariat and Program Support Unit.
- Project functions through three components: FS Policy and Planning Making Systems; Baseline and Information Systems; and FS Research and Capacity Building.
- The activities under the Baseline Information System include basic data collection and surveys (crops, livestock, marketing, NR monitoring and mapping, metrological information- weather, rain), crop area data, land cover data, crop production forecasting system, livestock analysis
- The expected results include overall policy framework for food security, institutional food security set-ups, and effective policies and programs
- The FS Council is the most recent, established in 2008 and include sectoral ministries
- FAO and WFP work together in developing the surveys, data and analysis of agriculture crop areas in southern Sudan

DATE: May 9, 2009

PARTICIPANTS: Dr. John Kanisio DG Planning MARF and Dr Aggrey Majok FAO epidemiology currently {resident Dr. John Garang Memorial College for S& T
Ahmed Sidahmed

PURPOSE: Livestock situation in Southern Sudan

DISCUSSION HIGHLIGHTS:

- Cattle are imported from Uganda solely to meet the demand for meat in the cities and the towns.
- Uganda cattle is meat type compared to the local breeds
- Uganda cattle fetches higher sale price in Sudan than in Uganda
- The local breeds are not sold for consumption because of poor market access and because they can not compete with Ugandan meet
- Slaughter is through the traditional abattoirs. There is need for commercial slaughter houses owned and run by the private sector. USAID program could assist is supporting the establishment of hygienic slaughter houses
- Animal Diseases:
 - Rift Valley fever reached Eastern Equatoria; foot and mouth (FMD) is not there but the threat remains.
 - East coast fever is in Central and Eastern Equatoria
 - PBPP and CCPP are available in all states
 - FMD and rinderpest have been eradicated, but the threat of FMD is there
- Inadequate staffing. Also the young professionals (vets, animal production specialists) need higher degree training. Disease surveillance system is weak in Southern Sudan
- Establishment, training and economic viability of the community based animal health workers (CAHWs) is highly encouraged. This process needs 5 years to mature
- GOSS needs to engage in policy dialogue that allows privatization of livestock production
- GOSS needs to remove subsidies and to stop the monopoly on distribution and sale of drugs. This will provide the private sector and the CAHWs the opportunity to compete and pursue successful enterprises while availing year round drug supplies and treatment services
- Currently the GOSS is supporting training and business initiation for the CAHWs
- There is need to mobilize veterinary doctors to the states
- The GOSS need to redefine the roles of the service ministries. The MARF should concentrate on developing and effecting legislations
- Commercialization is slow but progressing. There is an increasing need for cash. Both are reasons to assume that beef enterprises could succeed
- Livestock herders should be encouraged to diversify production (e.g. forestry products, processing)
- Support to fish folks is needed. Mainly the support is through provision of tools in order to increase marketing of local fish
- DG of planning at MARF is against use of NGOs in program implementation. He pointed out the failures that led to termination of two projects operated by CRS and Land O' Lakes

DATE: May 10, 2009

PARTICIPANTS: Irene Karimi, COP for GEMSS project
Ahmed Sidahmed
Meg Brown

PURPOSE: To learn about the microfinance sector in Sudan and USAID's support to see if there could be links to the new ag program

DISCUSSION HIGHLIGHTS:

- There are not many microfinance institutions (MFIs) in S Sudan, the predominant ones being SUMI (Sudanese Microfinance Institution) and BRAC (Bangladeshi MFI). SUMI has 5 branch offices, \$2.4 mil in capital and is close to being sustainable.
- GEMSS now working to strengthen the Microfinance Forum and its 5 members (SUMI, BRAC, CDS, Hamud, Finance Sudan). The Forum meets monthly – is establishing best practices for members.
- MFIs, according to Irene are now “going deep” expanding into rural areas.
- Interest rates are 3%/mo in general, loans mostly going for trade and businesses.
- Bank of S Sudan has a microfinance unit, GOSS is committed to MFI development. BOSS is receiving training on banking operations, and will get an advisor.
- Money transfers are possible between MFI branches now with Afritrans company. Traders can use this facility.
- MFIs want to go into savings, which is now allowed under the new legislation with the posting of \$500,000 bond.
- BDS services – Juba Inst. of Management provides training in bookkeeping for loan officers, audit and internal controls.
- SUMI – gives group loans up to \$1,000, individual graduates from groups, up to \$10,000
- Kenya Commercial Bank is here and interested in MFI lending. Equity Bank (Kenya) has license to come to here. Nile Bank has collapsed, Buffalo Bank only money transfers.
- For ag lending via MFIs, must show the viability of the ag activity as a business.

DATE: May 11, 2009

PARTICIPANTS: Dr. George Leju, DG for Extension and Research, Ministry of Agriculture and Forestry
Jeremy Gustafson, USAID/Sudan
Carmelita Maness, USAID/Sudan
West Yugulle, USAID/Sudan
Lokosang Lemi, USAID/Sudan
Ahmed Sidahmed
Meg Brown

PURPOSE: Briefing on MAF strategy and priorities for USAID investments in agriculture

DISCUSSION HIGHLIGHTS:

- A strategy for the crop and forestry sub-sector has been developed with USAID. Include framework, strategic plans. GOSS strategy to achieve food security and to reduce poverty by 20 to 30% by 2011
- Agriculture is GOSS priority No 5 after Security, Roads and Transport, Health and Education.
- Building of feeder roads in the highly agriculturally productive areas. is under the responsibility of MAF
- Maintenance of the feeder roads is the responsibility of the States and Counties
- MAF received 2% of GOSS budget annually
- Agriculture is the highest priority at the State Government level
- HQ provides technical advice and financial support to the state ministries
- Each state MAF has its own policy, but linked with the National Ministry through projects and programs such as SFISIA, SPCRC, MDTF, IFAD's SSLDP
- Agricultural extension is at the State level
- Agricultural research stations designated according to AEZs (Halima, Yei, Magwi and Yambio. But none is functional. The hope is for the return of the Southern Sudan researchers (e.g. tissue culture) from the North.
- Limited number of farmers (60) trained for seed bank development
- Help of ICRISAT and ASARECA in developing best bet practices and innovations will be sought
- Training: two plant breeders are now receiving graduate training at Makerere University in Uganda
- Very few extensionists with university degrees. The extension agents (state employees) normally have a diploma training level after high school
- The Greater Equatoria (3 States) has the most agricultural potential; Upper Nile for animal production and fisheries. Others such as Bahr el Ghazal and Warap states are mixed crop-livestock systems
- Policy favors privatization through organized groups.
- There are difficulties in harmonizing the works of the various NGOs (Training, Farmer Filed Schools). No much success achieved in training SMEs
- Some NGOs tried IGAs; e.g. Oxfam and NPA tried revolving funds for CAHWs.
- The newly passed land law stipulates land in rural areas is owned by communities and that traditional (communal) systems will be used to manage land allocation in rural areas of Southern Sudan. Land is allocated to returnees etc by the community chiefs.

DATE: May 11, 2009

PARTICIPANTS: UN OCHA: Marcello Lada, Deputy Head of Sudan Recovery Fund (SRF), and his team
Ahmed Sidahmed
Meg Brown

PURPOSE: Briefing on the Sudan Recovery Fund

DISCUSSION HIGHLIGHTS:

- The SRF was a response to the request from GOSS to Donors at the Oslo meetings;
- The aim is to fill in gaps in MDTF and to upscale services in the south
- The SRF is governed by a Steering Committee from representatives of government, donors, NGOs and donor supported projects, (MoRC, MoF, WB, UN, JDF, DFID, SSRDF, SSCD). The SC is chaired by the Minister of Finance;
- \$93 million were pledged by the Netherlands and UK;
- Funding already approved for two themes: Natural Resources and Rural Development including social development (humanitarian affairs, social development of women and youth).
- The allocated budget of \$10 million will be distributed equally among the 10 states;
- The funds will be allocated through NGOs selected by the States
- The SRF 's Technical Secretariat is responsible for vetting the proposals developed by the selected NGOs
- The funds are being expended through two rounds of proposals: Round I; Livelihoods and Social Development; Round II: Small Grants and Support to Indigenous NGOs and to contribute to the socio-economic development and capacity strengthening; Round III aims to achieve sector transformation goals in relation to service delivery, community security
- Round II will be managed by the International NGOs

DATE: May 11, 2009

PARTICIPANTS: Pam Fessenden, Food for Peace/Sudan
Ahmed Sidahmed
Meg Brown

PURPOSE: Discuss new FFP Multi-Year Assistance Program for Southern Sudan and BRIDGE project

DISCUSSION HIGHLIGHTS:

- BRIDGE has \$105 million for the Three Areas, Upper Nile, Warap and Unity. Winrock is implementing in Warap and Unity, while Mercy Corps is in the Three Areas and Upper Nile. BRIDGE is intended to build government capacity to provide services in health, education, livelihoods/economic growth, and water. Under livelihoods, support is given to seed fairs, micro credit.
- Title II MYAP is new for S Sudan. There will be no monetization, so not much funding for productivity or root causes of malnutrition. Pam is currently looking at Northern Bahr Gazal, Unity, Upper Nile, Warap and Eastern Equatoria. The latter would be of interest and relevance to the new ag project.
- Areas of complementarity: Title II can do feeder roads through Food for Work, which could be useful for the ag project. The ag project can work on productivity issues for Title II in E Equatoria. Title II also works on water and health, useful for the ag project.
- There was a suggestion to build on BRIDGE, and the ag project can look at lessons learned in BRIDGE about strengthening government service provision and perhaps some of the economic growth activities.

DATE: May 12, 2009

PARTICIPANTS: Ruth Buckley, USAID/Sudan
West Yugulle, USAID/Sudan
Justin Taban, MAF
Scott Allen
Ahmed Sidahmed
Meg Brown

LOCATION: Yei County, Central Equatoria

PERSONS MET: David Lakonga Moses County Commissioner and Department of Agriculture senior Official (crops, livestock, fisheries and forestry)
FAO Seeds and Tools Program, Mr. Crenscio Towongo
Edmond Gogo, A/Commissioner for Agriculture, Yei County
Crop Training Center Director David Bala and colleagues

PURPOSE: Hold discussions with country officials about agriculture priorities and gaps in the county, understand what programs are currently going on

DISCUSSION HIGHLIGHTS:

County Commissioner

- According to the County Commissioner, Yei was the food basket from southern Sudan in the 1970s and early 1980s. Now food comes from Uganda and Kenya
- Although people have started moving to their abandoned villages, the challenges facing agriculture are the traditional practices of food crop production and lack of incentives due to poor transport and road systems
- The war's impact was severe; people were internally and externally displaced. There is need to restore skills and knowledge especially for refugees who during the war stayed in the urban areas and no longer have motives to farm.
- There is need to enhance the services and to boost social incentives for production
- Security (LRA afflicted threats) is an issue
- There is a Cooperative Movement and a growing interest in group farming
- Use of farm machinery, improved seeds and storage are means to double production. Seed bulking and tractor hiring should be encouraged in Yei
- There is no rural finance system
- There is local level official extension system involved at a limited scale of training, transfer of some practices
- Livestock numbers are increasing. Obstacles mainly animal diseases coming from other states or from the migrant Umbararo cattle. There is tse tse fly risk and while Ankoli cattle are resistant to Trypanosomiasis, Umbararo are not.
- Fishing and aquaculture need attention. Dry fish is imported from Uganda. NGOs support to fish ponds is promising.
- Charcoal making is a threat to wood cover in the county
- The roles of chiefs are very important and they should be involved in natural resource management (e.g., watch on charcoal making). Also there is need for bills and bylaws to control wood cutting and charcoal making
- The roles of the traditional chiefs in enhancing policy decisions that support community organizations is very important

- There is need to improve and focus the relationship with the line institutions especially in areas of training, extension and capacity building
- Very happy with the electrification in Yei – a result of USAID funding.

FAO Seeds and Tools Program

- The program distributed seeds and tools to the returnees since 2004.
- The program is supported by demonstrations at Farmers' Field Schools (FFS)
- The early lots of seeds were imported from Uganda. Now the program has its own seed developing and cleaning center
- Some (400) farmers are now trained in seed multiplication and are being assisted by NGO in seed distribution to other farmers

A/Commissioner for Yei County Agriculture Office

- Established in 2000
- Main role is monitoring the distribution of farming tools and inputs supported by NGOs working in agriculture (Agricultural Forum)
- Yei is trying to develop a master plan with 9 strategies of which agriculture production is the most important. The agricultural production strategy gives importance to farmers' mobilization through Farmers Associations, Coops, self help, Farmer Field Schools, as measures to reduce migration to the urban areas. Already a reverse flux to the villages is seen. But LRA remains a threat to security.
- Coffee has potential and is being rehabilitated.
- Agriculture Office is selling tools "at cost" to farmers, and using those funds to purchase more tools for sale. It also sells seeds.
- Average family farms 3 feddans, with many crops
- An officer from the Ag Office is present in main markets to check prices and quality.

Crop Training Center Director

- Most farmers have no access to technology or seeds
- The major role of the center is to train the CAEWs and the farmers to produce the improved seeds themselves.
- The CAEWs are trained in multiple tasks (cropping, animal improvement and agro-forestry). The main issue with CAEWs is sustainability
- Market bottle necks (lack of transport and bad roads) discourage farmers from growing more crops. Among the many constraints along the market chain are post harvest losses and unclean seeds
- There is no knowledge about participatory breeding practices at the Center
- A problem facing the center is maintenance of the farm equipment
- Zero tillage is not suitable in the area because of very tall grasses

DATE: May 13, 2009

PARTICIPANTS: Ruth Buckley
West Yugulle, USAID/Sudan
Justin Taban, MAF
Scott Allen
Ahmed Sidahmed
Meg Brown

LOCATION: Morobo County, Central Equatoria

PERSONS MET: Commissioner Ezikia Jonathan
Senior Agricultural Inspector
Senior Fisheries Inspector
A/Commissioner for Cooperatives

PURPOSE: Hold discussions with country officials about agriculture priorities and gaps in the county, understand what programs are currently going on. Interview farmers along Yei-Morobo Road

DISCUSSION HIGHLIGHTS:

Morobo County

- Good agricultural potential that used to feed Juba before the war
- Constraints to agriculture: no equipment, youth no longer interested in farming, poor roads
- 50% of refugees are back
- Main crops: cassava, banana, sorghum, groundnuts, sesame, pineapples, cabbage, onions, tomatoes, mango, avocados and citrus. Also the county grew coffee in the past
- NGOs provide hand tools and seeds and support training Community Agricultural Extension Workers (CAEWs) and some were provided with bicycles. The Community was expected to pay CAEWs in kind (e.g., labor, food) but does not happen.
- There is need for training CAEWs. The present course of 3 months is not sufficient.
- There are currently 20 cooperatives but they lack skills in accounting, safe deposit for cash.
- There is need for training farmers in group dynamics and farming skills based on experience from GTZ and NPA support in 2005
- There are no seed traders. The farmers bring their own products to the markets
- Dry fish is imported from Uganda
- There are 10 newly established fish pond supported by NGO African Action ? (AAH) and managed by farmers groups (20 – 30 farmers/pond).
- The major constraint is lack of roads
- Some farmers are aware of agricultural equipment.
- The Commissioner encourages private investors and sees possibility through direct negotiations – on behalf of the communities- with the chiefs (possibilities are direct contract farming or employment as farm labor)
- Livestock (10 – 20 cows and a number of sheep and goats) are normally raised by a farming household.
- NGOs are supporting a range of activities (social, schools, health and agriculture) that is appreciated.
- Road maintenance is the responsibility of the County but there is need for generating revenue (taxes, fees) to pay for it.

- Granaries (local seed storage facilities) were traditionally constructed when there was surplus seeds to store
- Yei County plays a major role in GOSS. There are several MPs from the county

Yei-Morobo-Yei Road,

- The Team visited on fish pond run by 20 farmers (chair and vice chair are women and the secretary is a man who knows how to do accounting). The group started with 700 catfish fingerlings from Uganda and is waiting for the time when they are ready for sale and consumption. So far loss was very low (9 lost over 2 months)
- The team met with two cattle herds on their way to Yei market from Uganda. The cattle are meat type and fetch higher prices than at origin
- The Team visited a SUMI office on the road. SUMI does not lend for agriculture. Loans are limited to small businesses. Loans are provided to groups of 5. Group members qualify for individual and larger loans after 3 successful group lending cycles. Repayment rates are high. Average daily collection of repayment in the office we visited was about \$3,000!

Assistant County Commissioner for Cooperatives

- Cooperatives are run based on the Coops Acts of 1983 (union formation etc) which is out dated and not suitable for cooperatives of today.
- The role of the commissioner is to encourage cooperative formation but he is without resources, and is unable to audit the functions of the existing ones. Supervision is ad hoc and rudimentary. The Central Equatoria State (CES) office employs 9 State Coop staff members (diploma holders with certification in coop management). Some NGOs (e.g. NPA) are helping to build the capacity of the State Cooperatives staff.

DATE: May 14, 2009

PARTICIPANTS: Ruth Buckley
West Yugulle, USAID/Sudan
Justin Taban, MAF
Scott Allen
Ahmed Sidahmed
Meg Brown

LOCATION: Kajo Keji, Central Equatoria

PERSONS MET: Commissioner Muki Batali Buli and Senior Agricultural and
Cooperative official
Farmers groups
Ox plow manufacturing center
CAHWs
Livestock Training Center
Chamber of Commerce

PURPOSE: Hold discussions with country officials about agriculture priorities and gaps in the county, understand what programs are currently going on. Meet with private sector, see the market and interview traders

DISCUSSION HIGHLIGHTS:

- Most of the county population eat what they grow
- System is mixed crop-livestock farming
- War led to loss of agricultural skills as many refugees lived for so many years on food handouts have lost their skills and their desire farm. This year most of the returnees from Uganda and Juba camps. Once returnees are back land is distributed or relocated by the Chiefs.
- Production is for subsistence and the main constraints are lack of seeds, labor, cultivation tools and poor roads. This year a major constraint is late rain (two months delay). Security is no longer a problem (No LRA, no cattle raiding).
- The county prefers improved seeds, but in any case the seeds come late.
- Poor roads make it difficult to transport crops to Juba. Actually local product is transported to Uganda from where it is re-imported and transported to Juba!
- NPA supported the development of ox plows manufacturing facility, a farmer training center; oxen hire system and village organization.
 - The ox plow facility is still working manufacturing plows and spare parts. The Group “Savanna” use ox plows, store and distribute seeds
 - The farmer training center was initiated by NPA in 1998 (training in crop husbandry, ox plow technology, demonstration of improved seeds, training community oxen trainers and growing fruit trees. The center is now closed
 - The Mongita Farmers Cooperative is a good example which started with 145 members in 2004. The coop is still functioning and manages in addition to farming, a store for seeds and tools storage.
- Many farmers would like to own livestock but lack skills
- Livestock prices: 500 – 750 SDP/ local head of cattle compared to 400-600 SDN per head imported from Uganda

- The County plan submitted for 2009 highlighted the following needs: tools for land preparation, fertilizer, improved seeds, provision of water for human use at cultivation areas, spare parts for farm equipment, support to agriculture extension.
- Of 30 CAEWs trained by NGOs, 5 are women. Problems are lack of training, need for income sources.
- Of 62 trained CAHWs, only one third is functioning. Of these only 7 are self sustaining and have their own businesses (importing drugs from Uganda). The rest still depend on salaries. NPAs exit strategy (provision of revolving funds) started at end of the project giving little possibility for sustainability. However, the demonstrated sustained business of 4 (one also sells oxen-plough spare parts and vegetable seeds) are models to follow
- Almost all possible livestock diseases have been reported
- The Livestock Training Center was established in 2004 by support from NPA with the objectives of running veterinary activities and training community about livestock (cattle, small ruminants and poultry) management. Some demonstration work is going on such as cattle improvement (bull from Uganda), goat improvement (distribution of males from local goats and Boer buck crosses) and the introduction of broilers and layers from Uganda. The center is no longer supported by the NGO. The government has no resources to maintain the center. This effort may soon end without further support. The Center (now run by the MAF) generates some cash by renting the facilities for lodging and holding government conferences and meetings.

The County Commissioner identified the following most important gaps relevant to agricultural development:

- Lack of farm implements
- Lack of fertilizers
- The problem of tractor maintenance and operations
- Lack of drinking water
- Lack of road equipment to open roads

Chamber of Commerce:

Meeting with 8 members including the Deputy chair of the Chamber, Chair of the Market Center.

- Chamber of Commerce (CoC) is 1 year old
- It provides the county government with a mechanism to coordinate with private sector and facilitates oversight of problems faced by businesses. The CoC assists new businesses during start up.
- It was the former Commissioner who set up CoCs in all major trading centers
- There is no link to or support from the Minister of Commerce
- Market Committee resolves disputes, ensures prices are not fixed
- Traders in Kajo Keji market built their own stalls, but no guarantee of the leases
- CoC collects funds used to maintain roads around the market center
- Transport is major problem. Very few trucks, pick up trucks or buses.
- Priorities:
 - Financial facility to be able to access credit to strengthen business operations
 - Request capacity building in management skills
 - Discussions with government to decrease the taxes paid on imports (total 7.50 SDP per 50 g bag of goods from Uganda)
 - CoC wants to access finance to set up large scale processing (mills, juice, etc)

- Improved roads to facilitate trade
- Electricity
- CoC would like to purchase large truck (“10-tire”) to be owned and run by CoC
- Eventually CoC would like to run a loan service, would hire an accountant to manage

DATE: May 15, 2009

PARTICIPANTS: Norwegian People's Aid (NPA)- Ezana Getahun, Program Manager
Scott Allen
Ahmed Sidahmed
Meg Brown

PURPOSE: Briefing on NPA's past and current programs in the Equatoria States.

DISCUSSION HIGHLIGHTS:

- NPA started operations in Southern Sudan in 1986. Its operations covered 7 States and expanded from relief and emergency agricultural tools distribution to supporting agriculture extension and training. It has received funding from USAID Office of Foreign Disaster Assistance (OFDA).
- NPA established 22 farmer training centers with curriculum including crop husbandry, ox plow technology, specialized training in poultry and nutrition, as well as modern farm management, marketing and storage
- Activities in CES included micro-project small grants to farmers, in support of the MDTF. NPA will be embedded in the State Ministry of Agriculture in the future.
- In Eastern and Western Equatoria, NPA is in post-conflict activities focused on agriculture, livestock and enterprise development. A strong focus on women and on group formation. Livestock is now more than just health, moving into production and marketing
- NPA has supported its own Training Center in Yei, and does not use the Crop Training Center set up by USAID. The latter is for more specialized training, while NPA trains boma and payam extension workers since that is the level at which NPA works.
- NPA has worked with some outreach farmers to multiply seeds as a business
- NPA is leaving Kajo Keji
- There have been challenges trying to add marketing activities to cooperatives, and farmers have resisted. They believe they should be farmers, not traders.
- Because OFDA funds are not intended for long term development activities, community workers (CWs) and Training Centers projects are now without support and are not sustainable. The government can not put the CWs in payroll, particularly with current budget constraints and to date, these workers have not established viable approaches to being paid by the communities they serve.
- Possible solutions:
 - provide CAHWs starter-kits through 75% pay back revolving fund scheme;
 - establish partnership between NPA and the County Agriculture Departments and to operate through them;
 - Find potential entrepreneur to set up ox hire as a business and provide business and marketing skills, set up business plan and business model and provide start up capital.
 - Provide business and management skills to ox plow manufacturing center and provide an injection of capital to cover the unpaid order that has strapped them for cash to purchase materials to fill existing orders.

DATE: May 15, 2009

PARTICIPANTS: Mark Snyder, Country Representative Catholic Relief Services
Belihu Negesse, Logistics
West Yugulle, USAID/Sudan
Scott Allen
Ahmed Sidahmed
Meg Brown

PURPOSE: Briefing on CRS' past and current programs in the Equatoria States.

DISCUSSION HIGHLIGHTS:

- CRS was one of the implementing partners on SSARP – Southern Sudan Agricultural Recovery Project, working with FoodNet. This finished in 2007. SSARP:
 - Set up training centers for Crops, Livestock, Fisheries, Forestry,
 - CRS ran seed fairs with vouchers for farmers to purchase seeds to re-start ag
 - Training centers were supposed to become autonomous management was not strong enough and there was little money for users to pay for training.
- CRS has done lots of work in seed fairs, providing farmers with vouchers to get either free or discounted seeds from seed sellers who are brought together. Vouchers increase farmers' ability to purchase seed, while the system also aims to build a market for seed sellers. Quality of seeds sold at fairs is verified prior to the fair.
- CRS has a Single Year Assistance Program with USAID's Food for Peace office, as a transitional activity from Operation Lifeline Sudan. SYAP works in Nimule, Bor and Magwi is in seed storage with FAO, and Food for Work (FFW) to build storage facilities. Returnees are expanding cultivated area for agriculture with FFW.
- There is a large demand for seed bulking centers; local traders are supplying seed in the market.
- CRS is now positioning for the new Title II MYAP. Anticipated activities are crop diversification, market access, feeder roads using Food for Work
- Feeder roads – important to develop plans with communities and local government from beginning, including maintenance plans. Food for work used for clearing, putting in culverts, while local government provides graters, other equipment.
- Suggests that USAID's new ag program focus on food deficit areas with ag potential, aim to increase stability of production, target cassava, groundnuts, livestock and cash crops (vegetables).

DATE: May 15, 2009

PARTICIPANTS: World Food Program:
Rose Barbuto (Food for Work, Food for Education, Food for Training)
Steve Crosskey, roads engineer
Cameron Burge, roads engineer
Charisse Tullman, Vulnerability Assessment and Mapping (VAM)
Scott Allen
Ahmed Sidahmed
Meg Brown

PURPOSE: Briefing on various WFP programs that are relevant to agriculture and marketing – innovative food programs that can support agriculture, road infrastructure, food security

DISCUSSION HIGHLIGHTS:

World Food Program (WFP)

WFP Emergency Roads Rehabilitation Program is an emergency response. The program covers all southern states except Unity and West Bahr El Ghazal. Demining is part of the program using WFP's own resources. WFP will soon handover the equipment to the Ministry of Transport and Roads (MOTR). Training and capacity building is part of the program. The program represents one-third of all of WFP global operations. The cost is \$263 million and there is a shortfall of \$37 million. Some important parts such as Mobile Weigh Bridges are to be done. Post-program maintenance is a major issue. Also there is need to establish the feeder roads to connect production areas with the major trunk roads.

Emergency Food Distribution: Challenges;

- Finding partners in the rural areas who possess good expertise and good planning capabilities (e.g. World Vision, NPA)
- Targeting FFW/ Food for Recovery (FFR) to IDPs and returnees. Food for Training (FFT) is very important as it allows the communities to access training in vital productive activities (e.g. seed multiplication, transplanting, efficient water use). Future focus includes Food for Education (FFE) that could encourage girls' enrollment in schools and School Feeding Program (SFP) that provides one meal a day. The GOSS Ministry of Education is the biggest partner in the SFP that allows 0.5 million Southern Sudan students to go to school.
- Purchase of locally produced food for WFP's feeding programs in country or elsewhere (Purchase for Progress (P4P) program)
- These programs will phase out after 10 years.

Vulnerability Assessment Mapping (VAM) Office

- Understand how markets function, prices and cross boarder issues. FAO will train Government staff
- With the assistance of WFP/VAM, USAID's FEWS Net, FAO and the Census Bureau, a GOSS Food Security Monitoring System has been established.
- Early warning needs rapid assessment and also the identification of Hot Spots. Currently based on FAO-WFP's FCSAM and SIFISIA.
- Market information systems are complicated – need to standardize measures, weights, methodologies, select range of markets for price monitoring. FEWS studies market integration in the region, WFP and FEWS Net look at regional markets, VAM does Food Security Monitoring Systems. The aim is to get something piloted for GOSS to start an interim system.

- Census Bureau Food Security Unit collects data 3 times/year looking at expenditure, consumption.
- WFP wants to drop the Annual Needs Assessment and replace it with this Food Security Monitoring and Rapid Assessment in Hot Spots.
- WFP is helping build the system by working with the Census Bureau on assessment methodology, analytical methodology and interpretation.
- Eastern Equatoria – quite poor nutrition levels, very food insecure because lots of returnees are coming home and require to be fed by those already in the communities, putting a strain on what the host household has produced. Better off households are those with diversified livelihoods (ag + salary) while casual labor is the worst off.
- Western Equatoria – little information because it is not food insecure.

DATE: May 16, 2009

PARTICIPANTS: Dr. John Kanisto, Director General of Planning, Ministry of Animal Resources and Fisheries
DGs of Planning, R&D, and Animal Production. Fisheries, Extension, Special Projects, Administration and Finance and Directors of the various departments as well the office of statistics and marketing
Carmelita Maness, USAID/Sudan
West Yugulle, USAID/Sudan
Scott Allen
Ahmed Sidahmed
Meg Brown

PURPOSE: Briefing on strategy of MARF and identification of gaps where the ministry would like to have USAID assistance.

DISCUSSION HIGHLIGHTS:

- MARF has 2 consultants provided by MDTF – in M&E and Procurement/Financial Management.
- Extension Services:
 - Used to be very crop focused
 - There is need for demand driven, pluralistic (private and public) extension that can reach the community and build their capacity. Tools such as TV and Radio are good examples. FAO is providing assistance on the Extension Policy.
 - NGO approaches are often unsustainable. Initially extension will likely be government driven
- There is need to build the capacity of the MARF staff (only short-term training and exposure courses)
- Research is at its infancy. There are no laboratories
- Animal Production priorities:
 - improve quality of animals
 - do value addition/processing
 - increase/improve market access
 - Improve breeds
 - Improve feeds
 - Improve management practices
 - conservation of rangeland
 - deal with conflict over multiple uses of resources
- Animal health
 - is major problem, and while the CAHW networks have been useful, it was supported by NGOs who have now discontinued. The current policy recognizes CAHWs support. MARF strategy is to upgrade them to health technicians.
 - Needs:
 - To develop a private sector system for animal health services
 - Find ways of making CAHWs sustainable.

- Improve quality of Veterinary Assistants (VAs) who are trainers of the CAHWs and provide quality assurance of their work.
- strengthen disease surveillance capacity
- Fisheries Priorities
 - Form and strengthen producer groups
 - Market access
 - New techniques for improved processing, including smoking
 - Credit for purchase of boats and fishing gear
 - Aquaculture for Western Equatoria, less for Eastern and Central
- The road to Terekaka will, once constructed, facilitate transport of fresh fish from Malakal to Juba. The fish market information is being supported by SIFISIA
- How difficult will it be to commercialize pastoral livestock?
 - Herders (pastoralists) have limited consumption needs. There is a gradual change but the main issue is how to provide incentives for cash.
 - A major problem is insecurity. There is the risk of trekking animals through under developed roads from Terekaka to Juba. There is lower risk getting Ugandan cattle to sell in Juba.
 - Quality of stock sent to markets is very low as herders tend to sell old animals. Livestock need to be competitive with the Ugandan stock to attract the local markets (in price and quality). For example, the local cattle are dual purpose whereas the Ugandan is bred for either milk or meat.
 - Dairy could be a high profit investment in EES.
- Marketing of livestock:
 - Weigh stations/scales do not work because of high collusion among large traders.
 - Taxes are levied at district level as livestock move across districts
 - Need to look at market organization and incentives among actors

DATE: May 17, 2009

PARTICIPANTS: International Fund for Agricultural Development (IFAD):
Rasha Omer, IFAD Country Program Manager
Mohamed Abdelgadir, IFAD Country Presence Officer
Scott Allen
Ahmed Sidahmed
Meg Brown

PURPOSE: Briefing on IFAD's Southern Sudan Livelihoods Project rural finance component, and to discuss the possibility of IFAD implementing a rural finance component for the USAID agriculture project.

DISCUSSION HIGHLIGHTS:

- IFAD, a United Nations development organization with a experience using rural finance as a pro-poor agricultural development tool, is initiating a new project in selected counties of Central and Eastern Equatoria States.
- IFAD has contracted BRAC, a Bangladeshi microfinance institute (MFI), to administer the rural financing component of this new project which includes small grants for community projects, and income generation activities for seed multiplication, veterinary drug distribution and goat keeping.

The Team conducted a Skype conference with the IFAD staff to discuss possible collaboration.

- IFAD designed its rural finance component to address the low level of privatization and cash in the agricultural sector.
- IFAD believes there is need for apex organizations to on-lend to the rural communities. BRAC has been engaged to do this, and IFAD will provide funds to BRAC which will in turn award small grants to farmers' groups and MSMEs to expand their agricultural activities in crops, livestock, fisheries and other income generating activities.
- The program will also provide rural finance in the form of micro-credit to farmers groups, small to medium loans to local entrepreneurs (MSMEs) to set or strengthen their businesses that provide goods and services to farmers (improved seeds, ox plows, farm tools, fishing gear, fishing boats, smallholder poultry units, veterinary drugs, fertilizers, etc.).
- Criteria for selection participating communities include food security, demand, and potential for increasing production.
- IFAD will support the improvement of Captain Cook road which joins Terekeka and Juba and stretches within both EES and CES early next year. This will have a strong impact on market access and trade.
- IFAD is developing a new project on marketing and the private sector, expected to commence in 2010.
- IFAD project is built with an exit strategy that aims to sustain the project benefits through: working with the community groups, the local government at the Boma development committees and county offices, and through setting up small businesses managed by either individual entrepreneurs or collectively; and establishing a rural finance system that allows the community members to access microfinance.
- IFAD and USAID collaborated in the past in Southern Kordofan (?)
- IFAD is willing to cooperate with USAID on rural finance. A joint USAID-IFAD mission could be fielded (each funding their own representatives) to assess the rural finance sector, or the

potential to develop the sector, and to design a framework for a rural finance intervention in the Equatoria states.

- **TEAM RECOMMENDATION:** That USAID further discuss the possibility of developing a partnership with IFAD to develop a sustainable rural finance intervention.

DATE: May 19, 2009

PARTICIPANTS: H.E. State Minister of Agriculture Dr. Betty Achien Ogwaro and her senior officials (agriculture, fisheries, animal resources, gender, research and extension, environment and tourism, forestry, cooperatives)
Lawrence Otika Joseph, DG Agriculture
H.E. Col. Massimino Allam Tiyaha Commissioner of Torit County
West Yugulle, USAID/Sudan
Justin Taban, MAF
Sampson Bringi Francis, MARF
Scott Allen
Ahmed Sidahmed
Meg Brown

LOCATION: Torit, Eastern Equatoria

PURPOSE: Hold discussions with country officials about agriculture priorities and gaps in Eastern Equatoria, understand what programs are currently going on and what gaps are the most critical for USAID to consider for support. Identify likely geographic focus of USAID interventions. Visit Ministry of Agriculture demonstration farm, visit the market and interview traders.

DISCUSSION POINTS

- The Minister voiced concern with the lack of progress on the MDTF reaching and benefiting Eastern Equatoria.
- The Minister summarized the State's needs to transform agriculture from subsistence to market-based commercial. They requested immediate short term help and would like to have a technical assistant.
 - Improve capacity of all sections of ministry
 - Build county level building (MDTF has failed to do this)
 - Conduct needs assessment (done)
 - Develop an effective data base for every county and receive training in use and in mapping.
 - Training in planning – develop framework for each Directorate
 - Develop land use planning as land act is silent on agricultural uses
 - Delineate environmental concerns vis-à-vis ag practices, forestry use
 - Dissemination of technologies for ministry staff and progressive farmers

Ministry's priority activities:

- Markets: road and transport improvement, increase marketing of ag products
- Agriculture: seeds, extension, storage, farmers' group formation and capacity building,
- Forestry: improved use and protection of forests and forest products (EES considers itself the richest state in forestry resources. EES forests are good potential for management and for incentives to allow for marketing gum Arabic, and saw mills for timber), adherence to a clear environmental policy,
- Fisheries: river fisheries development
- Livestock: improve livestock production;
- Capacity: plan and develop result-oriented training programs for farmers, private and public sectors.

Working with farmers:

- Training in farming as a business, and link progressive ones to banks
- promote ox plow and perhaps tractors later
- Plant protection measures needed
- Strengthen women's groups who tend to be more productive, may need literacy training
- Use of demonstration farms, agricultural fairs, organizing farmers' groups are effective mechanisms
- Livestock:
 - Vaccination campaigns
 - Tick treatments, disease control especially ECF, PPR
 - Promote cross border trade with healthy animals
 - Develop cold chains
 - Fattening farms
 - Set up vet shops for CAHWs
- Cooperatives:
 - Develop primary and unions. Unions hold security reserves
 - Promote through Coops Day
- Priority areas include:
 - improved granaries and storage facilities,
 - building on NGOs supported innovations such as ox plows,
 - vegetable production.
- Need to ensure sustainability and avoid duplication of efforts was stressed
- No grants to farmers. Loans with in kind repayment (for ex., seeds)
- NGOs:
 - NPA – does training, but no visible impact
 - NCA – very small scale, works with farmer groups
 - AAI – does ag but is phasing out
 - CRS did good work with ox plow, and vegetables
 - No NGOs in Chukudum
- Magwi County has excellent agricultural potential and very good potential for increased food production. However, there is urgent need to improve the Captain Cook road stretch to Magwi
- The IFAD project in Magwi will cover a very small percentage (1%) of the county. USAID is encouraged to come into the other payams and bomas of Magwi county.
- An important feeder road to consider is Magwi – Palotaka road
- The major food crops are sorghum, sesame, maize, ground nuts. There is good potential, based on pre-conflict times, for cash crops such as coffee, tea and cotton.
- Livestock improvement potential: cattle, sheep, goats and poultry in Chukadum county and for small ruminants and poultry in Magwi county. The State officials considered Land o' Lakes dairy project could have been successful had it not been prematurely cancelled. NOTE: there was strong criticism of USAID for not taking time to do an orderly close out and hand over of the project to the State government.

- The Ministry would like to establish an improved livestock breeding center. The trypanosomiasis causing tse tse fly is a problem in Magwi County
- There is excellent potential for quick growth in poultry production
- Labor is not a problem The farming communities work traditionally through self-help groups to help each other, There are 150 groups in Budi alone
- Youth returnees are not interested in farming due to hard work in clearing land. The Ministry reported that the Uganda camps trained the youth in agriculture and food production, and were provided cleared lands for planting. Returnees need is to have similar support to enable them clear land, perhaps with ox plows.
- Youth are those who are between age 18 and 39 years. Those between 30 and 39 are most likely to return to their communities.
- Agriculture as a business should be taught in schools
- Lack of budget is constraining State and County level implementation of their strategies and plans.
- Women's literacy rate is very low, but they have better potential for saving and have experience in the traditional saving mechanisms (*sandoug*). The *sandoug* could be used to develop group loan schemes for women.
- According to the Commissioner of Torit there is a marked increase in cost of food and in cost of living
- Selection of counties: The Ministry provided the team with its recommendations for counties where USAID should work.
- Other issues from EES;
 - The Torit Model Farm shows the agriculture potential in the areas. Crops grown there include improved cassava, bananas, vegetables. Irrigation can improve production.
 - Slaughtered livestock is mainly local but very expensive (1200 SDP per head). Hygienic standards are not enforced at slaughter houses or during transport.
 - Dry fish is imported from Uganda and Kenya; eggs from Uganda
 - The ministry noted that the land law may not protect some of the public lands such as ag research centers in rural areas, which under the law, are the purview of the community.
- The Ministry provided the team with documents on the EES strategy and specific proposals for the team to consider during the design of USAID's agriculture project. The documents show the very good level of awareness of the state/ county level public sector of the agriculture development issues and priorities and should provide the project an excellent entry point.
- The Ministry of Agriculture is very eager to work with USAID. It feels it has not benefited from donor projects to date

DATE: May 20, 2009

PARTICIPANTS: H.E. Jama Nuunu Kuumba, Governor of WES
H.E. Prof. Mathew Udo State Minister of Agriculture
Senior agricultural officials
H.E. Charles Abdu Ngmaunde, State Minister of Finance
H.E. William Ngelam, Minister of Physical Infrastructure
H.E. Grace Daliro, Minister of Social Development
Senior staff at DG and Director levels
West Yugulle, USAID/Sudan
Justin Taban, MAF
Sampson Bringi Francis, MARF
Scott Allen
Ahmed Sidahmed
Meg Brown

LOCATION: Yambio, Western Equatoria

PURPOSE: Hold discussions with country officials about agriculture priorities and gaps in Western Equatoria, understand what programs are currently going on and what gaps are the most critical for USAID to consider for support. Identify likely geographic focus of USAID interventions. Visit Ministry of Agriculture non-functioning Yambio Agricultural Research Station, Training Center, visit the market and interview traders.

DISCUSSION POINTS

- Security is an issue (LRA are in the State near Congo border since 2006) but should not stop development
- There is high potential for agriculture in WES (all counties are high potential), which was once the bread basket for SPLA controlled areas. Even during the conflict, WES produced surpluses and never received food aid.
- 60- 70% of farm labor is done by women. Women do well in associations and groups and some already engaged in vegetable production (including the governor herself who is a member of a women's group). Women's groups finance and training to access export markets with organic farm products! Also need training in basic skills to run drug shops.
- WES is benefiting from the capacity building and rural development programs supported by EU (SPCR). There is no MDTF in WES. The delay in the rehabilitation of the Yambio Agriculture Research Station is holding back starting up ag research programs. There is also a problem in terms of which government will ultimately run ag research – GOSS or GoNU.
- WES priorities: Food crop improvement, livestock development, enhance the role of private sector in agriculture development, improve markets and transport, and rural finance.
- Production levels are currently subsistence and little incentive to produce for market due to lack of good roads to markets and poor storage. Not much progress in building feeder roads. The state has already identified priority feeder roads, which were presented to the UNDP- managed SRP which only picked 3 out of 15. WES is not benefiting from WES (?) WES received below its quota from the USAID supported schools (quota 10/ state)
- The State has only 7 tractors. The need for more was repeatedly expressed
- WES priorities for agriculture and rural development (i) roads; (ii) markets; (iii) storage/ processing. Agriculture priorities are (i) tools, (ii) improved seeds, (iii) training, capacity building and skill development.

- Priority crops by AEZ: Green Belt: maize, rice and groundnuts; Ironstone plateau: sorghum, cassava and groundnuts; Mountains/ hills; vegetables
- Livestock development priorities by location: Eastern WES: agro-pastoralism; middle WES: small ruminants and poultry
- There are no donor programs in agriculture, but there is donor support for fisheries and livestock.
- Capacity building is very important and is needed in all counties for CAEWs, CAHWs,
- The goal of MAF strategy is to reach self sufficiency and to sell the surplus at rewarding prices
- One proposal from the State is to support the development of group managed mechanized schemes, concentrating on a specific crop.
- The State encourages large scale investors, including foreign investors, for commercial agriculture/forestry. Potential investors have met with officials, but no follow up. Examples: Germans for fruit crops (mangoes and pineapples); Canadian for horticultural crops for European and American markets; and Indians for in palm oil, cotton and forestry.
- Market development priorities were summarized
 - processing products;
 - trucking livestock to central markets;
 - improve and professionalize the capacity of the traders by organizing them in traders' associations and providing training; and
 - investing in market information
- Rural finance: lack of finance constrains farmers, traders (can't buy vehicles). SUMI does not cover the needs of most of the population because it is only short term credit for limited businesses. BRAC has not yet started.
- Transport – there are no trucking or transport companies
- Capacity building:
 - at State level: policy development, planning for senior staff; development and implementation of regulatory and legal frameworks via short term courses (1-3 mo); M&E
 - at county: policy development, extension and technology transfer, M&E
 - payam level: extension and technology transfer

DATE: May 27, 2009

PARTICIPANTS: Peter Ewell, USAID/EA
Nzuki Mwanja, Regional Trade Policy Adviser
Kenneth Kambona, Regional Agr Trade and Policy adviser
Kaarli Sudsmo EA Regional Coordinator and Knowledge Management
Focal Point;
Dr Hudson, Agricultural Adviser
Ahmed Sidahmed

LOCATION: Nairobi, Kenya USAID Offices

PURPOSE: De-brief the Regional Economic Growth and Investment Office (REGI) of USAID/East Africa on the initial proposed directions for the new agriculture project in Southern Sudan. The presentation used for the Juba Meeting with GOSS and donors was used.

DISCUSSION POINTS

- Discussion touched on issues of security, production, self sufficiency, cross border trade and reliance on commercial food imports or food aid.
- Issues related to the current status of roads and transport and donor action were discussed
- USAID/EA team did not raise any major concerns with the exception of the question of investing on small farmers versus large scale farming. However, it was explained that this is USAID policy. The representative of the design team indicated his agreement with investing in supporting smallholder farmers since the MDG on poverty reduction is one of the over arching goals of USAID's agricultural programs.