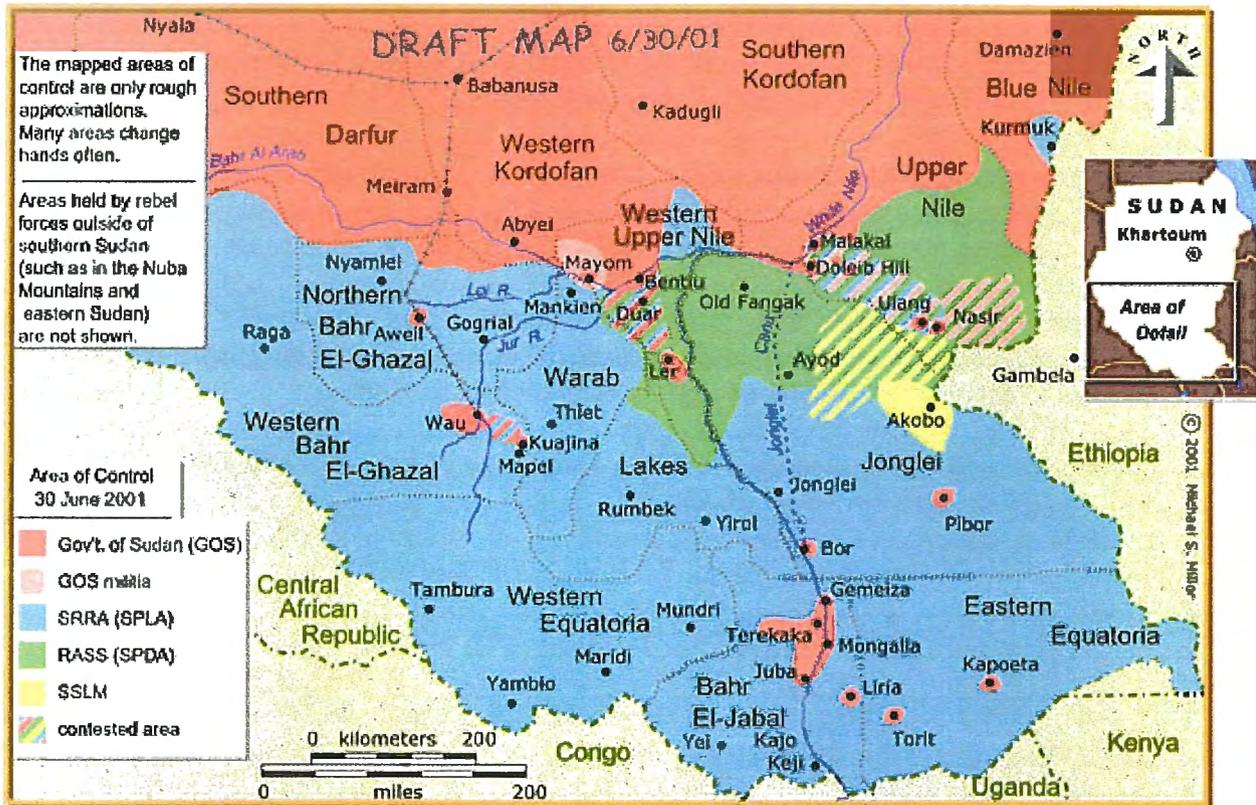


U.S. Overseas Cooperative Development Council (OCDC)

Southern Sudan Trip Report



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Submitted to:

**Roger Winter, Assistant Administrator USAID Bureau for Democracy, Conflict &
Humanitarian Assistance**

&

Brian D'Silva, USAID Southern Sudan Task Force

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I. Introduction

At the invitation of Roger Winter, Assistant Administrator, USAID Bureau of Democracy, Conflict and Humanitarian Assistance (DCHA), US Overseas Cooperative Development Council (OCDC) has been actively discussing potential roles for cooperatives in development in Sudan throughout 2003, first with Brian D'Silva of the Sudan Taskforce and then in a series of meetings with Southern Sudan SPLM leaders who requested a visit by a delegation of U.S. cooperative development organizations (CDOs). In response, OCDC worked closely with USAID to arrange a joint mission which was supported by the taskforce, Office of Private Voluntary Cooperation (PVC) and the SPLM counterparts. This is a report of that mission together with an overview of its activities and a brief summary of its observations and recommendations.

The mission's purpose was to gain a better understanding of local conditions in South Sudan, with emphasis on economic recovery, especially in agriculturally rich areas, assistance programs working to resettle displaced persons and refugees (including community action plans), and basic electrification and IT services in several towns--part of the Peace Dividend. The mission also attempted to assess lessons-learned and development perspectives concerning Sudanese participation and the effectiveness of private sector-led development and conflict transformation programs and efforts to change the regional outlook "from relief to development."

An additional goal of the trip was to identify potential partnerships with local Southern Sudanese leadership, various SPLM taskforces (who are focusing on different sectors such as agriculture, governance and infrastructure) and local NGOs/cooperatives. In addition, OCDC evaluated the legal environment for cooperative development, including both general cooperative laws and sector specific laws (such as those concerning credit unions and universal access). At the end of the trip, the mission provided a preliminary briefing to senior SPLM leaders on initial findings.

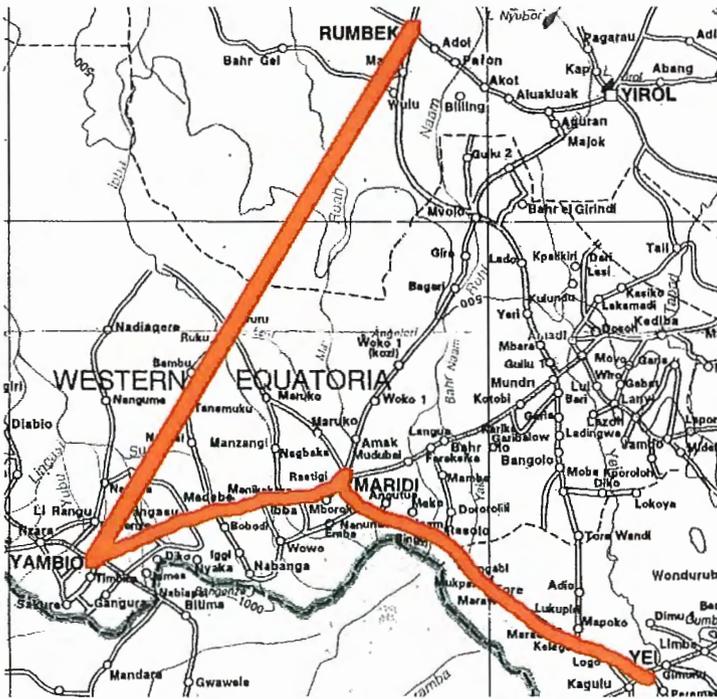
Don Crane of ACDI/VOCA chaired the mission; Maria Kendro of NTCA was vice chair; and Ted Weihe, OCDC Executive Director, secretary. Other members included: Scott Yetter and Patrick Sommerville (CHF International), Curtis Slover (WOCCU), Jim Willis (NRECA), Joseph Methu and Moses Nyabila (Land O'Lakes), and Brian Mitchell (NTCA). Ka Vang of the USAID Sudan Taskforce and Eileen McKeough (Somali Telecom) also participated.

The group traveled together to Yei and then split into two sections. The first went by four-wheel vehicle to Western Equatoria from Yei to Maridi to Yambio to Rumbek in order to assess agricultural and infrastructure development. The second group traveled by air to Eastern Equatoria from Yei to Lobone, Panyagor, and then Rumbek to examine Internally Displaced Persons (IDP), livestock and telecommunications. Western Equatoria is of special interest because it has enjoyed political stability since 1995, a more favorable development climate than any other in Southern Sudan and a region that is more settled with greater market activity. The development outlook in Eastern Equatoria is heavily influenced by the presence of large numbers of IDPs in the south, who are expected to return to northeastern Equatoria. As a result, this region will require extensive rebuilding and community development. Both groups met local government officials, tribal chiefs, NGOs and others, and took extensive field trips to local markets, cattle camps and IDP resettlement facilities.

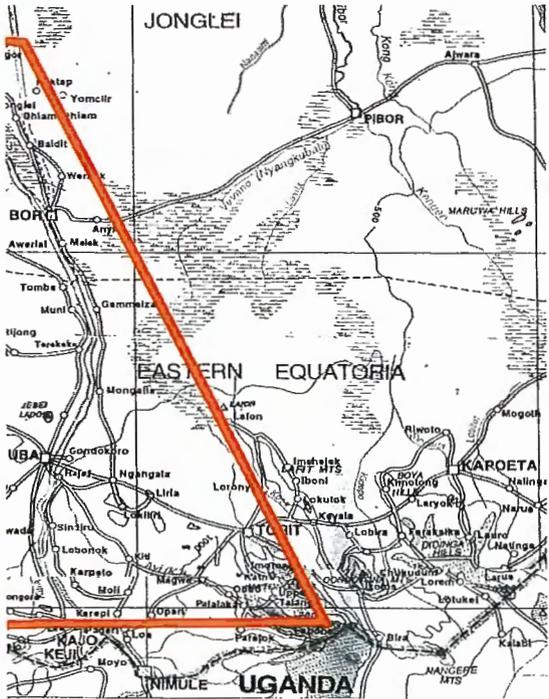
The mission's charge from USAID included general observations on conditions and country context, critical development challenges, and cultural and other factors conducive to private sector development. The following report contains recommendations concerning a broad range of development-to-relief activities, as well as appropriate cooperative development methodologies that could be applied in Southern Sudan. This report also has more detailed findings concerning agriculture, electrification, information technology, finance, community development and IDP integration.



OCDC Sudan Trip Participant



Western Route



Eastern Route

II. Observations

Overview

Southern Sudan is among the most isolated regions in the world, especially in the East where settlement patterns are much more widely dispersed than in other African countries, and where many Sudanese live miles from towns and rarely venture far from their homes. In the West, towns are more numerous but offer few amenities so that Sudanese may walk two days to find important services, such as hospital care. In most areas, settlements tend to be one or more shelters linked through a spider web of footpaths, or small fishing villages along the Nile. A number of major trading towns exist, of course, but tend to be small and to provide only rudimentary markets. They commonly lack any functioning infrastructure, such as paved roads, electricity, telephones, central water systems or sewage treatment. A few places visited have small electric grids with diesel-operated generators, and antiquated telecommunications (none functioning). Most buildings are locally constructed from adobe (even adobe bricks are scarce). In addition, many of the permanent structures that do exist have been damaged in the war.

The region's diverse settlement patterns and lack of functioning urban cores challenges relief and development efforts, since Southern Sudan's low population density makes provision of both food and services extremely expensive. The difficult conditions and great distances involved emphasize the importance of settlements that are necessary to advance the economy from subsistence to commercial agriculture.

Lack of market access and poor roads

The isolation of Southern Sudan is emphasized by its terrible roads, which are not only unpaved but often are merely tracks through the bush, heavily eroded and filled with large potholes that make them impassable after even the smallest amount of rainfall. This lack of access is a severe drag on every aspect of economic development and social life. As a potential surplus producer of agricultural products, Southern Sudan has severely limited capacity to move produce to market – either south to Uganda or north along the Nile. Marketing is further exacerbated by chokeholds – garrison towns especially Juba (a major marketing town in the south) and Malakal (a major port city for markets north to Khartoum) that often interdict civilian movement. The final hazard in many places is dangerous, unmarked fields of live landmines, especially around garrison towns and along the Nile.



Most current export trade is limited to cattle that can be trekked--often for weeks or more--and then, trucked still farther to markets in Kampala. For example, large numbers of cattle are gathered and herded from Rumbek South for over a month. They are then rested and fed at the Ugandan border before being sold and shipped to Kampala.

Livestock apparently moves north also, but given the conflict and garrison towns, it was hard to determine the importance of such commerce (although, one official thought it might be as much as 60% of exports). Hides and skins are also exported, but are poor quality. Most commerce is based on counter-trade, with small amounts of agricultural commodities (cattle) sold for hard currency which goes to import salt, soap and used clothing, among other consumer items. Trade is carried out in four currencies—Sudan Pound, Kenya and Uganda Shilling and U.S. dollars and utilizes a very large number of conversion rates that confuse and limit transactions.

Western Equatoria is rich in natural resources and grows wheat, sorghum, maize, coffee, tea, millet, cassava, and fruits (mangoes and oranges) as well as hardwoods. Coffee and tea are the major exports. Cattle production is important in the El-Ghazai and Rumbek areas, as well as in the traditional cattle areas in the Bor region where the Dinka live. Large numbers of livestock were killed or requisitioned during the conflict in many areas, including Panyagor and local herders there are being forced to restock with poor quality stock. Because animals are easy taken by the SPLA as part of the victory tax or rustled by militia, there is still reluctance to invest heavily to expand herds, which remain vulnerable to disease (since veterinarians are scarce, as is vaccine) and available breeding stock tends to be of poor quality.

The only functioning transportation system is by air. Most towns are served by dirt and grass airstrips that are not useable during the rainy season and may be dangerous with even light rain—for example; one of the team members was stranded in Panyagor for ten days. Most relief supplies are dropped off the back ramps in pallets by C130s and only a few aircraft have a capacity to bring in supplies of less than six tons. Most aircraft have small capacity; seating four to ten passengers with limited cargo capacity. Many restrictions apply to aircraft: transponders are turned off, areas over towns are off limits, and coded call signs are used for landings in communicating via radio with receiving organizations. Military restrictions also apply to New Site for visiting SPLM officials.

Commodities, most notably diesel fuel in drums, come into Southern Sudan by truck or, in some cases, by air. Often the trucks are 20-tons in order to navigate the poor roads, but these large trucks also contribute to major wear on the roads. In some cases, trucks in East Equatoria coming from Kenya travel cross-country but as we were told, a truck carrying refugees broke down and many of them died due to heat and lack of water.

Given the need to rely on airborne transportation and the lack of all-weather roads, relief and development activities must be accommodated within tight windows from six to eight months depending on the region. For example, diesel and basic food commodities must be stored in some quantity for the rainy season. Any breakdown in equipment – airplane instruments, radios, computers, generators, etc.—takes months to repair or replace. Non-operative trucks are scavenged for parts, given the difficulty of obtaining parts from abroad (or access to on-site repairs). For aircraft, it is apparently easier and less expensive to take an insurance write off than to pay for repairs as evidenced with a damaged aircraft at Rumbek that was waiting for an insurance adjuster from London. There are few blacksmith or repair shops and limited capacity in these trades.

Impact of rugged conditions and isolation on international NGOs

Virtually the only source of economic activity in Southern Sudan appears to be NGOs and UN agencies. They employ local workers, provide cash and food for work programs and bring support to local markets through their purchases of local foodstuffs. These mostly relief agencies operate from isolated and guarded compounds where there is little evidence of Sudanese leadership. Compounds tend to be located near airstrips or in safe, de-mined locations apart from towns likely to be bombed. As a result, these largely defensive positions have yet to be integrated into the local community structure if they are to stimulate development rather than only relief.

For the most part, the PVOs appear to rely on Kenyan and Ugandan staff with permanent headquarters in Nairobi. Given the rugged and dangerous living conditions and isolation during the rainy seasons, the lack of expatriate staff is understandable, but also is an impediment to both relief and community-based development. Given the lack of reliable communications systems, project oversight can only be carried out through infrequent trips by air. More mentoring and involvement of local Sudanese within relief agencies would strengthen human capacity building efforts.

The most common communication link is radio (inadequate) with occasional, very expensive satellite phones. Cell phones can be used on some areas near the Ugandan border. As a result, scheduling arrangements are difficult and, in most cases, notice of visitors or aircraft is unreliable. Where Internet service exists, it is controlled by NGOs, and in one case, inoperative because the generator had broken down. A small private commercial radio business exists in Panyagor where it is critical to arranging dowries (mostly cattle) in which IDPs conduct transactions with their relatives.

Rudimental markets and the economy

In general, regional farmers live at subsistence levels, with little surplus to trade so there are few traders, only rudimentary markets and few commodities for sale. Most trade is barter. However, several successful trader associations, organized around trucks, are active and have potential to grow as the economy develops. For example in Rumbek, competition to supplying diesel fuel has reduced prices from \$100 per barrel to \$60 dollars, an indication of the severe impacts of the regions isolation, poor infrastructure and very limited communications. In such an environment, economic development activities must be highly targeted, efficient to transport (whether imports or exports) and focus primarily on high value per pound products (e.g. Shea oil and honey)--and, be marketed during dry seasons.

The war and the destruction and danger it has brought has certainly retarded economic



Market in Panyagar

development, but the region has always been destitute with little exposure to the outside world, except through missionaries and relief workers. There are only a few commercial establishments still standing that existed before the conflict. Old banks, post offices and other buildings exist, but, for the most part, are now in ruins. This severe lack of resources and development and the barter economy means that entrepreneurs would have little realistic opportunity to invest micro-enterprise credits or any significant debt carrying capacity, except for a few rapid-turnover necessities such as soap and salt. Since land is held collectively, there is virtually no collateral to support investment.

As in many developing economies, remittances from citizens living abroad are extremely important, but are difficult to manage since Sudanese must travel at great expense to Nairobi or Kampala for wire transfers. In one example, it cost \$340 and took a month to travel to Nairobi by plane and road in order to obtain funds from a relative in the United States.

In general, investment and efforts to enhance resource values are foreign concepts to most Sudanese. For example, cattle (one of the region's most important assets) are held primarily for prestige and herders simply do not regard them as an economic asset. While some are sold to traders on occasion, most are killed only when diseased. The region's production potential is great--nearly every tropical and sub-tropical crop can be produced in the Equatorial zone of Sudan, where two crops can often be grown in a long and short season. However, movement south to Uganda competes with similar production patterns at high transport cost (and, greater flexibility to convert crops into value added products). The future markets for Southern Sudan likely will be in the northern parts of Sudan (Khartoum) and Middle Eastern markets where Sudan can expect a large comparative advantage for products that can be produced in efficient quantities with high quality, and timed to market windows.

However, efficient production remains a distant dream. Today, there are shortages of nearly all inputs including draft animals and locally produced hand-tools such as hoes, machetes and similar implements. Most farmers produce for their own needs with little understanding of the basic principle of agriculture as a business. In addition, technical assistance is difficult since most are illiterate and lack skill with numbers. In one case, farmers were encouraged to produce surplus commodities (using seeds provided by a local NGO). The first two years, the surplus crops were purchased by NGOs, but in the third year, the produce was not purchased and rotted in the cooperative warehouse. Approximately 70% of farmers are women who care for the crops (including cultivation and harvesting as well as on farm processing--hand milling of Sorghum). Men tend to be herders and to do the heaviest labor such as clearing fields.

Farmer Groups

SPLM leaders indicate that the organization of cooperatives is the preferred development approach. A number now exist, along with other group-based businesses (Women's Empowerment Project for accommodations in Yei, Maridi Farmers Association, trucking associations, cooperative stores) that were started with NGO assistance and grants, and they all are struggling. There is little understanding about the operation of cooperatives as a business. The current Southern Sudan cooperative law is based on British Colonial Law and outmoded provisions from Uganda and Kenya that have proven to make genuine member-owned and voluntary businesses difficult. The cooperative law vests too much power in the Register of Cooperatives and a top down structure with required membership of primary societies in apex and regional unions. The Commissioner of Cooperatives and Rural Development is open to revisions and requested an analysis of the law including recommendations for changes and model cooperative by-laws.

In interviews with the mission, farmer-association priorities are improved production, markets and marketing information, increased farm size, more and better agro-machinery, quality seeds, training and technical assistance. Restocking with quality cattle, vet services and vaccines are most important needs expressed by livestock groups.

Leadership and capacity building

The SPLM leadership is impressive at the senior levels, but appears thin at lower echelons. Nearly all government employees are volunteers. The need for better education and access to capacity-building programs across all fields is severe, but special immediate needs are to train basic vocations related to economic activities. There is a nearly universal desire to gain the benefits of peace and shift from relief and war to economic development. However, there are huge social and government needs as well (e.g., basic administration, customs collection, schools, health clinics). And, these compete with urgent economic development requirements. Without a thriving economy and hard currency exports, social services will be sustainable only a low levels, and continue to be funded primarily through donors. Lack of human capacity with few adults who can read and write is a huge challenge. Yet, Sudanese appear to want to learn, some students are entering secondary schools (120 in Lobone), and they appear to be resourceful and to adapt well to vocational training and basic education.

Schools--Overcoming Difficulties

The Adult Education School in Panyagor, run under the auspices of the New Sudan Women's Empowerment Group, is a group of huts a short walk from the CARE compound. Each hut is a classroom for a specific grade, 8 being the highest. Each contains a blackboard and some log benches.

The day we were there, grades 1 through 5 were in session. In one, the blackboard was covered with English phrases that young teenagers were learning; in another, boys and girls were busy calculating kilograms and pounds. In another class, boys and girls were thinking through a math problem. One hut was for young mothers, with babies in tow - that day learning some rudimentary English. Each hut had 6-10 students and seemed full, but we learned that the usual number was closer to 30. Because of the recent flooding, many students were unable to travel to the school.

IDPs and Resettlement

Repatriating displaced persons and refugees is a logistical nightmare. Expectations for repatriation to local villages/tribal regions at peace are high – yet the movement of 4 million people – many for long distances, including young children, women-headed households and elderly is virtually impossible. Resettlement will require water points and basic services such as primary schools and health clinics – before these families can reach and begin to live with relatives or in-laws. Timing is always a problem since IDPs or refugees need to harvest their crops before they depart, and they need to time their arrival with seasons when there is enough grass to build shelters. And, they need (and, lack) both food and basic agricultural tools to break new land. They must be sustained (with water and food) while they travel long distances, and while many trek their livestock (average about 10-15 goats and some cattle) and carry some household goods. In addition, they must be sustained while they build new shelters and plant crops for the coming season. For the most part, the resettled IDPs and refugees require food supplements for at least two years (since many will miss the initial planning season while traveling and building) and their initial crops are unlikely to be very plentiful even in the second year.

IDPs want to go back home en masse though they recognize it is only possible with support from NGOs. In interviews, IDPs listed the following priorities for resettlement: (1) security, (2) adequate and clean water (boreholes), (3) agricultural tools, seeds, personal belongings, cooking utensils and construction tools (e.g., mosquito nets, fishing equipment, axe, rake, cycle, machete), (4) primary health clinics and (5) primary schools. They are prepared to work to rebuild their own communities and bring as many resources as possible with them including teachers and health workers. They also will require school supplies, animal vaccines and human medicines at their resettlement areas. Much of the leadership for resettlement will come from traditional elders (chiefs). They expect NGOs to arrange for transportation, way stations, temporary shelters and processing centers.

In the case of Panyagor, local officials indicated that IDPs would relocate with families that now are living in a flood plain (currently under water with small berms around settlements) and then move to higher ground East of the canal. They plan to disperse somewhat, and indicated that their current living patterns are the result of the current insecurity--although, some indicated they would have a hut in town and in the countryside. Based on interviews with local staff and leaders, there appears to be little planning for such resettlement and no national or regional plans, although there are some IDP assessments by relief agencies, the latest in 2002.

Ready to Return Home

At a meeting with 14 women IDPs in Lobone who come from Bor County, they nearly all said they are ready and willing to return home if peace comes tomorrow. Families will go together but they will wait until services are available. They expect clean water, schools and health facilities. If such services do not exist, they are willing to go and build them. They plan to take their animals, usually 10 to 15 goats, with them since there is no market to sell them here.

They will need transport for the vulnerable, children and women, but the men and older boys will go ahead and drive the animals. The women said that when they return to Bor they would organize themselves as a group and stay close to services. They plan to farm and to barter food items for cattle.

The tribal chiefs indicated that many IDPs want to return quickly while there is NGO support. Based on their experiences in IDP camps, they believe that the early returnees will benefit more than later ones. In many cases, their aspirations for immediate return appear to be unrealistic. While officials indicated that resettlement to their tribal lands would be voluntary, it is hard to ascertain how voluntary it will be given that many women-headed households are likely to be forced to relocate since they are “married” to the brother of their deceased husbands. The best timing for returning appears to be from November to March during the dry season

Early settlement in unprepared locations appears likely to lead to unanticipated consequences, as occurred when an earlier resettlement of 12,000 IDPs in Panyagor was attempted. The results included some deforestation due to the need for construction materials and cooking fuels, increased health risks in moving into a more mosquito affected region, and increased lawlessness such as cattle theft. Water availability is critical for new settlers and for villages moving out of flood plains. SRRC representatives have few resources but recognize the need for repatriation workshops.

III. Recommendations

The greatest assets of New Sudan are its farmers, herders and traders who have huge potential for agricultural development and trade, and the nation should attach the highest priority to investment in this asset.

- Agricultural potential is great but market access is poor and generally at subsistence levels. Livestock production is limited few due to various diseases and lack of veterinary services. Farm supplies are in very short supply. Still, agriculture is the industry from which the majority of the people in Southern Sudan will derive their income for the foreseeable future. Therefore, the most effective way to increase incomes of rural people is to increase the productivity of agricultural resources--primarily, livestock.

Focused capacity building in vocational education, agricultural skills, and entrepreneurship can rapidly spur economic development through expanded agriculture in the face limited capital and a market economy that is still primitive.

- The primary bottleneck to development, and one of the most easily broken, is the lack of market access. This requires improved, safer roadways. Beyond that basic requirement, it will be necessary to analyze the several market chains to identify potentially profitable options and to provide people with adequate information on which to base investment and intervention decisions. Development of farm-to-market roads also will play a major role in reducing marketing costs. Livestock development will depend on increasing the availability of qualified veterinary services and medicines. In some cases, adding value can increase income from production in remote areas, and such investments should be considered for the region (especially Western Equatoria).

The mission recommends improving the livestock marketing process with the provision of vet services at strategic areas along the trekking routes, training of community based animal health workers, formation of marketing cooperatives which could also deal with input supplies (drugs, vaccines etc), establishment of beef finishing programs (through feeding) near market towns, and improved breeding and selection programs. We would also explore a dairy development program through the formation of farmer cooperatives around milk bulking centers.

- The mission also recommends the formation of farmer cooperatives and associations that have proven successful in Southern Sudan in the past and in many other places in the world in lowering prices of farm supplies, improving market efficiency and providing farmers an opportunity to participate in upstream and downstream profits. Given the dominance of subsistence agriculture, farmer extension through associations can teach them “agriculture as a business” and how to meet the requirements of the marketplace including quantity, quality, storage, value-added processing and packaging/branding.
- The mission believes that reliance on traditional government extension services or agricultural training centers (the latter envisioned in the Interim Strategy) is unlikely to provide an effective boost to development in this remote area. Rather our experience throughout Africa and elsewhere indicates that the most successful extension is achieved through commodity based farmer associations and cooperatives where there is a long-term possibility of sustainability through such activities as contract farming (e.g. honey and Shea nuts), fee for services (e.g., vet costs subtracted from livestock sales), input supplier credits to farmers (e.g. seeds in exchange for portion of profits), efficiencies in processing (e.g. collecting on-farm processed goods and milling), value-adding activities (e.g. converting grains into higher value livestock such as pigs), warehouse receipts (e.g. holding commodities off market due to glut at harvest time) and marketing through group efforts (e.g. an ability to collect sufficient quantities, quality and time produced to the marketplace such as sorghum or ground nuts).

New Site

Finding the New Site to meet with the Commission on Economy was a challenge since our landing co-ordinates were on a mountainside, but we got there and had a lively discussion. Don Crane presented major observations and said more details would be provided in a final report.

Commissioners had many questions and the discussion lasted until midnight. They were interested in ways to modernize housing and electrification; what technical assistance we could provide in resettling returnees; how can we help them sustain rural electricity given the level of poverty; what options we recommend for IT, our help in developing an Agricultural Institute; whether New Sudan can be competitive in international coffee and flower markets, and potential WTO and others restrictions that need to be addressed in peace accords on global trade. There was universal agreement that roads and infrastructure were the major challenges for economic development.

The Commissioner on Cooperatives was receptive to our concerns that the new cooperative law was highly restrictive and asked for our comments on both the law and help in developing model cooperative bylaws.

The roads are so poor that they effectively isolate the region, and constrain every aspect of economic development and social life.

- OCDC envisions development proceeding along **development corridors** as roads are rehabilitated beginning nearest to the markets (border with Uganda, Kenya and Congo, and access to northern markets along the Nile). The sequences of road rehabilitation with nodes of development can allow trade to development over the road segments as they are completed. A variety of businesses likely would develop along the corridor and in these nodes to service the traffic as well as provide collection points and storage of agricultural products, dips and de-ticking of livestock at borders, and centers where long haul trucks can be linked with smaller trucks able to bring produce out of the region without destroying fragile roads.

The mission agrees with the priority of building an all weather road from Kaya to Yei and to link up Yei to Maridi, Maridi to Yambio and Yei to Mundri. Rejuvenation of the Juba market will also require improved roads from Yei, Mundri and Kajo Keji. Similar improved roads are needed from Rumbek to Malakal. Because of the huge costs of road construction, key access roads to external markets should be given priority.



While the use of heavy construction equipment would mean more efficient and less costly road construction, road rehabilitation can be a major employment opportunity and means to inject money into the economy. Heavy involvement of local workers and communities along the road corridors can develop a “sense of ownership” and develop a capacity within communities to maintain roads and, at a minimum, repairing pot holes and clearing obstacles. The mission points to a number of notable successes in many countries in developing public works programs, preferably cash for work, to mobilize communities for road construction and rehabilitation. It also observed successful community association efforts to maintain roads. For example, rural feeder road rehabilitation in Uganda has been funded through monetized Title II commodities (not possible in Sudan) but the tested procedures are applicable in the provision of technical support for construction and design, initial grading with heavy equipment, employment of local workers in building culverts and similar labor intensive jobs and community commitment for maintenance.

- The mission also recommends emphasis on the formation of trucker associations to move goods to markets. Since large 20-ton trucks destroy dirt roads, a trucking system should be planned that will limit heavy vehicles to macadam roads and rely on smaller trucks on dirt feeder roads, thus combining long and short haul transportation with transfer points near borders. Similarly, more efficient systems are needed for the supply of diesel fuel including the delivery of large quantities to border areas using tanker trucks and storage facilities at long haul transfer points. Fuel depots are also important at major towns. This will be

particularly important for providing sufficient fuel to operate diesel generators, especially during the rainy season when bringing in supplies is more difficult, or not possible.

Telecommunications and electricity for major towns should be immediate priorities

- Communications and electricity must be accessible to Sudanese (not owned solely by NGOs) if development is to occur. This service is an essential part of normal infrastructure essential for market information and transactions, value-added processing, SME formation (e.g., tailoring, metal and wood works), social services (e.g., public lights, refrigeration of medicines, school lighting), government administration and donor coordination.
- Agricultural and economic development is not possible without urban centers and market towns. Urban planning can lead to the location of essential services and enterprises (e.g. improved farmer markets) in the towns with a center-out economic development strategy that does not become a magnet for rapid urbanization. The concept of an urban core with government and market functions is compatible with efforts to rebuild rural centers for livestock rearing, employment near resources (on-farm processing, woodworking near forest reserves) and clean water points for humans and animals.

Access to major urban areas can be achieved in a relatively short time frame and at reasonable costs given rapidly evolving technologies. In the medium to long term, planning is needed to integrate telecommunications with other infrastructure improvements, especially electricity, and to set in place a competitive legal and regulatory environment conducive to private investment.

Experience in a number of generally rural, low-income countries suggests that universal access to telecommunications is best achieved by local and community-based enterprises, whether investor or cooperatively owned, rather than by large private or state-run companies. The laws regulating international revenue and revenue sharing among domestic companies must be carefully designed to assure affordable rates and allow for cost recovery with due consideration for a policy of universal access.

- The mission recommends that USAID pursue a two-phase strategy to establish telecommunication infrastructure necessary to support relief, rebuilding, governance and commerce in post-conflict Southern Sudan. The first phase can be characterized as an “emergency response” designed to create robust telecommunication capability in support of key functions such as public safety, peacekeeping, relief activities and critical command and control functions of government, to be located in 4-6 locations throughout Southern Sudan. Such capability could be acquired using the procurement authority granted under Section 5 of the Sudan Peace Act (P.L. 107-245), with the objective of having capabilities in place within a 120-180 day time period.

For the emergency phase, the mission recommends the creation of community-owned telecenters with Internet capacity and cell nets radiating out from town centers. The centers should be located within the heart of the town, not on its edges nor controlled by NGOs, so that there is wide access to Sudanese, NGOs, government officials and donors. A second tier

cooperative could be formed by local NGOs, INGOs, local government and business/market associations on a fee basis. Even in very poor countries, properly designed telecenters, based on sound business principles, have been successful in many countries. Turnkey telecenters can be created rapidly, initially leased to local organizations and charging rates that can recoup initial investments. However, it requires a design based on revenue flows from business transactions (government, NGO or business), not social services such as distance learning. In fact, the accessing and payment of remittances can become a major source for sustainability.

The second phase of post-conflict rebuilding would focus on telecommunication sector reform. Such an approach could create a vibrant, competitive and investor-driven telecommunications sector in Southern Sudan. Emphasis will be on public policy objectives of universal access, empowerment of women, and use of information and communication technologies as a mechanism to drive development efforts cutting across multiple sectors.

- At this time, there is no coordinated approach to electric power. Much of the infrastructure (e.g. utility poles and generators) has been destroyed and may not have been sustainable in the first place because it depended on heavy government subsidies. The mission recommends a phased approach to electrification that places a priority on major commercial centers and can generate sufficient resources through replacement of small inefficient generators, substitution of high cost energy sources (e.g. kerosene and candles) and promote productive uses (e.g. mills for sorghum, processing, production of agricultural tools, carpentry, and tailoring).

Such an approach would have three phases, with an initial focus on electrification of core town centers for immediate and emergency needs such as hospitals, food distribution centers, and resettlement staging areas, and commercial marketing centers, and including street lighting. The second focus would extend service out from the town centers, based on increasing demand by businesses and others. It would include a major training, capacity building, and technology transfer program. To empower the local communities to take over the long-term operations of the electric systems, the interim period should be planned with a definite life cycle that leads as quickly as possible to the implementation of long-term responses. The final phase would envision a favorable enabling environment for a multi-provider electric sector, carry out a national plan for electrification and build institutional capacities at the national, regional and local level.

Management of the system would be by a second-tier cooperative or community-owned enterprise that establishes rates based on capacity to pay. Initially, micro-loans can provide capital for equipment, such as grinding mills. Groups of small businesses may formally or informally be organized to electrify a market place. Electricity-powered sorghum mills, for example, could have positive impacts on the lives of women who now must grind by hand. The mission observed small scale milling that with additional power could be scaled up rapidly on a commercial basis.

The major limitation on the construction of electric service is ability to pay and to acquire enough gasoline for the generators, in the face of the severe transportation constraints--

especially during the rainy season. Thus, the approach would be to start with relatively small generators, provide some redundancy (two generators and sufficient replacement parts and maintenance supplies) and design an initial core system with appropriate meters and transformers that can be built out over time. It is critical to have laws in place as service begins in order to be able to cut off service for non-payment, begin standardization for larger systems, rate setting, right of way requirements, joint uses of utility poles, etc.

For both telecommunications and electric service, there are human resource constraints in terms of management, technicians and electricians. We will focus capacity building through on-the-job training, pairing local staff with expatriates and turning over operations to local staff as soon as possible. In both cases, we propose to use U.S. volunteers from the telecommunications and rural electric sectors as much as possible and to rely on nearby countries for short-term technical designs and support.

The reintegration of IDPs and refugees should be accomplished through community assistance programs

- While there is a strong desire for IDPs and refugees to return to their tribal areas, the mission found almost no planning for their reintegration. Thus, widespread expectations are unlikely to be met given the magnitude of the resettlement problem, the lack of adequate roads and transportation, and absence of infrastructure, most critically water, primary schools and health clinics in receiving communities. While relief agencies are most likely to deal with these resettlement issues, the mission is concerned that those agencies will perpetuate their donor mentality, that provision of social services will take precedent over employment, and that conflicts could emerge between current residents and returnees without community and economic development programs that benefit residents and returnees.

In particular, the mission would encourage an extensive planning process and dialogue between IDPs and refugees with the communities where they will be returning. While planning workshops and exchanges would be useful, a telecommunications system is needed so that returnees can individually assess whether or not they want to return, and what arrangements are being made for their integration into extended family structures.

- Community planning and economic development programs are essential to ease the considerable strain on social

Reintegration of IDPs & Refugees

A meeting with 50 community leaders in Lobone (16 chiefs, 10-13 women, six local judges and clerics from 12 churches), held in English, Arabic and Dinka demonstrated how well organized the IDP community has become. About 90% said that they would return tomorrow if peace were signed. They expect NGOs to provide transportation and help in providing services such as schools, clinics and boreholes. They plan to take their personal belongings such as cooking utensils, clothes, tools as well as their animals. They will sell or give away what they cannot take with them. Several women leaders expressed their concerns on how their children will fare since they have been used to services and are not accustomed to mosquitoes.

They plan to resettle with their relatives and recommend sending a team of local leaders to access and survey sites and talk with local leaders and communities in Bor in order to ease return and ensure their place.

services and the increased potential for conflict. In other resettlement programs, an early focus on job creation, including agricultural production and public works employment has been instrumental in easing the burdens of reintegration. Many young refugees have never seen their homelands, and become used to more urban living and social services such as schools, clinics and hospitals than the traditional societies that their families came from. This pool of talent can be constructively engaged in community building, otherwise, they may generate discontent and conflict.

A major issue in repatriation is how to handle livestock. Since transportation is limited and distances great, it may not make sense to trek livestock to resettlement areas. An exchange system in which cattle are purchased at IDP camps for cash which could be used for the later purchase of higher quality, healthier livestock, especially in Dinka traditional grazing areas. That way, cattle and livestock can either be sold to traders, local residents or incoming displaced people. While the establishment of ownership and stewardship of the cash could raise problems, efforts to move livestock large distances using systems already strained to sustain people appear doomed to fail.

In discussions with local government leaders, we found that they have little capacity to develop plans for successful reintegration of returnees and desperately need help in this area. We also envision a major role of local NGOs to represent civil society and to carry out effective grassroots program for resettlement, including a special focus on youth and women.

- U.S. cooperatives are democratic businesses linked to communities for essential services. This model has been utilized in many developing countries in which democratic community decision-making is directly linked to small infrastructure repairs and construction. Such programs have been successful in building communities, reintegration of combatants and employment generation based on community improvements. The mission recommends that this community development approach be used for small to medium scale infrastructure improvements at current IDP camp communities as well as home areas. The timing of improvements will be critical to the staging of return and should support the development of health and education services. The County Development Councils and Community Assemblies should play a central role in this process as well as community-driven economic development planning.

Local availability of food for IDPs/refugees

- Southern Sudan is a food surplus region, and can provide needed supplies to support the movement of displaced people, so maximum use of locally produced commodities should be encouraged (rather than use of imported foodstuffs). Producers in Sudan have demonstrated their capacity to produce surpluses if they have market incentives and access to inputs (including seeds). However, the development effect of such purchases will be lost if it is seen as a one-time transaction, with no longer-term market building potential. Since resettled IDPs and refugees may require food supplements for several years until they are able to produce for themselves, NGOs and relief agencies should turn to local markets for their needs even if they must subsidize their transportation, storage and distribution to resettlement

areas. Where feasible, resettled IDPs should buy what they need through the market place, to minimize any dependence syndrome.

A holistic approach to food security should be developed, with economic development interventions focused on stability at the household level as well as focus on income generating activities to lift groups from subsistence farming. For example, cooperative and association building can accelerate development of commercial activities and focus collective resources on development "bottlenecks" such as poor roads, or the lack of infrastructure. Food security measures also must be supported by closely coordinated initiatives for developing more transparent and equitable governance mechanisms.



Women's Empowerment Hotel in Yei

Planning the Return

- To avoid longer-term conflict, extensive communication and trust must be developed between current and reintegration stakeholders before the return of IDPs and refugees is actually begun. Both preparation of infrastructure and timing are important. For example, November/December are the preferred months to return each year. This planning process should be revisited periodically and feathered with the activities and development of the local CDCs and Community Assemblies.

Conflict resolution must be a crosscutting theme of all interventions. Closely linked to this will be the need to emphasis "community security" interventions, which will establish mechanisms for protecting citizens through both community-driven and government-provided mechanisms.

The mission also recommends that new, participatory land tenure systems be begun in tandem with the planning for return and integration. Through intensive and on-going participation of local government and community representatives, a framework for an adjudication process should be at least outlined for the mitigation potential conflict over land and water use in the initial phases of planning and return.

- The civil preparation includes the enormous shift from central, military style administrative structures to democratic civil authorities. Once oil revenues (and eventually local tax revenues) as a result of the peace accords, they will help fund the civil administration. It will be extremely critical that local community representatives have a say in how those resources are allocated and accounted for. Technical assistance and training for capacity building of both local communities as well as civil administration will be critical.

It is virtually inevitable that many of the returnees will settle in and around town centers where services are more readily available, where there is more security and where there may be jobs at some point. This will be especially true of the garrison towns, which already have inadequate social infrastructure. For these centers and for future new settlements, careful planning is essential if virtually endless slums are to be avoided. And, it will be critical for local and regional authorities and community representatives to plan jointly for supporting and expanding services. Establishment of housing cooperatives is one interest of SPLM leadership as a means of addressing the shelter needs of population centers that are expected to swell after peace is established.

Cooperatives are the preferred approach to economic development by SPLM officials, but many government leaders and NGOs do not fully understand the primary business purpose of these voluntary, member-owned institutions.

- The mission found a few examples of successful group-based enterprises, such as the Yambio Women's Enterprise Association and truckers associations, but a cooperative store visited was effectively defunct. Most of these groups are not providing significant services to their members. However, these initial efforts can be built on and strengthened with more appropriate cooperative methodologies based on sound business principles and human resource training.

Initial cooperative formation should focus on marketing of surplus farm products for local, regional and cross-border markets, and for farming inputs through group purchasing. The mission concludes that markets and these cooperatives can be created for agricultural commodities being produced by members and potential members, and that farmer associations or cooperatives should be developed. However, this requires cooperative managers and members who are properly trained in business activities, cooperative governance and finance, and who have resources, such as working capital to purchase member produce, help in transportation to markets and storage. Cooperatives must avoid becoming donor driven, and members must make at least some equity contributions, even if in kind.

- We also recommend the formation of second tier cooperatives for telecommunications and electricity, owned by an association of businesses/traders, local and international NGOs and the local government. Such an arrangement can lead to more community involvement, justify reasonable charges, and better assure maintenance and reduce electrical thief. Self-help coops provide for community participation such as setting of utility poles or restoration of facilities to house equipment. These coops should be in the urban center and widely accessible. While initially rapid response initiatives, the cooperatives can grow through electric lines to major loads such as NGO compounds, hospitals, health clinics and processing centers. Cell phones can radiate out from the cooperative telecenters to serve more rural areas.
- We have had success with cooperative models for pharmaceuticals and animal vaccines through community-based stores that use donated commodities that are sold slightly above costs to create revolving funds. There are also successful forestry cooperatives which can be

developed for exploiting the teak and hard woods. The cooperatives can mill wood (to add value and for easier transport), make simple furniture (or basic cuts for prefabricated furniture) and operate a “certified lumber” program to control illegal logging. We strongly believe that national reserves of teak and other hard woods should be leased to private investors or cooperatives, not through government enterprises.

- We have had the opportunity to review the New Sudan cooperative law, which, in our opinion, would not establish an enabling environment for genuine, business-oriented and member-controlled cooperatives. Fortunately, in meeting with the Minister of Cooperatives, he indicated that he was receptive to modifications and we will be providing him with an analysis of the law and recommend model cooperative by-laws. It is also important that laws should enable cooperatives in different sectors, such as telecommunications, rural electricity and credit unions. In these cases, sector specific laws and regulations are necessary, such as the safety and soundness of credit unions, or provisions for universal access for utility cooperatives.

Because capital is so scarce and debt capacity so low, especially for seasonal agricultural activities, the mission believes that lending to group-based businesses is more appropriate than micro-credit programs for individuals. There are now no financial institutions (that the mission found) and none that are proposed that appear to be safe and sound. There is no effective demand for commercial financial services in the current relief-driven environment.

- The mission recommends the establishment of a Credit Union Bank as an alternative approach to the Nile Bank and the Grameen micro-finance approaches. This would be along the lines of the European Cooperative Banking Model (rather than the African Cooperative Banking Model), a system in which a banking institution conducts business at branches or offices at locations other than the main or “central office”, as distinguished from single-office banking. In many countries (e.g. Germany, France and the Netherlands), this type of cooperative branch system of banking is predominant, and to a lesser degree, branch banking exist at the state level in the United States. Each cooperative bank branch is considered separate, distinct, and autonomous in their operations, but each must meet the banking prudential regulations (with the exception of the nominal capitalization requirement for licensing) and be internally supervised by the central office.



Initially, as development efforts begin, the Cooperative Bank will be dependent upon a services and income structure built on remittances, payments and settlements. The establishment of a Cooperative Bank will facilitate remittances, both direct and indirect through the “hawala” system.

Concrete, tangible wealth transfer for immediate effect

- The project design involves transferring financial resources to women heads of household in the form of shares in the New Sudan Cooperative Bank and deposit savings. Each qualifying woman head of household would have share and deposit savings accounts of US\$25 (\$10 in shares and \$15 in a one-year time deposit). The deposit savings account will be in the form of a time deposit that can be used as a compensating balance—collateral. As an incentive to save, if at the end of three years, the average savings balance increases by 25 percent, an additional \$10 could be transferred into the savings account, and \$5 into the share deposit account.

The presence of member-owned, democratically controlled financial institutions (e.g. credit unions and farmer cooperative banks) has proven to be a valuable and needed component for economic and community development but requires appropriate laws and regulations so that cooperative financial institutions can begin to develop. Successful financial cooperatives must involve member savings (no matter how limited) and shared risks. Outside capital will be required to create financial institutions, but it will take many years to build institutions of sufficient size and scope to meet the financial needs of southern Sudan. Initially, postal bank-type savings programs may be a good start.

IV. Sector-Specific Comments

Agriculture

ACDI/VOCA's observed that in Western Equatoria the dominant characteristic of agriculture is its isolation from markets--caused by bad roads, lack of transportation, lack of information and a general dearth of commercial activity resulting from years of conflict and insecurity.

Production is primitive with almost no use of improved seeds, fertilizers, chemicals, and mechanization or improved farming techniques. Yet, surprisingly, the region produces a surplus of food because its soil is good, rainfall high and because it has two growing seasons.

In former times, Juba was the main market for the region as a bridge to both the North and Eastern Equatoria. Due to the conflict and the fact that Juba has been under the control of the GOS, its status as trade center has fallen to almost nil. And, while one may anticipate that a peace accord will pave the way for the revitalization of Juba as a trade center, it is difficult to predict the course or pace of this development.

Trade

According to the Director of Customs and Excise, the top 10 exports are: beef cattle, hides and skins, agricultural produce (e.g., coffee, oilseeds, ground nuts, palm oil), teak to Europe and honey. He is now setting up customs stations at the borders to collect excise taxes. At one exit town; it takes two months for him to get monthly reports. According to Anne Itto, the major imports are: petroleum, construction materials, salt, sugar, soap, and used clothing. Over the last five years, Sudan exported about \$1 million worth of products and imported \$10 million worth of commodities.

Now, however, the most important agricultural market external to the region is Arua, Uganda. Yet Yambio, which is within the 300-mile radius of Arua is a distant 20 hours from market due to the terrible condition of the roads.

Ultimately, the north may be a more important market for the region because its crops are very similar--the southern cassava, maize, millet, beans, fruits, etc. are almost indistinguishable with those in Northern Uganda. Nevertheless, development of southern markets is strategically important for the New Sudan. To be plugged into the global market means having multiple trading partners to reduce dependency and increase market intelligence.

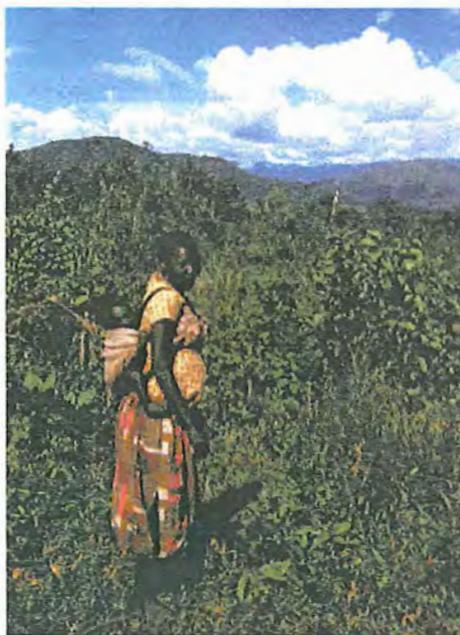
Attempting to move products to Arua and other markets in Uganda and Kenya leads to several conclusions. First, such efforts are of little consequence as long as the roads are as bad as they are now. The cost of marketing can be significantly reduced by even modest road repair. Road construction should proceed from the market to sources of supply so that the initial construction increases market flow and volume can build steadily as construction proceeds. The most important road segment for agriculture is from Kaya to Yei, next from Yei to Maridi, and thirdly from Maridi to Yambio. Yei to Mundri. Rejuvenation of the Juba market would call for roads from Juba to Yei, Juba to Mundri and Juba to Kajo Keji as well as improved links to the east bank. In the east, the Kapoeta-Lokichoggio could be strategically important.

Several other strategic considerations for marketing to Arua and beyond suggest themselves. Perhaps most important is to know the market and produce to its needs. A table of market prices for Uganda for the week of October 20-24 is appended. Since prices in Arua (in Ugandan Shillings/kg) for such things as chickens (5,000), groundnuts (1,100), and Simsim (850) are high relative to cassava (180), maize grain (400) and sorghum (400) they can more easily bear the cost of transportation. Similarly, flour is more valuable than grain. In general, as a distant-to-market source of supply, it behooves Western Equatoria to concentrate on high value crops relative to weight and bulk so they

Coop Marketing

The Maridi Farmers Association, indicated that they have 29 members, 9 of whom are on the executive committee. "Our goal is to promote grassroots development in helping farmers market their produce and to obtain technical assistance. The association is not profitable and has never paid out a dividend to its members. We do our banking through the CDC in a Ugandan bank. One share costs \$5 USDs, and registration is \$1 USD. The association owns a truck and hopes to purchase some decent storage facilities.

"We went to our members and obtained crops that were transported to Rumbek. They were initially paid by World Vision and, later, UNICEF, but when the aid organizations did not purchase our crops, they spoiled" In a related remark, a Yambio farm leader said: "We hope that you will go out, meet potential clients and tell them, there's food here."



Female farmer

can better bear the freight and to add value to commodities whenever economically feasible. Grading, processing and converting to animal protein are ways to add value to products.

Recommendations

ACDI/VOCA recommended to the mission that farmer associations and cooperatives be formed that can more efficiently provide inputs, processing and marketing of high value, export crops. Some processed products that might do well in Uganda are processed vegetable oil, formulated animal feeds and processed fruits. Lulu nut butter and honey are examples of niche markets that are already under development.

Animal product prices tend to be high, well above world levels. Projects that should be tested for feasibility include cattle fattening, confined chicken production and pork production. Pork is not a traditional industry in the region and can be sensitive in Muslim areas. However, the farmers questioned in the region raised no significant barriers to pork production other than unfamiliarity. Pork was not included on the retail price summary for Uganda, but should have a ready market there.

Another way to add value to crops is simply to store them until the market gains strength. Investment in storage facilities should be considered.

Markets within the New Sudan are weak both because of the lack of purchasing capacity among the population and because of relief-based imports. One would expect both of these conditions to abate over time and domestic markets to strengthen. Reintegration of IDPs, if properly handled, should add to both the strength of the domestic market and the productive potential of the region. With economic growth, one would expect a shift of employment away from agriculture toward manufacturing and service sectors and a further strengthening of agricultural markets.

The most glaring deficit among farmers and their associations is the lack of understanding of the commercial dimension of agriculture. Farmers are not used to thinking of their farm as a business and their associations have failed to be effective marketers of their surplus production. No strategic market planning was seen outside of the niche markets for lulu nut butter and honey, both of which were externally driven. A great deal of training will be necessary to change the peoples' mindset, but must be strategically implemented to be affordable. If cooperatives and associations are to properly serve their members and play a useful role in agricultural development, they must become market-oriented, market driven institutions.

Livestock Development

Land O'Lakes representatives on the mission visited sites in both Eastern and Western Equatoria, including communities in Yei, Maridi, and Yambio that are basically agricultural but where there are few cattle. The few herds seen were reportedly on transit from the Bhal el Ghazal area further north to Kaya in Northern Uganda. Kaya is a major market for live animals from Southern Sudan. The county commissioner at Yambio indicated that he only knew one person who has cattle in his county, a trader that buys cattle from Bahr el Ghazal and treks them to Kaya. For this

region, raising cattle is difficult because of Tse Tse fly populations, and in Maridi and Yambio, sleeping sickness is a common disease. The Tse Tse fly limits livestock production in most of the Western Equatoria region. The vector for trypanosomiasis causes sleeping sickness in humans and the Nagana disease in cattle.

Goats are more common in the region, yet only about two out of ten households have them. Most families rely on poultry (chickens) for meat, but diseases are a problem. Goats die quite often from liver fluke, mange and worms, while chickens are reduced to small numbers at least once a year by New Castle disease outbreaks.



Local Cattle Breed

The indigenous communities of Lobone also traditionally depend on agriculture. However, the area is currently inhabited by many IDPs from the Northern counties of Jonglei and Upper Nile. Most of the IDPs had moved with their livestock and the sighting of cattle is not uncommon.

Panyagor in the Jonglei County was the scene of heavy fighting before it was taken over from militia and government forces by the SPLA. As such most of the population, which is pastoralist, had moved south where they are living with their animals as IDPs. Many animals were lost during the war; especially due to rustling by militia and the region is now restocking

Rumbek is a livestock area and most families own cattle and/or goats. The prominent breed is a long horned Baggara type and the short horned Nilotic Zebu as well as their crosses. The visiting team was informed that there had been attempts to introduce the dual-purpose Sahiwal breed from Kenya in Juba county. Animals in Rumbek are raised in nomadic extensive grazing systems mainly by the Dinkas who are the main community in the Bahr el Ghazal area.

Marketing related observations

- There is a functional marketing system for live animals exists – cattle auctions, elaborate cattle trekking routes, a cooperative form of marketing, rudimentary quality assurance and community vet services along export routes
- There also are quarantine and meat inspection services to meet regulations of importing countries seems to be operating with support from FAO
- Perhaps 2,000 animals are sold monthly through Kaya to Northern Uganda. It is also thought that many more animals are sold to Northern Sudan but numbers are

Livestock Shortages

The Maridi County Secretary observed that there is a major shortage of livestock in the country. Most animals are for household use, especially goats and chickens. There is little or no market. There is a DRC Game Reserve that has problems with poaching, and the team saw Rhinoceros meat in the marketplace. Livestock management and veterinary services are necessary in order for livestock to survive. Livestock has been a source of conflict with IDPs who do not respect traditional practices.

difficult to estimate since trade with the North is currently unofficial and generally risky.

Constraints to livestock production

Development of agriculture and livestock in the area will depend to a large extent the availability of infrastructure in the area. At the moment, there are virtually no roads and no telecommunication facilities, and there is little access for agricultural products such as maize, sorghum, groundnuts, etc. This constraint is a significant constraint to any contribution that these products could make to economic development in the area.

Likewise, animals currently have to be walked distances of over 500 km to reach markets of Northern Uganda from Rumbek and the Bahr el Gazal region. This journey, which would take one day by truck (on a good road), now takes over two months. Many animals are lost on the way as the herds are driven through Tse Tse infested country. The animals that survive require expensive drugs and veterinary services when available. The lack of telecommunication systems also mean that the merchants in transit have no information on expected market prices or the quantity of cattle moving to market that affect the price. The war has effectively cut-off Southern Sudan from their traditional markets in the North since movement between the North and South is restricted.

Security concerns have led many farmers to lose interest in keeping livestock since these can easily be taken by militia or simply rustled. In Marindi, there were reports that people used to keep pigs but militia took them. Even after some people returned to their homes, soldiers would occasionally come and take away some pigs. As a result, people are no longer keen to keep pigs.

In the absence of veterinary, disease has become rampant. Several diseases were mentioned as killers by para-veterinary staff, including Contagious Bovine Pleuropneumonia (CBPP), Black Quarter (BQ), Foot and mouth disease (FMD), liver fluke, etc. Veterinary San Frontiers (VSF) of France and the FAO of the UN had been supplying vaccines and some drugs from Nairobi and had operated training programs for community animal health workers in a few areas. These services seem to have been discontinued in May 2003.

The major obstacles to expansion of the cattle and livestock sectors are animal health challenges and limited trained personnel. Most of the skilled personnel working in Southern Sudan are working for international NGOs. The few local staff available for the civil service is poorly skilled and work on a voluntary basis without pay.

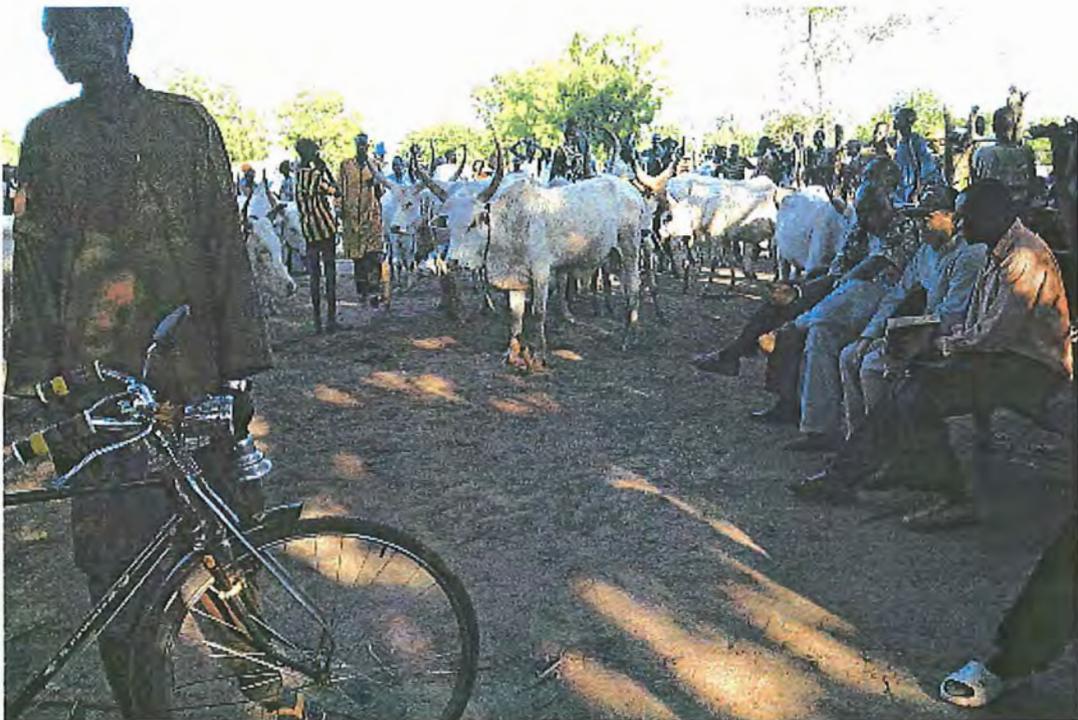
Recommendations

As a member of the mission, Land O'Lakes recommends three interventions to improve the productivity of the cattle sector in the Rumbek region:

- **Focus on production and productivity.** Improve the current livestock marketing process through making veterinary services available at strategic points along the trekking routes, training community-based animal health workers, forming marketing cooperatives which

could deal with input supplies (drugs, vaccines etc), developing beef finishing programs (through feeding) near market towns, and improving breeding and selection programs.

- **Organizing cooperative development activities.** These should include the establishment of milk bulking centers in/around Rumbek; similar to Land O'Lakes programs in Malawi. With improved collection, other interventions should focus on improved breeding and feeding practices. In Rumbek, farmers currently sell milk to small hotels/kiosks in the market and town especially during the wet season. As members of the visiting team walked around the market/town at Rumbek, they saw tins of milk powder as an indication that there is a significant culture of milk consumption. The interventions in dairy need to be guided by a survey in the Rumbek area to understand more clearly the quantities of milk involved and the size of market available. It is understood that a milk processing plant once existed at Juba; it therefore seems likely the opening up of Juba could assist in initiating development of a rudimentary dairy industry.
- **Resettlement of returnees** to the upper Nile region (Panyagor) could be tied in with provision of a "settlement kit" – with basic animal necessities, training of community based animal health workers and initiation of basic animal health and livestock vaccination programs. The animal health works can be formed into cooperatives for importing drugs/vaccines and management of animal health services.



Cattle Auction in Rumbek

Telecommunications

Relatively little is known about the existence, extent and type of public telecommunication infrastructure in Southern Sudan, and NTCA representatives on the mission observed facilities, their locations and condition. USAID's Sudan task force and the Sudan People's Liberation Movement/Army (SPLM/A) provided basic information about possible locations of telecommunications facilities, which NTCA then observed.

Where such facilities did exist, they were documented and photographed along with their type, age, condition or fitness for rehabilitation of equipment. The results of these determinations are presented, for each site, in the findings below.

Overall, there was little or no evidence of public telecommunication infrastructure in the areas of Southern Sudan visited by the NTCA assessment team. In those areas where telecommunication infrastructure was found, or where it was evident that it once existed, facilities were obsolete or damaged beyond repair.

Observations

- **Yei**, the provincial capital of the Southern region, is located in the Eastern Equatoria province, approximately 50 km by road from the Uganda border. Its population (and surrounding regions) is estimated to be 306,217 (WHO statistics). Although with the current seat of government, one of Yei's major problems has been the destruction of civil state apparatus in the course of the Sudanese civil war.

Yei has no public telecommunication infrastructure, and it appears none was ever constructed to serve this area. A walk-through of the town revealed that one private VSAT was in use by a local bar to provide satellite television (see Figure). There was evidence that the town center was once electrified.

Yei's proximity to the Ugandan border may facilitate interconnection with GSM systems based in that country, which if feasible, may provide a short-term strategy for introducing telecommunications to this community. NTCA staff was able to locate a possible tower site that met likely criteria for a GSM relay or repeater (see Figure 4).

Yei is home to the New Sudan Telecommunications Corporation (NSTC – see photo), an enterprise founded by the SPLM/A to advance the development of telecommunication infrastructure throughout the Southern region.



Possible Tower Site in Yei



Offices of the New Sudan Telecommunication Corp

According to NSTC staff, development priorities include infrastructure to facilitate remittances from overseas, citing the example of “hundreds” of Southern Sudanese lining up at the Western Union office across the border in Arua, Kenya, where he estimated that as much as USD 150,000 per month passed through local banks.

- **Maridi** also has no infrastructure or facilities for public telecommunication services, although NGOs present in the area are utilizing VSAT communication services, but none were evident from visual inspection.
- **Yambio** is a hub for both north-south and east-west trade routes, and has more commercial and infrastructure development than most nearby towns, including a telephone exchange and television broadcast facility, both of which were associated with a 10-meter satellite antenna, a television tower, and a dedicated diesel generator power supply system.

UNICEF operates a community information center in Yambio that provides Internet and satellite telephone services to local NGOs and residents. UNICEF maintains a separate Inmarsat VSAT installation for its regional relief distribution center located in Yambio.

Yambio once had an operating telephone exchange with a capacity of approximately 1,000 fixed business and residential subscriber lines. According to a former employee of the municipal utility that ran the system, the telephone exchange (and television broadcast facility) was closed in 1989 – prior to the outbreak of hostilities – when the satellite antenna failed. That system connected Yambio, Juba, Wow, and Rumbek with Khartoum and other northern cities. The operating utility also maintained a public calling office at the site.

Telecommunications Priorities

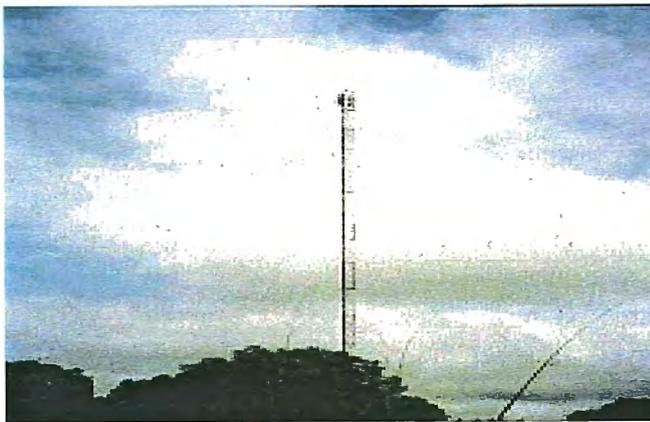
The Minister of New Sudan Telecommunications told the mission that “New Sudan has no infrastructure for telecom and our only priority has been war. We are starting from zero. I was the commander who bombed and liberated Yei and now I want to rebuild my country and town. I need your help in everything: a legal and regulatory framework and how to provide services to rural areas. My priority is to get telecommunications to the people, not the government.”



**Technician's Console, Operations Room
Yambio Telephone Exchange**



**Operator's Console, Yambio Telephone
Exchange**



Satellite Antenna, Yambio

The exchange equipment came from Nippon Electric Corporation (NEC), and key components were manufactured in the time period of 1976-78. The observed condition of the equipment was poor. Even if it were in pristine condition, however, this type of exchange equipment became obsolete years ago. Disposal of the existing equipment and its replacement would be the recommended strategy for restoration of fixed line service.

The Yambio external plant appeared to have been constructed in parallel with the electric grid (which is of a similar vintage), suggesting a planned infrastructure development scheme implemented by a previous administration, because otherwise there appears to have been little economic incentive to construct infrastructure of this capacity and quality in a settlement like Yambio. The telecommunication facility at Yambio was associated with a 10-meter satellite antenna and a television tower which are not operable. The satellite antenna lacks a wave-guide or radio, and it is unlikely that the control mechanism for aiming the antenna can be repaired. The television tower appears to be structurally stable (the anchor or "guide" cables are still in place), but it was not possible to evaluate the condition of the antennas atop the tower, or to find the transmitter.

A potentially serious safety hazard was observed during inspection of the Yambio telecommunications complex. The grounding cable (lightning conductor) has been cut so that it is possible that if the tower were struck by lightning, the tower frame, anchor cables, any connected structures could be damaged.



- Rumbek is the provincial capital of the Jonglei region and was also a major center of north-south trade in times past when it was served by all-weather road connections to the cities of Juba and Yambio--roads that now are seasonal due to lack of maintenance. As such, Rumbek was at one time equipped with the same type of telecommunication and electric infrastructure found in Yambio.

Unlike Yambio, however, Rumbek's infrastructure was severely damaged during the Sudanese civil war. There are only a few remnants of the town's telecommunication complex. The satellite antenna, television antenna, and associated structures appear to have been destroyed (with the exception, curiously, of the satellite antenna, whose dish was only slightly damaged).

In any event, even if the telecommunication complex in Rumbek were salvageable, it would be obsolete. There is little to be gained by anything but demolition and abandonment of the site.



Damaged satellite antenna, Rumbek.



Destroyed television antenna, Rumbek

- Lobone is a lush, agricultural area located in Magwe County, just at the Ugandan border where there are roughly 33,000 IDPs living in one of three camps (bumas). Two of the camps have housed residents since 1994, with the third camp established for more recent arrivals. The large majority of IDPs are from the upper Nile, and repatriation issues loom large.

No evidence of public telecommunication or electric infrastructure was observed in Lobone. There is limited access to two-way radio communications but most communication is conducted in person or through third party messengers.

It is inconceivable that either the repatriation process or significant development can be achieved in the absence of telecommunications capacity. However, Lobone's proximity to the Ugandan border may facilitate interconnection with GSM systems based in Uganda; and if feasible this could provide a quick-start, short-term strategy for establishing the necessary infrastructure. NTCA observed potential power sites that met likely GSM requirements.

- Panyagor is the major population area in a relatively desolate floodplain in North Bor County. Cattle raising is the main economic activity. Most of the Lobone IDPs come from North Bor and are expected to repatriate there once peace is established. Residents informed us that according to a 2003 census of North Bor County, the county has a population of 97,000.

Panyagor has no public telecommunications or useful electric infrastructure. Standing electric poles and damaged wiring were observed during a walk-through of the area, and we were told that some government buildings in the town center had been electrified decades ago. One entrepreneur in the town center runs a very busy "radio hut" and people were queued up to make fee-based radio calls.

Recommendations

NTCA recommends that USAID pursue a two-phase strategy in developing telecommunication infrastructure necessary to support relief, rebuilding, governance and commerce in post-conflict Southern Sudan. The first would be an "emergency response" to create robust telecommunication capability in support of key functions such as public safety, peacekeeping, relief activities and critical command and control functions of government, to be located in 4-6 locations throughout Southern Sudan. Such capability would be acquired using the procurement authority granted under Section 5 of the Sudan Peace Act (P.L. 107-245), with the objective of having capabilities in place within a 120-180 day time period.

The second phase would more closely resemble telecommunication sector reform efforts that NTCA has previously conducted in Nigeria, for example. After urgent priorities have been addressed under the phase one, NTCA would focus on creating the necessary legal and regulatory policies, public sector institutions, and human capacity needed to create a vibrant, competitive and investor-driven telecommunications sector in Southern Sudan. In such a program, emphasis would be placed on public policy objectives of universal access, empowerment of women, and use of information and communication technologies as a mechanism to drive development efforts cutting across multiple sectors.

Electrification

The NRECA representative took the lead in analyzing the electric sector. Currently, electricity use in each community is restricted to NGO compounds and a few community commercial enterprises that have access to small generators. These generators provide power for lighting for a few hours daily, with a few NGO and UN compounds powering computers and Internet access.

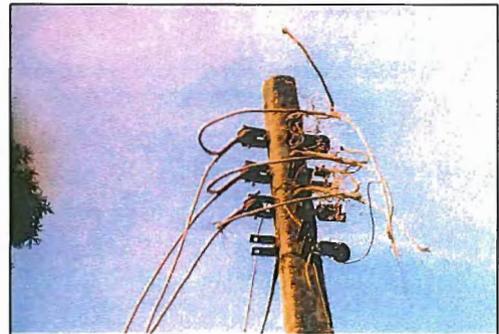


Typical small electric generator

Throughout the region, the communities exist largely without electric service. Each of the existing NGOs has their own small generators that provide limited electric service a few hours each day. The local government offices have little or no access to electricity though one office did have a small generator sitting in the foyer. Even the existing telecommunications office did not have electric service except limited access to a small solar system that powered their VSAT e-mail system for about two hours a day.

A few local businesses have the most extensive use of electricity. These small shops and commercial enterprises commonly employed small generators to provide lights. One entity in Yei used a small generator to power a refrigerator and satellite TV during the evenings and to provide lights to a pharmacy. The owner used the electricity to provide value added services to his customers, charging a premium for cold drinks and entertainment.

Only the AFEX compound in Rumbek, a commercial enterprise headquartered in Kenya, had 24-hour electric service and used electricity for substantially more than just lights. They also used electricity for air-conditioning in two buildings, and refrigeration, as well as for computers and Internet service.



Remnant of early electric distribution

Previous Electric Service

Each of the towns visited once had commercial grade electricity provided from central station generators with service level (low voltage) electricity distributed throughout the commercial and key residential areas. Each of these systems fell victim to the ravages of the conflict with only a few infrastructure remnants remaining. Table #1 on the following page provides details of previous generation facilities, and highlights some of the on-site generator systems now in operation.

Existing Local Energy Use

The local population currently pays for energy in the form of dry cell batteries, charcoal, wood, and kerosene. Access to electricity will replace or reduce some of these other energy sources. However, most existing cooking fuels are not likely to be replaced in the near future, though with effort some electric cooking and heating options may be introduced over time. Table #2 provides data on existing energy usage and expenditures.

Table #2: Existing Energy Use and Expense

Fuel Source	Quantity Purchased/Wk	Avg / Unit Cost (UGSch)	Total Monthly Cost	
Kerosene	1 litter	1500	6000 UGC	\$3.04
Batteries, dry cell	2 pair	700	5600 UGC	\$2.84
Charcoal	1 bag	2000	8000 UGC	\$4.05
Wood	2 loads	1000	8000 UGC	\$4.05
Diesel	0.25 litter	2000	2000 UGC	\$1.02
Approx Cost/ \$ mth	\$15.00	Total Cost/ Mth UGC	29,600 UGC	

Cost of Fuel and Specific Examples

In each area limited quantities of diesel fuel are available from commercial vendors. The fuel is supplied in 200-liter drums. The existing local cost per drum delivered varies with the cost of transportation. 1) in Yei the local cost per 200 liter drum delivered is approximately \$150 (250,000 UGX), 2) in Rumbek, the local cost of fuel is about \$107/drum delivered.

In Rumbek, a local trader would be willing to negotiate quarterly contracts that would immediately reduce the cost of fuel to \$65/drum. The price throughout the region would become increasingly competitive as the roads and accessibility are improved, as well as access to natural gas.

Table #1: Generator Data Table

Town	Generator	Year	kVA	kW	# Units	Total Available kW	Distribution	Notes
Yei	Elin	1976	125	100	6	600	Low voltage 415/240v	Only a few poles left in town
Maridi	N/A	-	-	-	-	-	Low voltage only	Nothing left of electric sys
Yambio	Leroy – Somer	1975	120	96	4	384	Low voltage 415/240v	Most pole left standing
Rumbek	N/A	-	-	-	-	-	-	Nothing left of electric sys
Other Generator Sites of Interest								
Yambio	ONAN		100	80	3	240	240/416v	Old Generators on site, but not repairable
TV station								
Operating Compound Generators								
Yambio	Olympian (Cat)	2001	27	21.6	3	55	415/240v	Maintained under contract by Caterpillar dealer in Nairobi Operated by local electrician
UN Compound Generator Large								
UN Compound Gen: Small #1								
Gen: Small #2	Olympian (Cat)	2001	21.8	17.4	3		415/240v	
Rumbek	F.G. Wilson	2002	20	16	3	32	415/240v	Maintained by company electrician from Kenya
AFEX Compound Units #1 & 2								
Unit #3	F.G. Wilson	1998	14	14	1		240v	Now used only for Backup unit

Recommendations

There is a need for a tiered approach to electrifying Southern Sudan. This approach will assist the country in transitioning from a humanitarian relief environment to long-term sustainable

development. Cooperatives within Sudan are widely accepted and appreciated which is ideal for establishing a co-op based organizational approach.

NRECA believes that restoring electric service in key communities of New Sudan will require unique solutions. This is due to the tremendous number of variables affecting infrastructure restoration, especially electricity restoration; therefore, there is no cookie-cutter approach to establishing or reestablishing electric service within the devastated areas. However, there are steps that can be taken to bring the lights back to these towns. The following outlines the initial electrification efforts that should be taken in New Sudan.

Electricity Supply

The initial task will be to consolidate the scattered micro-generation electric systems into a single energy platform. This will bring economy of scale and increased efficiency to the dispersed generation now in use, and provide an immediate increase in the availability of electricity within the commercial centers using existing fuel supplies. The installation of streetlights should be a priority. Streetlights effectively increase the level of safety and lengthen the functional business hours for the small commercial enterprises.

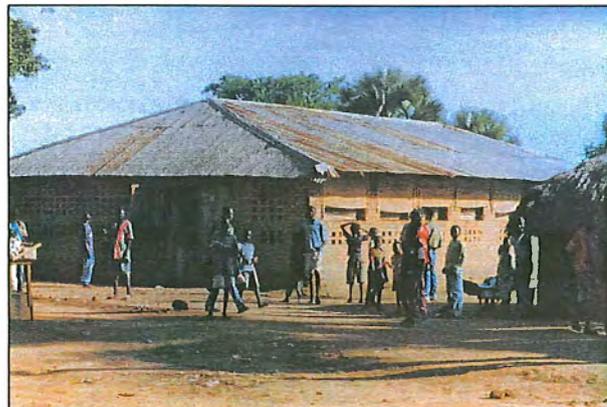
This first step will provide electricity from banks of diesel generators located in each community. Initially there will be a need to bring about twelve 100 kW generators in from Kenya. These units would initially operated under contract with the supplier in Kenya.

Implementation plans should include provisions for approximately 50 kW of supplemented generation provided through renewable energy sources at each site. The additional generation, supplied in modular (drop-in) units to create a hybrid generation system, will use solar and/or wind energy to offset petroleum use thereby decreasing fuel use and improving the environment. The situation faced in each of the communities creates an isolated “green-field” situation that makes the introduction of mixed-generation highly beneficial. The introduction of a hybrid generation system will help lower increase fuel economy and should lower the blended fuel cost. A hybrid generation approach will lengthen the life of the generators and decrease the need to operate diesel units in low-load / no-load situations. Additional benefits include the immediate availability of 24-hour electric service, which increases safety and security, provides power for cold storage, improves medical care, and enhances communication and information flow.

The initial distribution requirements for each town would be approximately four line-km of three-phase and four line-km of single-phase



Existing pole and street light



Old generator building in Yei, New Sudan

primary (medium voltage) lines. Also needed will be complementary levels of secondary lines, powerline material, and special equipment (transformers and meters).

Initially, diesel fuel should be purchased by contract from suppliers now working in the country on three-month contracts. This will allow for continuous supply of fuel while allowing for price competition that will bring the cost of fuel down dramatically once peace is established.

The second step should take place after the roads are improved, adequate fuel supplies secured, and electricity demand increases. At this point larger units such as combined-cycle generators can be employed. These units can be quickly and efficiently installed in 1000 kW increments. This should remain a favorable option as the unit cost continues to decline while the ease of installation for these modular systems grows. During this same period, the development of other alternative energy supplies should be explored and smaller scale units such as mini and micro hydro systems should be developed and implemented.

The third tier will be the development of a regional electricity supply grid that employs larger scale generation and transmission into play to supply the growing electricity demands within the region.

Organizing the Electric Systems

The organizational approach for each tier will be based on an appropriate co-op, community ownership model. The initial effort will be to establish community level energy-service organizations (i.e. co-ops, associations, membership corporation, etc) to be implemented the under close guidance from rural energy development organization such as NRECA.

The initial operating organization will be a local co-op NGO supported by NRECA. These local-level co-ops will operate will be incorporated into a larger scale consolidated services cooperative organization once it has been established. This will allow for the greatest latitude in initial operation service while maintaining the flexibility for long-term expansion and growth.

The second and third tiers organizational approaches will build and expand on these. The second tier efforts will focus on developing regional level cooperative organizations (NGOs) made up of clusters of community level organizations to provide the scale necessary to effectively manage and operate the dispersed systems. In addition, during this phase, supplemental support NGOs will be developed to supply needed services such as training and skills development, purchasing and procurement, and contracting services.

The third tier organizational approach will take much longer to implement and will include assisting the New Sudan authorities in developing a broad-based approach to electricity that allows organizational diversity to meet the growing energy needs within the country and that provides access to the greatest number of people in New Sudan. This effort includes policy guidelines, legislative language development, and the establishment of various oversight groups and agencies. Due to the level of complexity and multi-sector involvement, addressing these issues should be made a priority at the earliest possible opportunity.

Preliminary Tasks Required

A series of action plans will need to be developed for each stage of the electricity process.

1. Initial Action Plan.

- The focus of the initial electrification efforts will to begin the transition from emergency response toward development with a primary goal of developing a single electric energy platform.
- The plan should identify and serve critical loads and sites such as hospitals, food distribution centers, and staging areas.
- Interim actions should address providing electricity to local commercial entities to help reestablish community viability, and to the provisions of street and public night lighting to increase safety and to promote feelings of peace and security.
- The plan should identify the activities necessary to begin a comprehensive and effective approach to the provision of electric service.
- This implementation period should be kept to a minimum, as this will be the most costly part of the electrification process. During this initial period operational funding will depend heavily on outside sources.
- It should be noted that much, if not most of the equipment and materials utilized during this period would be completely expended. Few actions during this phase will lead to long-term solutions if left unmodified.

2. Transition Plan and Actions

- Interim actions continue to transition away from emergency response and moves progressively toward long-term solutions.
- This should include an action plan that modifies the emergency response activities and consolidates these isolated activities in an increasingly comprehensive response approach.
- Target outputs of the plan usually include addressing the increasing generation demands, growing equipment and material logistics problems, and initiating training, capacity building, and technology transfer. To empower the local communities to take over the long-term operations of the electric systems.
- The interim period should be planned with a definite life cycle that leads as quickly as possible to the implementation of long-term responses.

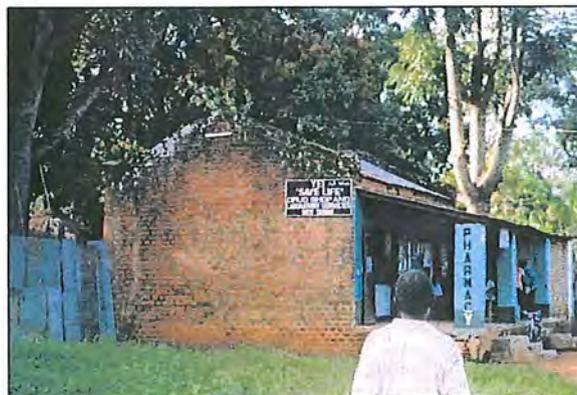
3. Long-Term Response and Planning.

- Long-term solutions do not effectively respond to local needs during either the emergency response or the interim periods.
- A long-range action plan should be a critical output of the interim period activities. This plan should lay the groundwork for continuing rehabilitation, provide a roadmap for expansion, and put the legislative framework into place. The long-term responses should be considered from the start; however, groundwork for sustainable electrification should begin by charging for energy use at least to cover operational and maintenance costs.
- A country level master plan is often one of the outputs of the long-range plan.

The technical details of the mission are now being evaluated, including the existing level of energy expenditures for each community, the cost of diesel delivered to each community, potential productive uses of electricity that can be encouraged, and the level of training that will be required for each of the operating personnel.

Also Needed for Success

The approach to electrification in Sudan must focus substantially on training. The 40 years of almost continuous conflict has left a large part of society devoid of basic education. This means that any successful approach must include a significant level of training for every position and trade including - technical training of operators and technicians and electricians, and professional development of office, bookkeeping, and management staff personnel.



Existing local business using electricity from a small

The approach to electrification must also include a major economic development effort. At a minimum, this effort should provide the introduction of productive uses of electricity, and the empowering of small-cottage industries throughout the region. Small business development must be a primary concern. The development of a strong agribusiness and commercial enterprise sector is the only means of bringing much needed capital into the society and providing the long-term economic sustainability required for success to the electric sector by society itself.

IDP Reintegration and Community Development

CHF International participants assumed the lead role in assessing community development opportunities in general and in particular the conditions confronting IDPs and returning refugees in several sites in South Sudan, including Lobone, Yei, Maridi and Yambio in the Equatoria region, and Panyagor in Bor County of Upper Nile, and Rumbek in the Lakes regions as well as Eastern and Western Equatoria.

The assessment consisted of both a review of background documents and fieldwork. (See attachments for details notes of the assessment activities.) The current context surrounding the return and reintegration of IDPs and refugees to their home areas in New Sudan is a confluence of “pull” and “push” factors that will determine the rate, proportion and strategy of return for each subgroup in the displacement.

Pull Factors (i.e. incentives that will attract IDPs and refugees back to their home areas) include:

- **Kinship relations:** The most commonly mentioned reason for wanting to go back to home areas was to be reunited with family. People both in the camps and receiving communities assume and anticipate that relatives will return and stay with kin for the first phase of their integration, or until the returning relatives have build their own homes. Depending on the time of year when returnees arrive, they would stay with their kinship for 3-9 months.

- Access to traditional livelihoods:

On numerous occasions, IDPs are motivated to return to home areas by the desire to return to their traditional livelihoods, namely cattle rearing and fishing. This motivation includes access to ancestral homesteads and grazing lands. This is particularly true of those IDPs from Bor County.

- Access to Land: There is a sense of pressure among IDPs and refugees that they must return to their home areas sooner rather than later so they may stake claims on their traditional or ancestral lands before someone else does.

- Donor-Sponsored Assistance: IDPs, refugees and local authorities have high

expectations that donor assistance will be forthcoming to assist them in moving back to their home areas. If assistance is made available (e.g. transportation, resettlement kits, food security support), families and communities will be ready to exploit those opportunities and resources.

Resettlement Issues

In discussion with North Bor County Administrators, they indicated that several assessments on resettlement were made, but none recently. In 2000, 16,000 IDPs/refugees voluntarily returned from Kenya and Lobone. He discussed that the program ended because funding ran out and people refused to return because there were no facilities. They indicated that the resettlement process would take two or three years and should be initiated at the onset of the dry season in November. Upon the return of a few key people in the family the first six months boreholes would need to be drilled and housing built.

The second year, more family members would arrive and they would settle initially with relatives. The main issues are security and boreholes. They planned to resettle families west of the Jongolai Canal which is currently vacant. They indicated that there would be no problems with land tenure since "everyone knows whose land is whose and the chiefs can sort such questions out." Flooding in Bor County worsened in 1988 when a new river formed which empties into Bor County during the rainy season instead of directly flowing into the Nile. As a result, flooding is getting more severe each year and is currently the worst in 14 years.

Security: With the peace agreement, people anticipate that the security situation will improve because the SPLA will have rightful control over the territory of New Sudan and that militias funded by the GOS (e.g. the Neur or Murali in Bor) will no longer have outside support for conducting raids.

Push Factors (i.e. reasons that will encourage IDPs and refugees to leave the camps) include:

- Displacement by returning populations: There is a very real problem looming in the regions with IDP camps. Many of those camps are located in areas where the original population was displaced to another location. Under peaceful circumstances those original populations will also like to return to their homelands, creating pressure on the local IDPs to relinquish land and homes thus pushing out of the area.
- Security: Especially in areas of the south along the Ugandan border, the worsening security situation where the Lord's Resistance Army is operating is pressuring people to move back to their homelands or elsewhere.

- Government Policy: As stated by numerous representatives of the local administration and SPLM, authorities on the regional and national levels prefer that people “go back to where they came from.”
- Lack of economic opportunity and traditional livelihoods: Without full access to land and productive assets in the camps or with tenure over land under cultivation in question, populations are looking forward to returning to home areas where they expect this problem to be resolved because of kinship ties, ancestral lands and abundance of areas depopulated over the last 40 years.

These factors alone are not enough to instigate a full return to home areas. They do not include disincentives that will either move populations to either stay where they are or resettle in a third location, most likely an urban or peri-urban setting. The disincentives are essentially the missing pull factors of home areas and include:

SRRC Capacity

According to SRRC officials, they have major budget constraints and are totally reliant on international aid. For repatriation, the SRRC has the capacity to manage or fund logistics and can assist in the planning and coordination of refugee and IDP returns. They are interested in contributing through organizing reception centers, collecting statistics and helping with provisions for those in transit. The Yambio County Secretary said that at present, they were receiving returns from the Congo and CAR. Returnees register with public security and then SRRC. There is no resettlement camp so returnees are integrating into existing communities. In the past two years, 39,556 have returned.

- Lack of services: The most prevalent concern voiced by IDPs about returning to their home areas is the lack of or poor quality of services in the receiving communities. Although services in the camps were limited and in need of improvement or expansion, they by far exceed those in the home areas. There is a grave lack of primary and secondary schools (secondary are non-existent), teachers, health care, personnel and medications, financial and veterinarian services.
- Lack of basic infrastructure: Return of populations is greatly hindered by the almost complete lack of infrastructure in receiving communities. Roads, bridges, dikes, schools, permanent buildings, water and sanitation, health care facilities, telecommunications, and electricity are rudimentary at best. The lack of services and lack of infrastructure are obviously closely linked and together require substantial investment to even begin to turn the situation around. Some areas of Upper Nile exist in isolation for many months a year due to flooding, poor roads and no telecommunications.
- Lack of economic opportunity: Without access to outside markets, receiving communities (and IDP camp residents) exist on subsistence agriculture. Inputs for achieving greater production or processing of produce are either unavailable because of transportation costs or undesirable because there is no market for selling surplus produce. Small-scale service income generating activities are constrained by lack of capital for starting up or expanding and limited clientele because of the predominance of a barter economy. Several traders and business persons explained that they would more likely relocate to urban areas of the garrison towns because their chances to pursue business opportunities are far greater than returning to

their home areas. Also, IDPs and refugees have acquired education and training while living in the camps but are unlikely to find employment opportunities to utilize those skills in their home areas.

- **Lack of coordination:** This issue cuts to the core of what will make for a more smooth and effective return and reintegration process. Several local administrators, community leaders and NGO representatives lamented the lack of coordination and integrated planning which has left them isolated and working off extremely limited information.
- **Lack of security:** This constraint is ever evolving with the peace process. There are two levels that are critical here: first the level related to the overall civil war and second the level related to interclan and intertribal tensions and conflicts.

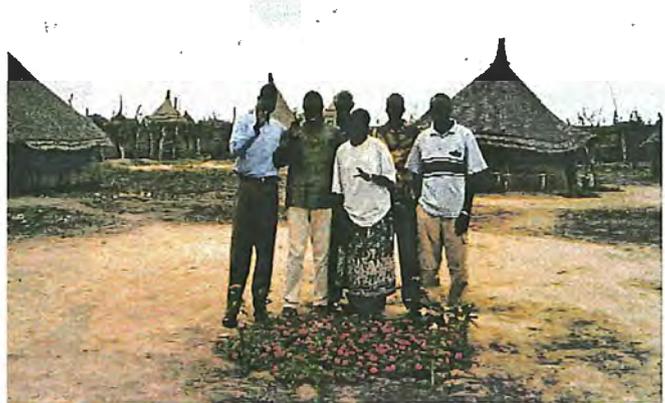
All three of these disincentives most severely impact women and children - women because they are responsible for the household (grinding cereals, fetching water, paying school fees, cultivating, etc.) and are at high risk of health complications related to child birth and children because they are denied education, adequate nutrition and health care.

Recommendations

Working off the premise that it is desirable to support IDPs, refugees and host community populations in their determination of the most viable livelihood and settlement strategies, CHF International recommends pursuing the following types of interventions:

- **Community-driven infrastructure improvements:** Under a community development approach small to medium scale infrastructure improvements should be pursued in the current IDP camp communities as well as home areas. The timing of improvements will be critical to the staging of return and should support the development of health and education services. The County Development Councils and Community Assemblies should play a central role in this process as well as the community-driven economic development planning mentioned below.
- **Community-driven economic development:** A holistic approach to food security should be promoted so that economic development interventions establish stability to reduce vulnerability at the household level as well as focus on income generating activities that will lift individual families and groups of families out of subsistence farming. For example, cooperative and association building can accelerate this and focus collective resources on key issues. Food security measures also need to be closely coordinated with any initiative for developing more transparent and equitable governance mechanisms.
- **Joint planning for return and integration:** It is necessary to arrange meetings between return and reintegration stakeholders before the return of IDPs and refugees actually begins. The seasonal factors will play a decisive role in when, how and whether refugees and IDPs will return to their home areas in a given year. (November/December are the preferred months to return in a year.) This planning process should be revisited periodically and feathered with the activities and development of the local CDCs and Community Assemblies.

- **Participatory land tenure system:** This process should begin in tandem with the participatory planning for return and integration. Through intensive and on-going participation of local government and community representatives, a framework for an adjudication process should be at least outlined for mitigating potential conflict over land and water use in the initial phases of planning and return.
- **Local Governance:** Democratic processes and transitioning from a military style administrative structure to a civil authority will need to be addressed. Once oil revenues (and eventually local tax revenues) begin to flow through the civil administration it will be extremely critical that local community representation has a say in how those resources are allocated and accounted for. Technical assistance and training for capacity building of both local communities as well as civil administration will be critical.
- **Conflict Resolution:** This will need to be a crosscutting theme of all interventions. Closely linked to this will be the need to emphasize “community security” interventions which will establish ways for protecting citizens through both community-driven and government-provided mechanisms.



Urban/Town Planning

It will be inevitable that large numbers of returnees will settle in and around town centers. This will be especially true of the garrison towns, which already have extremely inadequate social infrastructure at the present. For these population centers and for future new settlements it will be critical for local and regional authorities and community representatives to jointly plan for capacitating and expanding services. Establishment of housing cooperatives is one direction that SPLM leadership expressed interest in for urban areas as means of addressing the shelter needs of population centers that are expected to swell after peace is established.

Savings and Credit Services

The WOCCU representative reviewed the general financial factors including savings and credit services and observed that the economy is non-commercial and subsistence-based (without historical understanding of a market-based economy). In addition, it operates primarily on human power without machines or draft animals for agriculture. And, it operates with extremely low levels of household wealth--what could be construed as wealth (land) is illiquid with undefined property rights. As a result, the economy is linked to oil, timber, and cattle. Past history includes a monoculture cotton economy in Yambio.

This is the first country that the well-traveled WOCCU representative had been where a demand for credit has not been expressed as priority number one, or any priority. It was mentioned only once, seemingly as an afterthought.

Overriding priorities include clothing, school, food (salt, sugar and tea), but no thought of investment of developing productivity.

In general, cooperatives have a good name and are seen as a preferred development approach--in contrast to experience in post-socialist countries. With regard to credit unions, there is no specific legal structure (no savings or credit cooperative) law. The cooperative law appears to have been based on Kenya's cooperative law. Key observations include:

- The SPLM must define the future direction of development, and therefore, resource allocation to various priority sectors, e.g. timber, minerals, livestock. Sequencing of actions is extremely important—fundamental economic infrastructure (electricity, telecommunications and financial services) is missing and is critical in facilitating economic growth.
- A Micro-finance bank is being established, with the technical support of Chemonics which is a Grameen Bank replication with no apparent customization to the local environment in structure and process. The trained staff did not have the business plan/pro formas for the Bank.
- With an effective lending interest rate of 80 percent annualized (70 percent real), it is hard to project a loan portfolio that can sustain operations and achieve financial, or even operational sustainability in five years. In particular, lending to agriculture is prohibitive because of the much lower risk-adjusted returns. Savings will earn no return for at least the first year.
- Obviously, the extreme lending interest rate reflects, in large part, the high cost associated with implementation of a Grameen Bank program and its relative efficiency. As compared to other types of microfinance programs, specifically credit unions, this Bank is an extremely high cost alternative as compared to credit unions (operating expenses to average total assets ratio of 3-10 percent) in an economic environment characterized by limited economic opportunities and high risk. The impact in outreach will be small and negligible.
- For the Nile Commercial Bank, the financial statements presented are both incomplete and lacked transparency—capital and fixed assets accounts are missing, and losses are accrued as an addition on the asset side. Lending interest rates annualized are 120 percent. Shares and savings earn no return for the immediate future.

Remittances

“Currently, if I want to get money from my relatives in UK, I need to go to Uganda or Kenya. It is 350 miles from Yambio to Kampala and it takes several days. I have to borrow money for transport and lodging and, by the time I received my money, most of it I owe for the costs of my trip.”

“ I wanted to collect \$11,000 from my brother in America. I had to take a bus and airplane to Nairobi which cost me \$340 and it took over one month in travel to get the money.”

Discussions with individuals seeking remittances.

Five months into operations, interest income due is delinquent (approximately 40 percent). All bank staff has loans outstanding—makes up 30-40 percent of loan portfolio—and is delinquent in repayment. Bank staff quality is poor—staff could not explain the financials, pricing, etc. One of the bank staff had experience working for the Unity Bank in Yambio in the early 1990s.

Recommendations

In order to facilitate economic growth, the fundamental economic infrastructure—electrification, telecommunications and financial sectors—must be present. In particular, no other sector in a market economy is more important for promoting/facilitating economic and community development than an efficient, effective and well-capitalized financial sector.

Major segments of agriculture cannot modernize without the support of a strong formal financial system. An increasingly capital-intensive and market-oriented agriculture system requires working capital and seasonal loans along with medium- and long-term credit for on-farm investments. And, people must learn how to manage their assets/liabilities; and in particular their financial savings—financial and non-financial. But the simple fact is that large majorities of the people have no wealth, either in financial or non-financial savings. The lack of wealth severely constrains their ability and opportunity to climb out of or ease poverty conditions, and limits their access to formal credit. As a result:



Rumbek

- WOCCU proposes to establish a **Credit Union Bank** along the lines of the European Cooperative Banking Model (not the African Cooperative Banking Model). This is a system of banking in which a banking institution conducts business at branches or offices at locations other than the main or “central office”, as distinguished from single-office banking. In many countries, e.g. Germany, France and the Netherlands, this type of cooperative branch system of banking is predominant, and to a lesser degree, branch banking exists at the state level in the United States. Each cooperative bank branch, under this type model of banking is considered separate, distinct, and autonomous in their operations. But each cooperative branch must meet the banking prudential regulations (with the exception of the nominal capitalization requirement for licensing) and be internally supervised by the central office. WOCCU is currently working with two credit unions in Mexico that reach a million clients through 300 branch offices.

Initially, as development efforts begin, the Cooperative Bank will be dependent upon a services and income structure built on remittances, payments and settlements. The establishment of a Cooperative Bank will facilitate remittances, both direct and indirect through the “hawala” system. Assuming anecdotal information is accurate, current levels of

remittances through Western Union in Uganda and WOCCU's experience with deposits of remittances in credit unions, roughly \$500 thousand per year would be held by members in a Cooperative Bank. Further, the Bank will offer a payment system and international settlements for donors and local government. This is similar to what IPC and the Microenterprise Banks have built their services and income structure around in Bosnia, Kosovo, Georgia, etc.

- Concrete, tangible wealth transfer for immediate effect—the Project design involves transferring financial resources to women heads of household in the form of shares in the New Sudan Cooperative Bank and deposit savings. Each qualifying woman head of household will have transferred into their share and deposit savings accounts US\$25—\$10 in shares and \$15 in a one-year time deposit. The deposit savings account will be in the form of a time deposit that can be used as a compensating balance—collateral. As an incentive to save, if at the end of three years, the average savings balance increases by 25 percent, an additional \$10 will be transferred into the savings account, and \$5 into the share deposit account.

Outreach and impact for \$1 million in financial transfer is 25,000 head of households, and roughly two hundred thousand extended family members.

Five hundred thousand dollars in tier 1 capital will be transferred as institutional capital. In addition, WOCCU will seek to attract financial investment from other international cooperative financial institutions, both credit unions and cooperative banks.

Itinerary for OCDC Trip, October 16-24, 2003

Group 1 (Focus on Agriculture)**Friday, October 16**

In Yei, meet with:

- Director of Customs & Excise – Michale Amule
- PLM Equatoria Regional Government – regional secretaries, directors and others
- Sudan Relief and Rehabilitation Commission (SRRC) – Luka Achaye & Lexon Bashi Amozai
- Secretary of Cooperatives
- Secretary of Telecommunications – Gier Chuang Aluong and colleagues
- Ann Itto, Chair of the Agriculture/Natural Resource Management Pre-Interim Task Force
- Market

Saturday, October 18

Travel to Maridi (by car)

In Maridi, meet with:

- County Secretary – Samuel Bati,
- CDC - Paul Simon
- SSRC - James Benson

Sunday, October 19

- Visit of Hydro Dam
- Equatoria Foods Honey Processing, Maridi County Commissioner
- CDC and Farmers Association – Paul Simon Mihandis & Andrew Joseph
- Chamber of Commerce – Beston Buwaza
- CRS
- CARE
- Honey prod center
- Hospital
- Farmers Association

Monday, October 20

Travel to Yambio (by car)

In Yambio, meet with:

- County Secretary
- SRRC County Secretary – Christopher Mamu Bennet (Acting)
- SRRC Relief Coordinator – Francis Francisco
- Representatives of farmers, livestock and agriculture associations
- Nile Commercial Bank – Samson Arab

Tuesday, October 21

Day trip to Nzara (1 hour outside Yambio):

- ❑ Visit the Agro-Industrial Complex, Arthur Saed, engineer
- ❑ SSARP Technology Training Center

Wednesday, October 22

Travel to New Site (aka Kilke)

Meeting with and Debriefing for SPLM Commission on Economy

- ❑ Chuor Deng, Industry and Mining
- ❑ Jaboc Marial, Roads and Bridges
- ❑ Deng Chuol Malang, Human Resources
- ❑ Michael Roberto Kenyi, Agricultural Planning and Coordination
- ❑ Ayom Marh Fou, Finance
- ❑ Jaden Tongun Elilio, Agriculture
- ❑ Michael Amule Joseph, Customs and Excise
- ❑ Stephen Komoyangi, Commissioner for Cooperatives and Rural Development
- ❑ Francis Latio Michael, Finance
- ❑ Bandindi Pascal Uru, Commissioner of Agriculture and Animal Resources
- ❑ Anne Itto, Natural Resources Management

Thursday, October 23

In Rumbek, visit:

- ❑ Meeting with three Secretaries
- ❑ Visit Cattle Camp
- ❑ Rumbek Secondary School
- ❑ UN
- ❑ Market area including cooperative store

Friday, October 24

Depart Rumbek for Entebbe (by plane)

* Stay overnight in Entebbe

Group 2 (Focus on IDPs)

Thursday, October 16

Travel to Yei (by plane, early morning)

Friday, October 17

In Yei, see above:

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Saturday, October 18 Saturday, October 18

Travel to Lobone (by plane)

In Lobone, meet with:

- SRRC Director – Luka Achaye
- SRRC Regional Director – Lexon Amozai
- CRS Staff – Victor Williams (Acting Manager)
- Local Authorities (Payam Administrators)
- SRRC Officer Manager – John Bor
- SRRC Secretary – Michael Lam

Sunday, October 19

Morning visit to Catholic Church

Afternoon visits:

- Tour of IDP Camps
- Meeting with group of women in Boma II (14 women)
- Meeting with traders in Lobone (12 men)
- Sudan Medical Care
- Market and Secondary School
- Norwegian Peoples Aid (NPA), Jesuit Educational Project

Monday, October 20

Meeting with Community Leaders from Boma I and II (about 50 total, 12 women, 16 chiefs, 6 judges, several priests)

Travel to Panyagor (by plane), Panyagor is a potential resettlement site for IDPs/refugees

Tuesday, October 21

In Panyagor, meet with:

- North Bor Director – George Walkuol
- Educational Commissioner
- SRRC Secretary – David Pancho
- Visit CARE project, Women's Project
- Market area and former Canal Project Center

- Meeting with two chiefs – Kuer Bulrui & Mayon Reech Ajamg

Wednesday, October 22

Travel to Rumbek (by plane)

In Rumbek, see above

Visit USAID-funded activities

Thursday, October 23

In Rumbek, see above

Friday, October 24

Depart Rumbek for Entebbe (by plane)