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USAID OFFICE OF FOOD FOR PEACE
SOUTHERN SUDAN
BELLMON ESTIMATION

June 2009
This publication was produced for review by the United States Agency for International Development. It was prepared by Fintrac Inc.

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PREFACE

During the period April-June 2009, the Bellmon Estimation Studies for Title II (BEST) team undertook an analysis aimed at generating recommendations for a Bellmon determination to be made by USAID. The purpose of the analysis was to determine that the direct distribution and monetization of U.S. agricultural commodities provided for use in Southern Sudan during FY2010 through Title II meet the criteria set forth in the Bellmon amendment.

CONTENTS

ACRONYMS

ANLA	Annual Needs and Livelihoods Assessment
AWD	Acute Watery Diarrhea
BEST	Bellmon Estimation Studies for Title II
CDSO	Crude Degummed Soya Oil
CFSAM	Crop and Food Security Assessment Mission
CIF	Commodity Insurance and Freight
CPA	Comprehensive Peace Agreement
CPI	Consumer Price Index
CRS	Catholic Relief Services
CSB	Corn Soya Blend
DEV	WFP Development Program
DMFSS	Disaster Management Food Security Sector
EBF	Exclusive Breastfeeding
EES	Eastern Equatoria State
ENRDC	Chronic Malnutrition Reduction Strategy
FAO	Food and Agriculture Organization
FANTA-2	Food and Nutrition Technical Assistance project
FFE	Food for Education
FFT	Food for Training
FFW	Food for Work
FOB	Free On Board
FY	Financial Year
GAM	Global Acute Malnutrition
GDP	Gross Domestic Product
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
HPG	Humanitarian Policy Group
IDMC	Internal Displacement Monitoring Centre
IDP	Internally Displaced Persons
INDECA	National Institute of Agricultural Commercialization
IOM	International Organization for Migration
IPP	Import Parity Price
LRA	Lord's Resistance Army
LZ	Livelihood Zone
MCHN	Maternal Child Health and Nutrition
MEWIT	Merchandise Wholesale and Import Trade Enterprise
MFI	Micro-finance Institution
MIS	Market Information System
MMU	Monetization Management Unit
MOE	Ministry of Education
MOF	Ministry of Finance
MT	Metric Ton = 2,204.62 pounds
MYAP	Multi-Year Assistance Program (PL-480 Title II)
NBG	Northern Bahr el Ghazal

NES	Northern Equatoria State
NGO	Non-governmental Organization
OCHA	Office for the Coordination of Humanitarian Affairs
PM2A	Prevention of Malnutrition in Children under Two Approach
PRRO	WFP Protracted Relief and Recovery Operations
SAVE	Save the Children
SHHS	Sudan Household Health Survey
SSCSE	Southern Sudan Commission for Census, Statistics and Evaluation
UNHCR	United Nations High Commission for Refugees
UNMIS	United Nations Mission in Sudan
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
USG	United States Government
VAM	Vulnerability Assessment Mapping
WES	Western Equatoria State
WBG	Western Bahr el Ghazal
WFP	World Food Program

1.0: EXECUTIVE SUMMARY

This report is produced as part of the process of assessing the feasibility and impact of introducing multi-year development programs to Southern Sudan. It is based on a desktop study and field work conducted during April through June 2009. It is not intended to reassess levels of food production, nor does it shed new light on national levels of food security. This report draws heavily upon the latest work by the Crop and Food Security Assessment Mission (CFSAM)[1] and Annual Needs and Livelihoods Assessment (ANLA)[2] teams. It does not seek to repeat the study conducted by (Food and Nutrition Technical Assistance) FANTA in determining the most appropriate states and priority objectives for multi-year assistance program (MYAP) food aid-based assistance.[3] Rather it assesses the potential impact of food aid-based assistance from a Bellmon perspective, i.e. considering the potential disincentive effects on domestic production and markets, along with ensuring adequate storage facilities for Title II commodities.

The report consists of an overview of the political, economic, agricultural and social situations in Southern Sudan, all of which impact substantially upon both food production and marketing, and the process of food aid distribution. There is also an assessment of the nature of food security in the country, including brief analyses of those factors that appear to most affect food security. The current food security situation is then considered, followed by a description of current food aid distribution initiatives, their constraints and impacts, and an assessment of the current state of the market for food commodities. In light of the above assessments, the potential impacts of future MYAPs are considered, and the conditions under which such initiatives might be most successful from a Bellmon perspective are discussed.

1.1 MONETIZATION ANALYSIS

The study team was requested to consider the feasibility of monetization options in Juba.[4] From the perspective of market economics, sorghum could be readily monetized. For most of the year, domestic grain markets throughout much of the country appear to be almost completely dominated by imported white sorghum. Prices remain high and local production remains unaffected by the presence of imported goods. Provided that awardees were able to import sorghum of equivalent quality (i.e. a dual purpose grain that could be used for both flour and brewing), then it would be possible to displace some of the imported sorghum from the market.

There are two constraints to such monetization. First, it appears that the sorghum currently imported by USAID is less preferred than the white sorghum imported from the North. Secondly, the structure of the market is such that it would be necessary to undertake multiple sales of

[1] FAO/WFP, 2009. "Crop and Food Security Assessment Mission to Southern Sudan, 6 Feb 2009" accessible ftp://ftp.fao.org/docrep/fao/011/ai479e/ai479e00.pdf.
[2] WFP South Sudan VAM Unit, 2009. "South Sudan Annual Needs and Livelihoods Assessment, 2008/2009" accessible http://www.internal-displacement.org/8025708F004CE90B/(httpDocuments)/4FF1FD20B8B21C50C12575A1005E6A79/$file/Final_Final_31_03_09+ANLA+Report.pdf.
[3] Sudan Food Assistance Transition Study, Washington, DC: Food and Nutrition Assistance Project, December 2007.
[4] This brief analysis is meant to inform future consideration of monetization to support future programs in Southern Sudan.

small lots in rural areas if adequate sales volumes were to be achieved.[5] The second constraint might be overcome if the sorghum were monetized, or sold to the Government of Southern Sudan (GOSS).

Small lot monetization sales have been undertaken successfully in other countries (e.g., ACDI/VOCA USAID Title II Program in Rwanda), but it would require further investigation to determine the most effective modality of sorghum monetization in Southern Sudan. Nevertheless, the economic viability of small-lot sorghum monetization should be considered if monetization is undertaken in the next year or so. At such time, an assessment of market conditions should be considered if monetization were to be undertaken in the future, in which case a reassessment of market conditions would be necessary.

1.2 DISTRIBUTION ANALYSIS

The transition from emergency relief to non-emergency development aid in Southern Sudan will present multiple challenges for Title II awardees, many of which will revolve around issues of targeting households with chronic food insecurity, in an environment where large pockets of acute food insecurity will remain for the foreseeable future. To determine how future MYAPs might best be located and targeted, so as to maximize the efficient use of Title II resources, and thereby avoid introducing a substantial disincentive to or interference with domestic production or marketing, this distribution analysis:

- Discusses the relationship between food security and Southern Sudan states, livelihood zones (LZ), residency status (i.e., returnees, internally displaced persons (IDPs) versus residents) and wealth status in order to highlight possible appropriate indicators for targeting;

- Investigates current production and market conditions relevant for future food aid programming;

- Highlights key field observations regarding ongoing program effectiveness and current constraints to effective implementation which will be important to consider in designing future MYAPs so as to avoid introducing production disincentive or marketing disruptions;

- and provides state-specific analyses which should be consulted for supplemental Bellmon-related guidance.

Key Findings of the study include:

Food insecurity is widespread. The presence of food secure, chronically food insecure, and acutely food insecure households within individual states or LZs will require careful design and implementation of Food for Peace programs to ensure maximum food security impact. Residence status is one key factor affecting acute food insecurity, while household wealth is well correlated with chronic food insecurity. As noted in the recent FANTA and ANLA studies, three other categories of households are more prone to food insecurity, including female-headed households, households with children under 5, households that depend heavily on casual labor and petty trade for their livelihoods, and households regularly affected by shocks.

[5] Adequate volumes are assumed to be those required generate at least US$ 5 million annually, i.e. 10,000 MT of sorghum at current prices.

Food aid has been primarily used for emergency purposes. Despite the signing of the Comprehensive Peace Agreement (CPA), and a planned transition to development aid, there will remain substantial need for ongoing relief. Three awardees have had food aid operations. In 2008, programs included General Food Distribution (GFD) (mostly directed towards IDPs and returnees, though also provided to residents in areas of high return or displacement), Food For Education (FFE) school feeding, therapeutic feeding, supplementary feeding, Food For Recovery (FFR), and institutional feeding programs. The Food For Education, Food For Recovery, and General Food Distribution to returnees appear to have suffered a high probability of inclusion error primarily due to inadequate staffing for supervision and implementation.

Regarding the **suitability of food aid commodities**, USAID Title II sorghum is appropriate for Southern Sudan, given its predominance in the local diet. Indeed, sorghum is more appropriate, over a wider area, than any other cereal. Red sorghum is less preferred than local varieties, such as the imported white sorghum from the north, which are generally used for multiple purposes. Though not widely grown, if at all, lentils are preferred to many other pulses. They also have a short cooking time which makes them both less costly in terms of fuel, more environmentally friendly and less of a hazard to the respiratory health of those tasked with household cooking. Vitamin A fortified soybean oil, which is not produced locally, is widely considered to be a high value cooking oil. Oil is appreciated as a food, but not consumed in great quantities, mainly due to its price.

The greatest need for distributed food aid is during the cultivation period, April through August inclusive, in the southern parts, and a month later further north. However, if in the previous year the harvest was poor (e.g., harvesting period for green maize begins in August), then food aid is required earlier than this.

Despite evidence of fairly well-integrated markets, small-scale farmers are largely unresponsive to market prices. Key constraints to expansion of production include lack of technical skills, income poverty which restricts purchase of basic agricultural inputs, perceived risk associated with inter-clan rivalries and cattle-destroying crops and, for IDPs specifically, access to land. The result is that poorer households often produce insufficient food supplies to either support their own household consumption or generate sufficient income to meet household consumption needs through market purchases. During food shortages, many households use severe coping strategies such as selling animals or other assets in order to buy food; skipping meals; or simply not eating at all on certain days.

Though they report the impacts as a normal part of the business environment, traders appear negatively impacted by food aid distribution under current program operations. Grain markets are dominated by imported grains which are generally sold at import parity price. Traders report price reductions of by 10-15%, and declines in sales volumes by as much as 50%, for sorghum (the primary staple) as well as other cereals including maize and wheat. Food aid has consisted of sorghum, predominantly, followed by soybean oil; and was found for sale in markets in at least four states. Thus, while traders regarded price reductions associated with distributed food aid as a regular part of the business environment, producers stated that the prices they receive for their crops are not high enough to offset the financial risks associated with investments to increase crop production.

Physical conditions in Southern Sudan make effective implementation of food aid programs extremely challenging, and future food aid programs must address these challenges to avoid substantial leakage. Several factors contribute to the difficulty of delivery of food aid without risking substantial leakage. Most beneficiaries live in widely-dispersed and

small communities (50-100 people per settlement), surrounded by small plots, at a distance from passable roads. There is an overlap between the hunger season and the rainy season, which makes accessing these communities during their time of greatest need especially challenging. Assessment and supervision of food aid were reported as difficult by all Awardees.

Community-based targeting is problematic because clan favoritism might impede properly targeted food distribution, and increase the possibility of inclusion error.

According to data from Awardees, nearly one-third of all food aid resources (MTs) have been directed towards IDPs and returnees, who face temporary food insecurity due to the lag time from crop planting to crop harvesting. The recent war has resulted in over one million refugees and internally displaced persons (IDPs) returning to Sudan. Clan structures favor the return of a family to its original clan, but are hostile to returnees settling in new areas.

Asset wealth is one food aid targeting indicator that could be used to reduce inclusion errors for multi-year programs. Asset wealth affects availability, access and utilization of food on a long-term basis for residents, IDPs and returnees. Households primarily experience food deficits when they face cash deficits, since many households rely more on the imported food sold in markets for their source of food than on subsistence farming. A focus on wealth groups within LZs, instead of community-based targeting, and use of commercial partners for supervision, will help reduce inclusion errors.

Many different types of programs will be appropriate in the upcoming MYAP cycle, including those identified by FANTA in its study, including Food For Work (FFW), Food For Training (FFT), FFE, and maternal child health and nutrition (MCHN). MCHN interventions will require a multi-prong emphasis on improved nutrition and improved access to clean water and sanitation, along with basic health care to prevent and treat infectious diseases. The co-existence of high rates of both chronic and acute malnutrition in children under 5 underscores the importance of both recuperative and preventative approaches to early childhood malnutrition. Integration of health-related components into food aid programs will enable efficient utilization of USAID Title II resources, and aid in attainment of the overarching goal of sustainable development.

The degree of staffing and supervision to effectively implement such programs will ultimately ensure a future food aid program will avoid introducing disincentives to production and market disruptions at the local level. Specifically, MYAPs should allow for extensive supervision to ensure minimal inclusion errors, sufficient to allow a focus on wealth groups within LZs that is not dependent upon community-based targeting. Given the lack of capacity within local authorities and the costs of building increased supervisory capacity into the implementing agencies, it is recommended that commercial partners be used to enhance supervision, especially of FFW programs.

Given the challenges of attracting and retaining sufficient staff to implement programs, in some cases, geographic targeting may be the most efficient option. The extent to which certain states host a larger percentage of extremely chronically food insecure households will be an important consideration for the design of future food aid programs from a Bellmon perspective, since the greater the representation of such households in a given state, the more likely food aid will represent additional consumption.

1.3 STORAGE ASSESSMENT

There is adequate port capacity in Djibouti. Mombasa port is also available, though a recent report by RATIN (a trade data system in Nairobi under the USAID/COMPETE project) notes substantial congestion at the port, with vessels required to wait for up to 7 to 10 days to secure berths. It further notes:

> Grain Bulk Handlers Ltd in Mombasa has been discharging around 7,000 metric tons (MT) per weather working day. Around 40% of the vessels are now discharging conventionally. The port is struggling to handle more than 250,000 MT a month which is 20,000 MT below monthly maize consumption demand and does not take into account additional reductions when wheat and other grains are discharged.

There are adequate, clean and secure storage facilities available in Juba, and to a limited extent, up-country. World Food Program (WFP) has over 93,000 MT capacity under their control or partner control, and across all areas. See Annex I for further details.

2.0: COUNTRY BACKGROUND AND OVERVIEW

2.1 POLITICAL OVERVIEW

Sudan has suffered more than twenty years of civil war. The Comprehensive Peace Agreement (CPA) with the government in Khartoum was finalized in 2005, granting Southern Sudan much autonomy.[6] The CPA requires disparate groups in Southern Sudan to work together, resulting in an uneasy peace.[7] Local conflicts between clans,[8] and between residents in Western Equatoria (WES) and the Lord's Resistance Army (LRA), continue to destabilize the country and derail the referendum process.[9] In addition to political uncertainties, many in Southern Sudan are uncertain whether the government in Khartoum will relinquish the rents derived from oil resources in the south, or profits from the agriculturally-productive "Greenbelt" in Western and Central Equatoria.

While the new Southern Sudan government has espoused development, its current low level of institutional capacity has resulted in limited achievements. A large share of government revenue has been spent on salaries and allowances.[10] While oil rents and donor financing have been accompanied by an improved road network, and construction of schools and clinics, overall, limited progress has been made in re-building of infrastructure. Declining oil prices have reduced Government revenues, and the ability to pay civil service wages (particularly for the military).[11] Additionally, state-level administrative capacity and financial resources are also extremely limited.[12]

2.2 ECONOMIC OVERVIEW

Both north Sudan and Southern Sudan use the Sudanese Pound (SDP), which is controlled by the central bank in Khartoum.[13] While separate gross domestic production (GDP) figures for Southern Sudan are not available, GDP for Sudan in 2007 was $46.2 billion (or $7,995 per capita).[14] The government of Southern Sudan expects to receive 50% of oil rents and customs revenues from the government in Khartoum, equivalent to $1.4 billion and $29.6 million, respectively. A further $600 million is anticipated from the donor community[15] for FY 2009.

[6] Pending a referendum in January 2011, when the people of Southern Sudan will have the option to vote to secede from Sudan to form a new country.
[7] Part of the Southern Sudan army remains a coalition of militia, loyal to local leaders rather than the new government. Local skirmishes between supporters of political rivals are common.
[8] Conflicts are normally centered on cattle ownership or grazing rights.
[9] WFP has noted that the incidence of local conflict has escalated considerably over the last twelve months, suggesting that the political climate is becoming less stable.
[10] This is considered by some to be one factor contr buting to the recent rapid increase in prices, especially in Juba.
[11] Given the heterogeneous nature of the military forces, the risk of further destabilization is considerable.
[12] State level authorities rely on the ad hoc collection of substantial taxes and license fees to finance administrative costs. Increased public sector spending has been blamed for the rise in prices.
[13] As a result, the GOSS is unable to influence monetary policy.
[14] The World Bank
[15] GOSS Ministry of Finance and Economic Planned Approved Budget 2009

As for trade, the only data available is from Khartoum, which fails to account for north or south transfers of domestic and international goods. What is apparent is that a considerable volume of agricultural and other goods are entering Southern Sudan from the north, Uganda and Kenya; and limited trade takes place between Southern Sudan and the Democratic Republic of Congo (DRC), and with Ethiopia. With the exception of informal agricultural exports from Western Equatoria to the DRC, Southern Sudan generally exports only oil, and Southern Sudan is dependent upon revenues from oil rents and donor financing. The CPA specifies that all trade revenues be evenly split between the north and south.[16]

Southern Sudan's population mainly lives in rural areas, with only 2% of the population living in urban areas.[17] Economic activity is highly informal, with most people engaged in subsistence agriculture, livestock production or fishing, and petty trade (e.g., sale of alcoholic drinks, firewood and grass). Political uncertainty has impeded necessary investment and construction, and hence, opportunities for employment beyond the agricultural sector are very limited.[18]

2.3 AGRICULTURAL OVERVIEW

Subsistence agriculture (fishing, crop production, and livestock production) is the main form of economic activity in Southern Sudan.[19] Livestock production is undertaken by both nomadic pastoral peoples and sedentary crop producers. Crop production occurs on a shifting cultivation basis. Annex V describes the nine LZ, which range from biannual crop production in the fertile Greenbelt of the southwest, through annual shifting cultivation throughout much of the north of the country, to pastoral cattle rearing in the arid east. Riverine crop production and fishing-based livelihoods surround the Nile and Sobat rivers.

The highly informal nature of the agricultural sector makes production data for Southern Sudan extremely limited. There are no statistics on livestock. Crop production data are limited to a comparative WFP Crop and Food Security Assessment Mission (CFSAM) examination of cereal and cassava production, which suggest that crop production in 2008 exceeded previous years, and should allow a small national surplus.[20]

As for trade in food commodities, only a small proportion of produce or livestock reach formal markets.[21] This proportion is lower than that found in other subsistence-based economies, due to two factors: extremely dispersed rural settlements, and lack of transport infrastructure to bring goods to market. As a result, it is hard to identify many farmers who consistently bring goods to market; indeed, very few rural households rely on produce sales (less than 11%), and livestock sales (12.2%) as a primary cash source. The markets operating in both rural and urban centers appear to be functioning effectively. Cereals from Khartoum (especially white sorghum) can be found throughout the country, at prices that are consistent with import and transportation costs; while other commodities, including maize, wheat flour and cassava flour, are imported from Uganda and Kenya. For much of the year, markets are dominated by imported agricultural

[16] For customs purposes, Sudan is treated as a single country. The CPA had been managed from Khartoum, up until the beginning of 2009, when the Government of Southern Sudan (GOSS) began to take responsibility for its own customs operations.
[17] The official 2008 census estimates the population of Southern Sudan to be 8.26 million, but the data is subject to considerable debate, estimated between 8.2 to 10 million.
[18] Many hotels are in temporary structures or tents; some state governments operate out of removable temporary structures; and urban centers are surrounded by large areas of huts and woven grass fencing.
[19] Most agricultural production is subsistence-based, with the exception of the Greenbelt LZ.
[20] However, given transport bottlenecks, it is extremely unl kely that any of the surplus production will be cost-effectively transported to deficit areas.
[21] Crop producers often complain of livestock destroying their crops. Traditionally, livestock are highly valued, representing wealth and status, while crop production is generally viewed as an inferior activity carried out by poorer HHs; and there is little or no reparation for damage to crops.

commodities. For reasons discussed in Section 5.6, local production has yet to take advantage of a national market that operates mainly at import parity prices.

2.4 SOCIAL OVERVIEW

The most significant social factor affecting food security is the existence of clans, which act as a barrier to movement and agricultural development. Although there is plenty of land available for crop and livestock production, there is frequent competition for resources, including cattle rustling.

Superimposed upon the clan structure is the impact of returnees and IDPs. The presence of large numbers of returnees and IDPs throughout the country is a major factor impacting food security.[22] The International Organization for Migration (IOM) estimated that from the date the CPA was signed, to June 2008, 1.7 million people had successfully been repatriated.[23] The nature of the clan structure presupposes the majority of returnees almost always return to their own clans.[24] The pervasive presence of strongly cohesive clans binds members of a community by ties of kinship, in a relationship of mutual obligation. While clans provide plots for cultivation, and provide IDPs with food, redistribution of food within the clan may be inequitable.

While some returnees have cash, or still possess assets (e.g., cattle) within the community they are returning to, most come back with few assets. Returnees generally arrive just before the land preparation season, so that the burden upon their own community is minimized to a period of approximately four months. However, some returnees arrive at the end of the harvest period, and require support for approximately ten months.[25] Returnees can affect the food security of a community for up to one year or more, and may become candidates for long-term food aid-based assistance. IDPs, however, tend to suffer acute food insecurity over a shorter time frame.

Many of WFP's food aid initiatives have been for relatively short periods, which may seem insignificant within a chronic food security framework; but are essential for IDPs.[26] Given the low volume of food traded in markets, continuation of IDPs returning home, high numbers of new displacements in 2009, and political uncertainties, demand for emergency food aid will likely increase again. Generally, food aid will continue to be required in many areas of the country. MYAP proposals should make reference to the level of political stability in the program localities, and should only be implemented if a stable development environment can be assured.

2.5 SANITATION AND DISEASE OVERVIEW

An overview of Southern Sudan would be incomplete without reference to the prevailing standards of sanitation and the high levels of morbidity amongst both children and adults across the country. In terms of sanitation, two indicators are significant. The first is the prevailing sources of drinking water (Table 1). The Annual Needs and Livelihoods Assessment (ANLA) data shows that while 50% of respondents now have access to borehole water, nearly 40% of all respondents' access to drinking water is from unprotected sources.

[22] The distribution of returnees is generally concentrated within the Northern and Western Bahr El Ghazal and Lakes states. According to WFP, strategic locations include: NBG, Warab, Jonglei (Bor and Akobo Counties), UN (Panyilang), Unity (Koch, Leer, Mayendit, Panyiar), CES (Juba, KajoKeji) and EES (Magwi County).
[23] Over a 16 month period alone, from February 2007 to June 2008, 365,000 people were successfully repatriated (IOM 2008).
[24] For example, it is not easy for internally displaced persons (IDPs) to develop farms in an area where another clan presides.
[25] If the harvest fails, support may be necessary for an additional twelve months.
[26] The WFP general food ration for returnees is initially for 3 months; and dependent on need, is for an additional 3 months.

Table 1: Type of Water Source Used by Household

Type of Water Source Used	Number	Weighted %
Household water connection	46	1.4
Public standpipe	82	1.6
Borehole/hand pump	2321	49.9
Protected dug well	108	2.8
Unprotected dug well	452	12.2
Protected spring	67	0.6
Unprotected spring	192	3.6
UN/NGO tanker / truck	16	0.4
Vendor	71	2.1
Rain	90	2.1
Rivers/Ponds	985	23.1

Source: ANLA Report 2008/09

Secondly, while approximately 10% of households have access to a traditional pit latrine, roughly 85% have no prepared facilities and use “open air” defecation.

The results of poor sanitation and health facilities are very evident. Table 2 shows the proportions of children under five who had suffered from various conditions in the two-week period preceding the survey.

Table 2: Morbidity in Children Under Five

Morbidity by types	Weighted %
Watery Diarrhea	40.6
Bloody Diarrhea	7.4
Bloody diarrhea- (of those with diarrhea)	12.2
Cough	45.7
Fever	60
Measles	7.7

Source: ANLA Report 2008/09

As reported in the 2006 Sudan Household Health Survey (SHHS), disease patterns showed some variation when disaggregated by state, with diarrheal incidence highest in WBG, WES and Unity. Prevalence of fever was highest in Western Equatoria State (WES), Warab, Lakes and Unity. States with the highest prevalence of suspected pneumonia were Unity, WES and Eastern Equatoria State (EES). High levels of disease affect the utilization of available food; therefore improved sanitation and hygiene practices will be as important as food availability and access in reducing malnutrition levels throughout Southern Sudan.

3.0: FOOD AID OVERVIEW

This section outlines previous initiatives as well as initiatives planned within the next year. See Annex IX for a description of existing food aid programs.

3.1 PREVIOUS INITIATIVES

The last five years in Southern Sudan have seen an overall change, from a solely humanitarian relief situation in response to the complex emergency, to one of rehabilitation and development, which was initiated by the signing of the Comprehensive Peace Agreement between the Khartoum government and Sudanese People's Liberation Movement in January 2005. Reflecting this change, WFP has expanded on recovery food aid activities over the years, despite remaining on a single year EMOP status, while still performing its emergency and humanitarian role. Norwegian People's Aid and Catholic Relief Services have also independently managed food aid programs with USAID Title II funding, through this period up to today, and have coordinated with WFP to ensure the beneficiaries and locations served complement the major WFP program.

Rations provided by World Food Program (WFP) are intended to provide minimum protein, energy and micronutrient requirements in a food basket that contains maize or sorghum, pulses, vegetable oil and corn-soy blend, along with salt and sugar. Norwegian People's Aid and Catholic Relief Services' ration levels are similar to WFP, but without salt and sugar (both Awardees) and without corn soya blend (CSB) (NPA). Table 3 provides summary data on commodities and quantities from USAID Title II/USAID over the past 5 years through the 3 agencies of WFP, Norwegian People's Aid (NPA) and Catholic Relief Services (CRS).

Table 3: Summary of Food Aid by Agency (MT)

Agency	Program	Commodity	In Metric Tons						
			2004	2005	2006	2007	2008	Total	Average
WFP	EMOP	Sorghum/Maize	n/a	87,515	75,279	71,000	64,603	298,397	74,599
WFP	EMOP	Lentils/Split Peas	n/a	8,655	6,273	7,715	7,224	29,867	7,467
WFP	EMOP	Veg Oil	n/a	4,247	4,739	5,155	4,833	18,974	4,744
WFP	EMOP	Salt	n/a	2,150	1,956	1,582	1,393	7,081	1,770
WFP	EMOP	Sugar	n/a	1,860	3,147	1,489	756	7,252	1,813
WFP	EMOP	CSB	n/a	9,206	9,172	4,359	3,458	26,195	6,549
		Total	**-**	**113,633**	**100,566**	**91,300**	**82,267**	**387,766**	**96,942**
NPA	SYAP	Sorghum	6,674	6,665	6,675	6,379	4,474	30,867	6,173
NPA	SYAP	Lentils	993	1,079	920	887	325	4,204	841
NPA	SYAP	Veg Oil	405	417	326	480	481	2,109	422
		Total	**8,072**	**8,161**	**7,921**	**7,746**	**5,280**	**37,180**	**7,436**
CRS	SYAP	Sorghum	7,568	3,816	5,665	4,653	6,268	27,970	5,594
CRS	SYAP	Lentils	1,119	318	688	655	654	3,434	687
CRS	SYAP	Veg Oil	502	212	355	370	409	1,848	370
CRS	SYAP	CSB	456	47	152	366	412	1,433	287
		Total	**9,645**	**4,393**	**6,860**	**6,044**	**7,743**	**34,685**	**6,937**
		Grand Total	**Grand Total**	**17,717**	**126,187**	**115,347**	**105,090**	**95,290**	**161,234**

Source: Awardees. Single Year Assistance Program (SYAP) and Emergency Operations (EMOP).

Note that Average for WFP taken over period of 2005-2008

3.2 PLANNED INITIATIVES

For over 20 years, USAID Title II has been providing emergency food assistance to Sudan in response to urgent humanitarian needs. Starting in 2010, USAID Title II is introducing MYAPs in Southern Sudan to include development food aid programs, which will complement emergency programs.

WFP, NPA and CRS are active in Southern Sudan. WFP has a range of distribution modalities across all ten states of Southern Sudan; NPA works mostly on emergency/relief based activities in four states of Southern Sudan; and CRS is primarily active in Eastern Equatoria State, with some activities in Bor County of Jonglei State.

Further details about planned initiatives can be found in Annex X.

4.0: MONETIZATION ANALYSIS

The study team was requested to consider the feasibility of monetization options in Juba.[27] From the perspective of market economics, sorghum could be readily monetized. For most of the year, domestic grain markets throughout much of the country appear to be almost completely dominated by imported white sorghum. Prices remain high and local production remains unaffected by the presence of the imported goods. Provided that USAID Title II were able to import sorghum of equivalent quality (i.e., a dual purpose grain that could be used for both flour and brewing), then it would be possible to displace some of the imported sorghum from the market.

There are two constraints to such monetization. First, it appears that the sorghum currently imported by USAID Title II is less preferred than the white sorghum imported from the North. Secondly, the structure of the market is such that it would be necessary to undertake multiple sales of small lots in rural areas, if adequate sales volumes were to be attained.[28] The second constraint might be overcome if the sorghum were monetized, or sold to the Government of Southern Sudan (GOSS).

Small lot monetization sales have been undertaken successfully in other countries (e.g., ACDI/VOCA USAID Title II Program in Rwanda), but it would require further investigation to determine the most effective modality of sorghum monetization in Southern Sudan. Nevertheless, the economic viability of small-lot sorghum monetization should be considered, if monetization is undertaken in the near future. If monetization were to be undertaken in the future, a reassessment of market conditions would be necessary.

[27] This analysis is meant to inform future consideration of monetization to support future programs in Southern Sudan.
[28] Adequate volumes are assumed to be those required generate at least US$ 5 million annually, i.e. 10,000 MT of sorghum at current prices.

5.0: DISTRIBUTION ANALYSIS

5.1 WHY WOULD FOOD AID INTRODUCE A SUBSTANTIAL DISINCENTIVE TO LOCAL PRODUCTION AND MARKETS?

The “Bellmon Amendment” requires assurance that a proposed food aid distribution program will not result in a substantial disincentive to or interference with domestic production or marketing in that country. The extent to which distributed food aid has the potential to result in a disincentive to local production, or disrupt markets, rests fundamentally on whether proposed food aid would represent "additional consumption" for beneficiary households, (i.e., food consumption which would not have occurred in the absence of the food aid distribution program). If food aid transfers exceed a household’s perceived needs, the household is more likely to sell the food aid, reduce market purchases, and/or increase household farm sales. Such a response could lower market prices, and/or reduce local incentives to production.

5.2 HOW CAN WE ASSESS ADDITIONALITY IN SOUTHERN SUDAN?

The large-scale nature of the ongoing food aid distribution exercise in Southern Sudan has required the development of suitable indicators that can be used to assist in the targeting process. Unfortunately, food insecurity is widespread across the country and is not well correlated with many population variables. The transition from emergency relief to non-emergency development aid will present additional challenges, many of which will impact the proper planning and effective implementation of future MYAPs. To determine how future MYAPs might best be located and targeted so as to maximize the efficient use of Title II resources and thereby avoid introducing a substantial disincentive to or interference with domestic production or marketing, this distribution analysis:

- Examines the relationship between food security and Southern Sudan states, livelihood zones (LZ), residency status (i.e., returnees, IDPs versus residents) and wealth status in order to highlight possible appropriate indicators for targeting;
- Investigates current production and market conditions relevant for future food aid programming;
- Highlights key field observations regarding ongoing program effectiveness and current constraints to effective implementation which will be important to consider in designing future MYAPs so as to avoid introducing production disincentive or marketing disruptions;
- and provides state-specific analyses which should be consulted for supplemental Bellmon-related guidance (see Annex II for the state-specific analysis).

This analysis is based on field work and a review of secondary data resources including ANLA, CFSAM, FANTA, SHHS, TANGO and FEWS NET reports.

As of the date of this report, MYAP proposals have not been completed, so the specific states in which potential Awardees might implement MYAP programs are not available for consideration. While much relief will continue to be provided on an emergency basis, development aid is expected to form an important component of future programs. The exact nature of those future programs (i.e., who will be targeted for food aid assistance, where, how and when) is unavailable for analysis. However, FANTA recently outlined indicators relevant to food security in Southern Sudan, some of which (food consumption score and food security as defined in the 2008/2009 ANLA) are particularly relevant for the present Bellmon analysis, and identified geographic priority areas. Of particular importance in a setting like Southern Sudan, where large population movements are still underway and emergency assistance related to both natural and man-made crises is expected for the foreseeable future, it will be especially important to revisit any findings from the present report as programs draw closer to implementation.

5.3 FACTORS AFFECTING FOOD SECURITY IN SOUTHERN SUDAN

A considerable effort has been made to characterize the nature of food insecurity in Southern Sudan and to develop indicators that would assist in the targeting of food aid. As noted above, FANTA recently outlined indicators relevant to food security in Southern Sudan, most of which relied on the 2008/09 ANLA report. The ANLA[29] characterizes food security using a composite measure of access and utilization which incorporates:[30]

- Food consumption: the quality and variety of the diet consumed by the household (proxied by WFP's standard Food Consumption Score, or FCS);[31]
- Food access: the ability to sustain this consumption and access food in the future (proxied by proportion of household expenditure on food and sources of income); and
- Coping strategies: the severity and frequency of various coping strategies employed by the household (proxied by a Coping Strategies Index, or CSI[32]).

Households identified as extremely food insecure using these ANLA indicators are those households which have poor diets even in harvest season, have poor ability to cope with price increases or other shocks, and frequently rely on severe coping strategies to smooth consumption. Such households can reasonably be considered as households for whom food

[29] The ANLA food security indicators are based on household and community surveys in eight of the ten states in Southern Sudan. The sample was designed so that results would be statistically representative at the state level. However, limited accessibility issues precluded sampling of the most isolated and flooded parts of each state (including Maban and Old Latjor County in Upper Nile, and large parts of Jonglei and Lakes states). Therefore, inferences based on ANLA indicators for these 3 states' relative food security status should be made with appropriate caution.

[30] For more details on how household food consumption, access and coping strategies were combined into a single measure of HH food security, please see ANLA 2008/2009 and Annex 5 of CFSAM 2009.

[31] The FCS is not a quantitative measure of any nutrition gap, which could then be compared with the ration under the proposed food aid program to determine by how much the 'nutrition gap' might be filled (or potentially overfilled) under the program. However, it does provide a snapshot of both the frequency and diversity of household staple consumption and is, therefore, a reasonable proxy indicator of the availability and access dimensions of food security and, to a lesser extent, the utilization dimension. Through sample surveys of households throughout eight of Southern Sudan's ten states, 7-day recalls of food consumption provided a measure of food consumption during the post-harvest season, the time of survey implementation. The weighted score reflects both dietary diversity and frequency of consumption of food items. The survey which derived the FCS reported here was conducted during a favorable harvest period. Therefore, households identified as food insecure using poor FCS can reasonably be considered as chronically food insecure since, even in a favorable harvest period, these households were consuming very poor diets.

[32] A Coping Strategy Index measures a household's resilience to food security shocks, looking at the severity of the strategy employed by households and the frequency, during periods of food shortages. ANLA Southern Sudan 2007, http://ssccse.org/blog/files/ANLA_2006%20Final_with%20appendices.pdf.

aid would represent additional consumption. This report will therefore rely on ANLA's state-specific food security rankings for some of the analysis to follow.

Unlike in some other countries where the livelihood zone (LZ) or state is an appropriate geographic targeting criteria, the wide range of activities undertaken within different states and LZs suggest that neither states nor LZs *per se* are sufficient indicators of food security status. Targeting of food aid initiatives based solely upon either geographic location or LZ may be subject to considerable error. Nevertheless, there are some geographic disparities in food insecurity which can inform appropriate geographic targeting. Particularly where staffing constraints or other impediments to effective implementation make geographic targeting a more appropriate targeting approach than another type of administrative targeting (such as household-level targeting based on means-testing), proper use of reliable indicators to define geographic areas with the greatest food deficits can help ensure minimal negative impact on production and markets.

As noted in the recent FANTA study, food insecure households are typically characterized as:

- Asset poor
- Households with children under 5
- IDPs/refugees, returnees
- Female-headed

FANTA also notes that households that depend heavily on casual labor and petty trade for their livelihoods, and households regularly affected by shocks, face a higher likelihood of suffering food insecurity. The extent to which certain states host a larger percentage of these extremely food insecure households is an important consideration for the design of future food aid programs from a Bellmon perspective, since the greater the representation of extremely food insecure households in a given state, the more likely food aid will represent additional consumption if food aid is geographically targeted. While there is no data available to indicate which states have a higher percentage of households that depend heavily on casual labor and petty trade, or households regularly and disproportionately affected by shocks, there is some important geographic variation in other indicators apparent from available data.

As developed in the 2008/09 ANLA, severe and moderate food insecurity are the best available indicators of the relative absorptive capacity of food aid on a sub-national basis for Southern Sudan, which is important to inform geographic targeting where administrative targeting will be the most effective targeting approach. Table 4 reports the proportion of households and total numbers of food insecure people by state for the eight states included in the ANLA study.

Table 4: Proportion of Households and Numbers of Food Insecure as Noted by ANLA Study

State	Population (est 2010)[a]	% HHs with poor FCS[b]	# HHs with poor FCS[b]	% HHs severely food insecure[b]	# HHs severely food insecure[b]	% IDPs[a]	% Female-headed HHs	% Stunted under 5 (- 2 SD)[c]
Warab	1,939,934	22%	426,785	20%	387,987	4.2%	6%	28.9%
NBEG	1,431,743	18%	257,714	14%	200,444	1%	8%	37.8%
Lakes	992,799	24%	238,272	7%	69,496	1%	15%	29.8%
EEQ	884,770	20%	176,954	13%	115,020	2%	14%	33.6%
Jonglei	1,146,041	15%	171,906	13%	148,985	2%	12%	32.5%
WBEG	425,446	18%	76,580	14%	59,562	8%	19%	41.3%
Unity	678,546	8%	54,284	4%	27,142	3%	11%	38.6%
Upper Nile	742,507	unknown	unknown	4%	29,700	1%	14%	31.1%
CEQ	764,030	NR	NR	NR	NR	NR	NR	32.8%
WEQ	899,845	NR	NR	NR	NR	NR	NR	38.0%
Total	***9,905,661***							

Note: NR = not reported in ANLA as CES and WES considered food secure states. Northern Bahr el Ghazal (NBEG); Eastern Equatoria State (EEQ); Western Bahr el Ghazal (WBEG), Central Equatoria State (CES) and Western Equatoria State (WEQ).

Source: a=2009 FANTA, b=2008/09 ANLA, c= 2007 SHHS

Based on a relatively conservative proxy indicator of additionality (poor or unacceptable food consumption score), the five states with the largest percentage of households for whom food aid would represent additional consumption are Lakes, Warab, EES, WBG and NBG. Based on total population, the five states with the greatest numbers of food insecure households are Warab, NBEG, Lakes, EES and Jonglei (in descending order). Note that the food consumption score (FCS) for Upper Nile should be interpreted with caution since only the food secure areas were assessed and, therefore, overall scores are likely much lower. That said, the population of Upper Nile is roughly half the size of the largest states of Warab and NBG.

Based on the composite indicator of severe food insecurity as a reasonable proxy indicator of additionality, the states with the largest percentage of households for whom food aid would represent additional consumption are Warab, NBG, WBG, EES and Jonglei. Based on total population, the states with the greatest numbers of severely food insecure households are Warab, NBG, Jonglei, EES and Lakes.[33] An important challenge in Southern Sudan will be to effectively design programs which account for differences in acute versus chronic food insecurity at the household and/or community level, particularly given the vulnerability of households with different livelihood strategies to different types of shocks. Where an indicator or set of indicators suggest truly chronic food deficits, development food aid will more likely represent additional consumption. Where acute crises, such as would be associated with IDPs or weather shocks, food aid has greater potential to result in change of household behavior (sale of food aid, reduced market purchases, etc). Where food insecurity levels are driven primarily by acute crises, especially related to IDPs and/or returnees, emergency food aid will be more appropriate development aid.

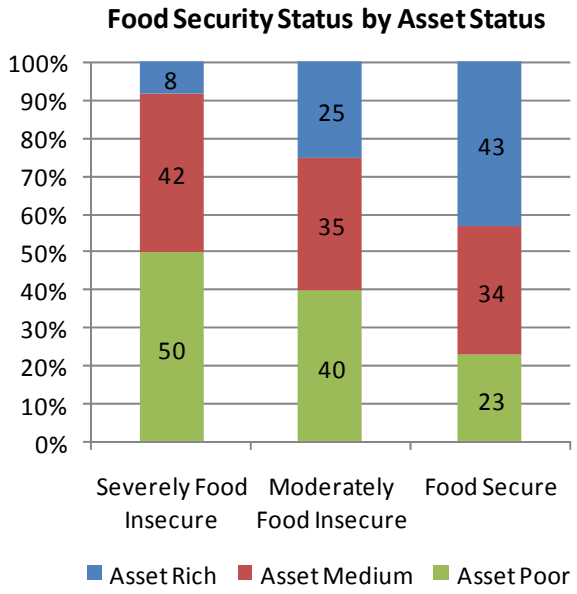
[33] Interestingly, while households in Lakes report poor food consumption, 86% of households have good access, which may suggest that poor nutritional habits related to cultural practices more so than inherent food insecurity.

Evidence from ANLA 2008/09 suggests that the two variables most closely associated with food security status are residence status and asset wealth.

5.3.1 Wealth Groups

A key finding of ANLA 2008/09 is that food insecurity can be found in all LZs, and, although levels of food insecurity are higher among returnees and IDPs than among residents, there is considerable variation in the extent and nature of food insecurity amongst *all* groups. The most critical factor determining the extent of food security is household wealth, as determined by assets and capacity to produce or purchase food. Figure 1 shows the variation of food security with asset status.

Figure 1. Variation of Food Security with Asset Status



Source: ANLA Report 2008/09

Among all indicators, asset status[34] showed the most consistent correlation with food security. The ANLA report notes:

> *….this basically confirms that food security and poverty are closely linked, even in the context of Southern Sudan where culture is an important factor of food insecurity.*[35] *Although asset wealth might not always be a suitable targeting criterion, this could in many places be a simple way of targeting vulnerable households (p.17).*

[34] Similar to standard Demographic and Health Survey (DHS) methods to derive proxies for socio-economic status, the ANLA derived assets measures using Principal Component Analysis to find the weightings of the different assets. The more of the variance in the data that is explained by a certain asset, the higher is its weight. This assigns each individual HH a certain score. Thresholds are then found by breaking this indice into three equal groups. For further details, and a example using standard DHS methods, see http://www.measuredhs.com/pubs/pdf/CR6/CR6.pdf

[35] In this case, the cultural influence is that of kinship which would oblige wealthy families to support returnees or others within the clan, irrespective of the extent to which it might result in their own impoverishment.

Unfortunately, figures for asset wealth by state were not available for this analysis. However, the strength of the relationship between asset wealth and food security status per ANLA suggests that where there is a higher percentage of extremely food insecure households, there will also be a relatively higher percentage of households who are asset poor. Where direct household-level targeting of beneficiaries is feasible, or community-based targeting is appropriate, use of such indicators can help to ensure efficient use of Title II resources. Where kinship ties make community-based targeting inappropriate, measures should be taken to weigh the costs versus benefits of implementing programs on this basis.

A strong correlation between asset wealth and food security may imply that food security is determined more by access than availability. The ANLA report determined how each wealth group disposed of its total income (both cash and goods in-kind, including own production). It found that, in line with expectations, higher income households spent proportionally less of their income on food (<50%), compared with the poorest households, who in some cases spent as much as 70% on food. Surprisingly, however, it also found that the most food secure households were more reliant upon the market for their food than food insecure households:

> *While the food secure source half of their food from the market, those that are severely food insecure buy only 35 percent of the food. This reflects the higher purchasing power of households with higher socio-economic standings, with better and more reliable income sources, and livelihoods strategies that are more integrated with the formal economy (p. 17).*

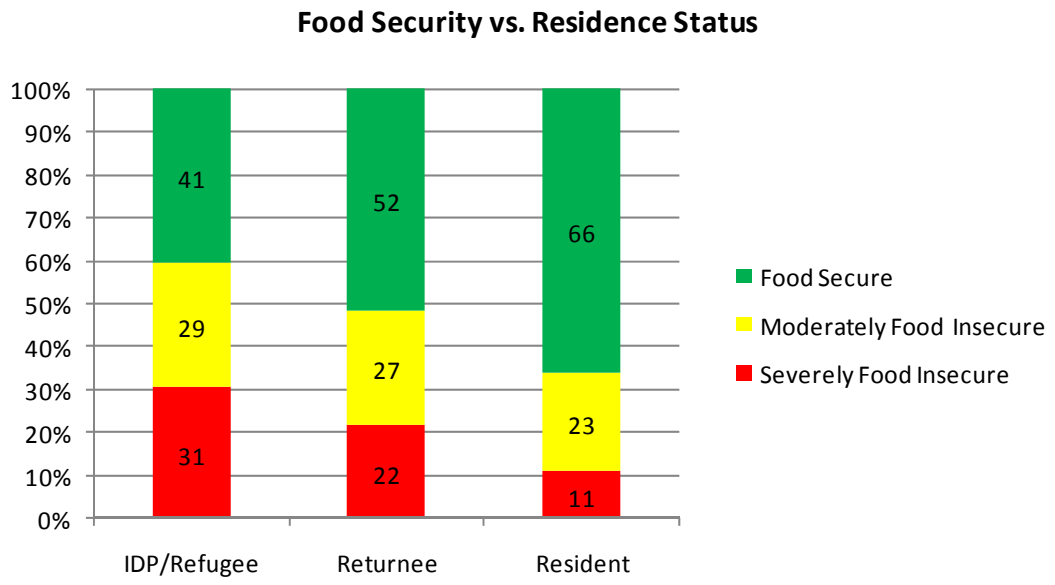
Such dependence upon the market for food security is at odds with experience in rural areas in other countries, where it is often the poorest who lack the means of production and are thus commonly the most market-dependent, while wealthier households achieve higher levels of food security by virtue of their own production. In Southern Sudan, it would appear that for the majority of residents (as opposed to IDPs and refugees), land is available for cultivation. While they have limited purchasing power to access staples on the market, limited purchasing power also significantly inhibits the poorest households' ability to purchase inputs necessary to exploit available land for household production (tools, labor, seeds, etc.). Added to these constraints, past and ongoing civil insecurity, as well as threats from cattle destroying crops, have made households averse to investing in more than the minimal necessary for subsistence. So while shortfalls in household production are made up by market purchases by all households, the poorest households, which by definition lack sufficient purchasing power to access markets, are also relatively more dependent on the market for their staple purchases, thereby adding to their vulnerability to price shocks.

In spite of these current challenges for the poorest households, the ANLA data and analysis substantiate an observation made by the BEST field team. Namely, given adequate wealth, it is possible to achieve food security (provided kinship obligations are not excessively onerous) through the commercial market, which appears to be functioning effectively as far as imported food commodities are concerned. This suggests that interventions that target the chronically food insecure would benefit from a component that increased capacity to leverage natural resources, particularly existing household plots (e.g.: cash, tools, seeds, fertilizer or food aid as wages for cultivation). Carefully-designed interventions, which rely on an appropriate mixture of food aid, in-kind aid and cash, along with technical assistance/training, may increase agricultural productivity and/or production while simultaneously decreasing the vulnerability of the poorest households to price shocks.

5.3.2 Residence Status

Not surprisingly, the ANLA report clearly identifies resident status as a key factor affecting food security. Figure 2 shows the variation of food insecurity with residence status as determined by the ANLA.

Figure 2. Variation of Food Insecurity with Residence Status



Source: ANLA 2008/09. Please note that due to rounding, the IDP/Refugee and Returnee bars may not equal 100%.

The impact of returnees on a community is greatest during the initial settlement period before the returnees have harvested their first crops. This period may range from three to ten months (returnees do not commonly travel during the rainy season). Thereafter, returnees may become self sufficient and food secure. However, this is not always the case. If crops fail, as has been the case in large areas of the Western Flood Plains LZ which experienced widespread flooding late in the cropping season, then returnees may be dependent upon the local community for a further 12 months. The general practice of CSs has been to provide food aid to returnees for a standard period of three months. However, this is increasingly subject to a review after three months which may result in further assistance if required. NPA, in particular, has fine-tuned assistance to returnees substantially, with household-level assessment and review of requirements. This of course requires increased capacity on the part of the Awardee.

As a specific class of beneficiaries, Returnees and IDPs receive a substantial proportion (33%) of the food aid distributed within Southern Sudan. Table 5 indicates the volumes intended for distribution in 2009, together with the numbers of beneficiaries that each Awardee expects to serve.

Table 5: Returnees and IDPs: Food Aid Tonnages and Number of Beneficiaries, 2009

	CRS	NPA	WFP	Total
Total Tonnage	6,720	7,211	80,288	94,219
Food Aid Tonnage for Returnees IDPs Refugees	2,065	3,758	25,892	31,715

	CRS	NPA	WFP	Total
% Food Aid Tonnage for Returnees/IDPs Refugees	30.73	52.1	32.35	33.66
Total Number of Beneficiaries	95,600	180,941	606,109	
Number of Returnees IDPs Refugees	23,300	69,508	93,397	
% Number of Returnees IDPs Refugees	24.37	38.41	15.41	

Source: Awardee AER Submissions

These numbers do not reflect the total number of returnees/IDPs. In the 15-month period between February 2007 and August 2008, at least 365,000 displaced people returned to their communities; it is expected that at least 250,000 people will return in 2009. Some of these will return with assets,[36] but many will return with little means of immediate support and will require assistance. Based on IOM estimations of more than 5 million people displaced during the war and 1.7 million successful returns since the CPA, it can be assumed that a considerable number of people have yet to return to their original communities. Returnees and IDPs may be found in all LZs. Recent IOM data for returnees suggest that NBG, WBG and Lakes had the highest levels of returnees during the period February 2007-June 2008. However, significant numbers of returnees can be found in every state (see Table 6).

Table 6: Number of Returnees February 2007 – June 2008

State of Final Destination	Number	% of All Returnees in Southern Sudan
Central Equatoria	17,805	4.87
Eastern Equatoria	20,824	5.70
Jonglei	5,460	1.49
Lakes	74,952	20.52
Northern Bahr El Ghazal	140,617	38.50
Unity	26,024	7.13
Upper Nile	11,488	3.15
Warab	18,890	5.17
Western Bahr El Ghazal	34,267	9.38
Western Equatoria	14,919	4.08
Total	365,246	100.00

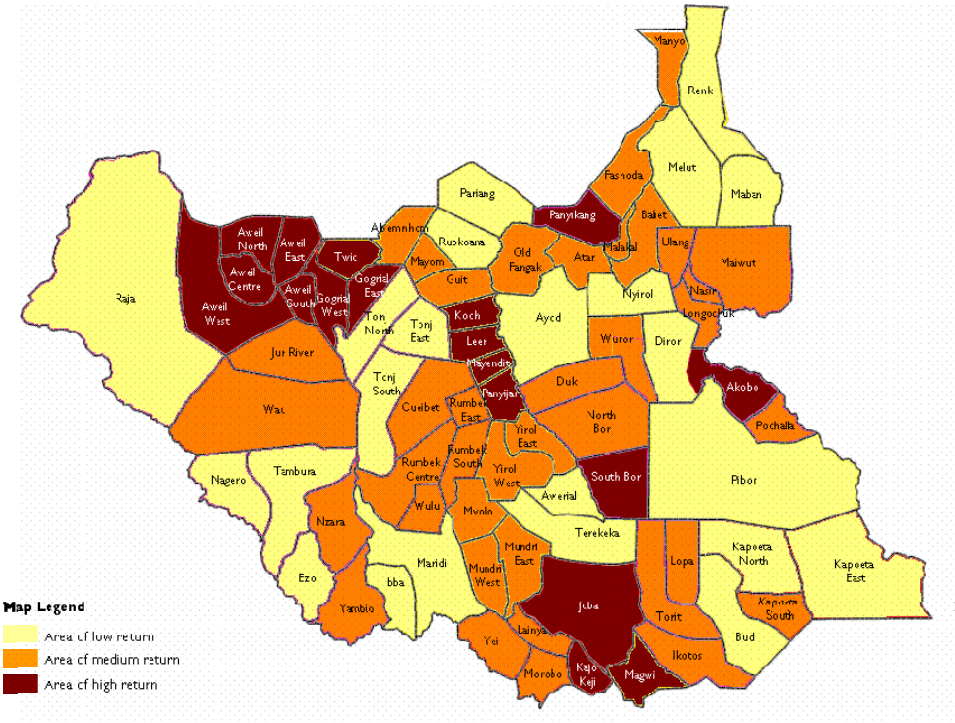
Source: IOM Report: Total Returns to Southern Sudan Post CPA to June 2008

WFP projections provide more updated estimates. The returnee map below illustrates the areas of high, medium and low return density.[37]

[36] For example, during the last two years, NPA reports a significant number of disputes centering around cattle owed to returnees as bride prices paid for wives sold while the returnees were away from home. Upon return, these cattle should be locally available for collection, but this has not always been the case and disputes have consequently arisen.

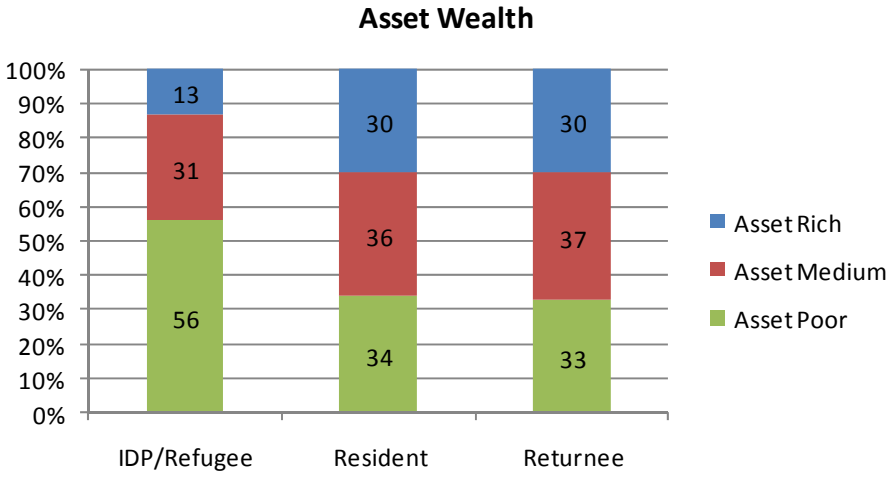
[37] Density is defined as: Low density = less than 0.2 returnees/km2, medium density = 0.2-0.5 returnees/km2, high density = more than 0.5 returnees/km2. Note that a combination of data sources was used to derive this map. The actual number of returnees for 2008 was estimated. The number of returnees assisted by WFP in 2008 was compared to ANLA 2008 data. In areas where these did not match, other information was explored to provide a final estimate for 2008. IOM/RRR forecasts for 2009 were used as a basis for the estimated number of returnees in 2009. The average of these two figures (actual number for 2008 + forecasted number for 2009) was then taken so that the map would give a representative situation, not only the situation of one year alone. Finally, this average was divided by the geographical size of the county in question. In this way, comparisons can be made between large counties like Raja, and small counties like Kajo-Keji. The final map thus represents the density of returnees in various areas.

Figure 3. Density of Returnees by Counties



The ANLA data also showed the variation of assets with residence status (Figure 4).

Figure 4. Variation of Assets with Residence Status



Source: ANLA Report 2008/09

Significantly, while only 13% of IDPs are asset rich, 30% of returnees fall into this category. Based on that survey, returnees are nearly indistinguishable from residents in terms of assets. This reflects the fact that food security problems faced by returnees will, once the initial settling in period has passed and the first crop has been harvested, be similar to those faced by residents. IDPs may face more acute and severe food insecurity.

5.4 CHRONIC VERSUS ACUTE FOOD INSECURITY

Though continued and repeated acute crises associated with civil insecurity and weather shocks affect much of Southern Sudan, it is also quite evident that a significant part of the population remains food insecure on a chronic basis. Both malnutrition indicators and the high prices of grain in the markets which operate at import parity prices that exceed the purchasing power of the poorest households, on the other. ANLA data suggest that the poorest households lack the capacity to source food from the markets. At the same time however, such households are unable to feed themselves from their own production, or if able to produce enough food, are unable to utilize it effectively. The causes of chronic food insecurity appear to be related both to constraints to expanding production (availability) which appear to be related both to inadequate purchasing power and civil insecurity, lack of purchasing power to access available marketed foods, and complex utilization issues related to feeding practices, as well as sanitation and hygiene conditions.

As a consequence of the constraints to expansion of household production, outlined below, many of the poorer households that rely mainly upon cultivation for their survival, produce only limited amounts of food and accept that the balance of their food needs will be met from the market using income earned from other low-investment activities. As a result, local production is barely adequate to meet the needs of rural communities; the deficit is consistently met by imported food.

Here, we briefly outline acute and chronic food security conditions across Southern Sudan per the most recent Integrated Phase Classification (IPC). Please see Annex IV for the most recent IPC map, generated in April 2008. It shows high levels of chronic food insecurity throughout much of the country, with the exception of the Greenbelt and Ironstone Plateau LZs where the majority of the population is generally food secure. Conversely, much of the Eastern Flood Plains in Jonglei are designated an area of acute food and livelihood crisis. The general prognosis for the chronic food insecure areas is a high risk of worsening conditions in the north and west and an alert in the south-eastern areas. However, it is noteworthy that the likelihood of deteriorating food security in the south-eastern part of the country is largely independent of the livelihoods there. The LEA baseline data found that the pastoralist LZ was generally more food security than many other LZs in Southern Sudan. The general deterioration of conditions there has more to do with localized disturbances and floods than underlying conditions. Conditions prevailing in each of the states in April 2008 are summarized in Table 7.

Table 7: Summary of Integrated Phase Classification for Southern Sudan (April 2008)

State	Livelihood Zone	Phase	Condition
Northern Bahr El Ghazal	Ironstone Plateau	1.	Generally food secure
	Western Flood Plains	2.	More than 90% of the population were chronically food insecure due to floods, civil insecurity, disease and increased population. There was a high risk of deteriorating conditions
Western Bahr El Ghazal	Ironstone Plateau and Greenbelt	1.	More than 80% of the state was designated generally food secure. In this area, less than 20% of the population was chronically food insecure and conditions were stable.
	Western Flood Plains	2.	More than 90% of the population were chronically food insecure due to floods, civil insecurity, disease and increased population. There was a high risk of deteriorating conditions
Warab	Western Flood Plains	2.	More than 90% of the population were chronically food

State	Livelihood Zone	Phase	Condition
			insecure due to floods, civil insecurity, disease and increased population. There was a high risk of deteriorating conditions.
	Ironstone Plateau	1.	Generally food secure.
Unity	Western Flood Plain, Eastern Flood Plain and Nile-Sobat	2.	More than 90% of the population were chronically food insecure due to floods, civil insecurity, disease and increased population. There was a high risk of deteriorating conditions over much of the state except for the most northern payams, where conditions were more stable.
Upper Nile	Eastern Flood Plain and Nile-Sobat	2.	Where conditions were mapped, more than 90% of the population were chronically food insecure due to floods, civil insecurity, disease and increased population. There was a high risk of deteriorating conditions
Lakes	Western Flood Plain and Nile-Sobat	2.	More than 90% of the population were chronically food insecure due to floods, civil insecurity, disease and increased population. There was a moderate risk of deteriorating conditions
	Ironstone Plateau	1.	Generally food secure
Western Equatoria	Greenbelt and Ironstone Plateau	1.	Generally food secure, although in some areas, between 10 and 20% of the population were food insecure due to a combination of civil insecurity and dysfunctional markets
Central Equatoria	Hills and Mountains	2.	More than 90% of the population were chronically food insecure due to floods, civil insecurity, disease and increased population. Conditions appeared stable.
	Greenbelt and Ironstone Plateau		Generally Food Secure
Eastern Equatoria	Pastoral and Hills & Mountains		More than 95% of the population were chronically food insecure due to floods, civil insecurity, disease and increased population. Conditions appeared stable.
	Greenbelt	1.	Generally food secure.
Jonglei	Nile-Sobat	2.	More than 90% of the population were chronically food insecure due to floods, civil insecurity, disease and increased population. There was a high risk of deteriorating conditions.
	Eastern Flood Plain and Hills & Mountains	3.	15% chronically food insecure. 85% experiencing acute food and livelihood crises, caused by floods, civil insecurity, disease and increased population.
	Pastoral	2.	More than 90% of the population were chronically food insecure due to floods, civil insecurity, disease and increased population. Conditions were stable

Source: FAO

5.5 UTILIZATION OF FOOD

While availability and access are important to ensuring food security, utilization is also critical. A growing body of research finds that early childhood nutritional status substantially contributes to long-term human capital outcomes (including cognitive ability, schooling attainment, earnings as well as adult health). Malnutrition rates will be influenced by feeding practices, intra-household food allocation, hygiene and sanitation, as well as access and use of appropriate preventive and curative healthcare, which together influence disease prevalence. Chronic undernutrition in children under 5, particularly stunting (low height-for-age), is one potential indicator of chronic

food deficits. Malnutrition rates may reflect either inadequate intake, malabsorption due to infectious disease, or some combination of both. To the extent rates reflect disease prevalence much more than inadequate intake, any conclusions drawn from such rates will be an inaccurate reflection of household food deficits. To the extent the prevalence of stunting reflects poor availability and/or poor access, such prevalence rates can appropriately inform geographic targeting from a Bellmon perspective.

The most recent source of reliable state-specific malnutrition rates is the 2006 SHHS[38] Stunting prevalence in children under 5 is high throughout Southern Sudan, above 30% in 8 of the 10 states. Interestingly, the rates in the 2 states traditionally considered "food secure", CES and WES, are above the mean for the whole of Sudan; the prevalence in WES is the 3rd highest among all 10 Southern Sudan states. A review of water and sanitation conditions across states suggests that fewer than 38% of households in WBG, WES and CES have access to improved drinking water (SHHS 2006). While approximately 10% of households have access to a traditional pit latrine, roughly 85% have no prepared facilities and use "open air" defecation (2008/09 ANLA).

As reported in the SHHS 2006, disease patterns showed some variation across states, with diarrheal illness most common in WBG, WES and Unity. Prevalence of fever was highest in WES, Warab, Lakes and Unity. States with the highest prevalence of suspected pneumonia were Unity, WES and EES.

Because of the importance of utilization issues in Southern Sudan, allocation of Title II resources devoted towards improvements in water and sanitation, appropriate feeding and hygiene practices, and access and appropriate use of preventative health care (e.g., use of bed nets to prevent malaria) and curative treatments (e.g., oral rehydration salt for diarrhea) will ideally help ensure efficient use of USAID Title II funds and therefore minimize leakages related to distributed food aid.

Both the 2008/09 ANLA and FANTA's 2009 desktop study suggest that preventative early childhood nutrition programs such as PM2A would be appropriate in some states within Southern Sudan. To avoid both undercoverage and leakage, resources directed towards improvements in growth monitoring and basic research on the major determinants of stunting in Southern Sudan should receive adequate priority in future development assistance. From a Bellmon perspective, this will be especially important if food aid programming relies on state-level stunting prevalence figures to assist in geographic targeting as might be expected under a targeted early childhood nutrition intervention such as PM2A.

5.6 CURRENT PRODUCTION AND MARKETING CONDITIONS

Both national and local conditions affecting agricultural production and markets are important to consider in designing future MYAPs, so as to avoid substantial disincentives or market disruptions related to distributed food aid.

[38] The ANLA also reports stunting prevalence rates for 2008, and compares those rates to the SHHS rates for 2006. However, lack of transparency in whether the cut-off used was -2 SD or -3SD makes ANLA's reported rates impossible to interpret. The apparent declines in stunting rates in the two-year period suggested by the two sets of data are implausible, particularly during a 2-year period and in the Southern Sudan context. Not surprisingly, the resulting lack of correlation between stunting and food security based on these data is puzzling given the scale of chronic food insecurity and high disease prevalence among children under 5 in Southern Sudan.

5.6.1 Production Conditions

The latest CFSAM report for Southern Sudan indicates a substantial increase in area planted to cereals in 2008, and generally favorable production conditions throughout most of the season, resulting in a potential cereal harvest of 1.25 million MT. Net cereal availability of 1.0 million MT, when compared to the estimated demand (based upon a population of 9.7 million people[39]) of 0.95 million MT, presumes a modest surplus of 47,000 MT.[40] In practice, figures of national consumption and production are gross approximations, and the construction of a conventional food balance for Southern Sudan is not yet possible. Although the CFSAM attempted to estimate non-cereal crop production (especially cassava), accurate figures for area planted and yield do not yet exist. Additionally, Southern Sudan lacks widely-accepted population data upon which a national food balance based upon own production could be determined with any degree of certainty. Southern Sudan also has no independent import or export data. Any available import or export data relates either to the whole of Sudan or to the North alone.

Moreover, the difficulties of transport in rural areas have meant that very little food produced within Sudan moves from one part of the country to another. The markets that are most accessible to the main production areas in the Greenbelt are located in the DRC. The small national surplus or deficit is, therefore, of nearly no significance to the levels of food security throughout most of the country. Food security is largely affected by availability in the more remote rural areas, and by access in urban, peri-urban and roadside areas.

At the household-level, the BEST field visit corroborated observations made elsewhere (ANLA 2006) about constraints to expanding small-scale household production. Namely, while most resident and returnee households have adequate land, many households face substantial constraints to expanding production which restricts the area cultivated and ultimately household production levels. These constraints include:

- **Lack of technical skills**: An entire generation has been disrupted and allowed only minimal education. As a result, people's technical skills have diminished and productivity has declined as a result.

- **Poverty**: Most households lack sufficient assets to purchase tools and/or hire sufficient labor to cultivate effectively. Particularly at the household and community levels, the shortage of labor results in labor costs which make initial land clearance and subsequent weeding prohibitively expensive for poor households.[41]

- **Risk aversion**: As years of conflict, and faced with ongoing inter-clan rivalries, households are averse to investing in expanded cultivation for fear that insecurity associated with renewed conflict would force them to uproot. In addition, degradation by cattle grazing is a constant deterrent to investment beyond the minimum required to achieve subsistence.

[39] This USAID mission figure has been estimated from earlier data. The latest (disputed) 2008 census gives a total population of 8.26 million

[40] This figure appears to have been derived from historical demand, extrapolated for the increase in population and the anticipated production.

[41] The dependency ratio is high (an average 125% across Southern Sudan), with an average 6 out of 10 HH members either being ill, too old or too young to work. The ANLA also found that, 1 out of 3 households has a chronically ill member – this rate is considerably higher in the border areas of NBEG and Unity, probably because of war injuries.

While **residency status** may be a cause of chronic food insecurity, it is generally related more to short-term food deficiencies, which are often resolved following the first crop harvest. Indeed, only in the case of IDPs is residency *per se* a cause of chronic food insecurity; and then, only when displacement takes place for more than one season. In practice, many IDPs are displaced for relatively short periods of three months or less.[42]

5.6.2 Market Conditions

Grain markets in Southern Sudan are unregulated, but constrained by the limited availability of information, high costs of transport, high duties and local taxes, and small transaction volumes. Nevertheless, despite these imperfections, the markets do operate and commodity prices appear to reflect supply and demand. All markets visited (in areas which admittedly were served by passable roads) had grain for sale, and most contained at least one small mill. The following observations appear to be representative of most markets:

- All markets appeared to be supplied almost exclusively with imported grain. In particular, white sorghum from the North was found in all markets at prices that were generally higher than the prices of other types of sorghum.[43] In the southern part of the country, imported maize, sourced from Uganda, was more common.[44]

- Field observations corroborate some of the findings from ANLA 2008/09's trader survey. Firstly, markets visited appear to be operating in parallel and secondly, the price of imported white sorghum generally varied according to the cost of transport. Thus markets appear to be fairly well integrated with price differences reflecting transportation costs rather than lack of market integration.[45] The ANLA found that 69% of traders in Southern Sudan cited high transportation costs as the major constraint to their business.

- Field observations suggest there is significant market demand for grain at wholesale prices in excess of SDP 150/100 kg (i.e. more than US$600/MT).

- Many markets contained USAID TITLE II sorghum, generally selling at prices significantly lower than either local or imported sorghum. Traders reported that USAID TITLE II red sorghum neither baked nor brewed as well as local or imported white sorghum. USAID TITLE II sorghum was most prevalent in small rural markets, where food aid beneficiaries were able to sell the grain to retailers easily. Observations suggest that commercial redistribution of food aid occurs at a local level and does not reach larger urban centers.

- Very few markets had any local grain available for sale. Locally-produced sorghum was found in only two markets (Juba and Wau). Traders indicated that local produce was only rarely found in the markets that were visited. It is possible that very small

[42] A number of WFP food initiatives are for 25-60 days only – sufficient to feed IDP populations that will shortly return to their own communities.
[43] Wholesale prices of sorghum and maize currently exceed $500/MT.
[44] Three types of sorghum were observed in the markets. White sorghum imported from the north appeared most frequently. It commanded a higher price and was preferred to the second most frequent, USAID TITLE II sorghum. Locally-produced sorghum was seen least frequently but was considered as acceptable as white sorghum (and indeed preferred for some uses), but in Juba was priced at or slightly below imported white sorghum.
[45] White sorghum originating from northern Sudan was more preferred in the northern parts of Southern Sudan such as NBG, but was cheaper there than the white sorghum found in EES, where a small minority preferred to consume it, but transport costs were much higher.

volumes are nevertheless traded in remote markets, but in small structured markets (where, for example, no more than five retail outlets might sell grain in lots of 3.6 kg each), local produce was rarely, if ever, seen. The local sorghum was priced slightly lower than the imported commodity from the North.

- In no case was it possible to quantify the amount of grain, either locally-produced or imported, that was reaching commercial markets. There is no data on local production other than the CFSAM survey, and no data available from GOSS customs as to imports from beyond either Southern Sudan or all Sudan.

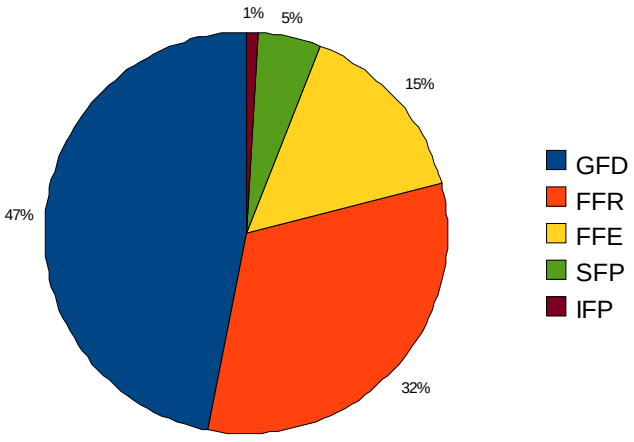
- See Annex VII for recent FEWS NET Production and Market Flow maps for sorghum and maize.

5.7 CURRENT FOOD AID PROGRAM EXPERIENCE

An important consideration in determining relative absorptive capacity at the sub-national level is the presence of ongoing food aid and cash transfer programs. Both the amount of in-kind aid and the timing of distribution must be considered to properly account for the likely magnitude of food deficits throughout the year, and any surplus which might be generated by unintended errors in targeting. This section describes current food aid programs in Southern Sudan generally, and discusses current constraints to effective implementation. Annex IX provides an overview of all existing food aid and cash transfer program within Southern Sudan.

Southern Sudan has received extensive food aid in the past. Much of this food aid has been distributed on an emergency basis. In 2008, programs have included not only general food distribution (GFD), but school feeding programs (FFE), therapeutic feeding, supplementary feeding (SFP) and programs such as food for recovery (FFR) and institutional feeding programs (IFP) (Figure 5).

Figure 5. Food Aid Programs (% of Beneficiary Households)



Source: ANLA Report 2008/09

GFD has been undertaken especially for returnees and IDPs. In most cases, this has been the provision of three-month standard rations to all returnees and IDPs as soon as they have been identified, irrespective of food security status (although therapeutic and supplementary feeding

might also be provided when required). Ideally, a review after three months would determine whether further food aid is required, but capacity to conduct such reviews is limited so reviews do not always take place.

While a standardized procedure is followed in most cases, whereby numbers of returnees are submitted to WFP by local authorities, verified, and food is provided (often through a third-party NGO) on the basis of those numbers, NPA has adopted a more stringent procedure whereby returnees are visited at their homes, their needs assessed and food provided according to the assessed shortfall from a 2,100 kilocalorie daily diet. Food may then be provided on that basis until the cultivation season, when the supply is increased to allow for the additional energy consumption. Thereafter, food will be supplied until the new crop is available and may be continued after that if the harvest is poor.

Given the lack of roads and widespread distribution of returnees, this assessment procedure is labor intensive. However, it does result in minimal inclusion error and appears to be most appropriate from the perspective of minimizing wastage and/or disincentive effects of food aid.

There have been limited **Food For Work** (FFW) activities implemented by awardees in Southern Sudan. Generally, they have consisted of community projects such as soil conservation works, drainage, roads and bridges). Awardee supervisors in the field note three general reasons for the lack of FFW:

- Supervisory and particularly engineering capacity, of Awardee field staff is inadequate to monitor FFW projects;
- Supervisory capacity and direction from local authorities is limited;
- Awardees have had difficulty in establishing effective work norms and wage rates.

As a result, **Food For Recovery** (FFR) has predominated instead of FFW. This has concentrated on community-nominated projects whereby a given volume of food has been distributed to a community in exchange for their input into a specific project.[46] In such cases, a substantial proportion of the food might be prepositioned within the community and released to beneficiaries in two or three stages as the work progressed and was completed. There is no direct relationship between the volume of food released and the amount of work done by any specific beneficiary and, although initial distribution might be equitable, control by the Awardee of final recipients is limited.

School feeding has also been widely used. Varying degrees of efficiency of school feeding programs were noted during the field visit. In some cases, the programs appeared to work effectively in that children were encouraged to attend school and were properly fed. In other cases, children either did not attend, or attended only during feeding times. WFP staff noted the difficulties encountered in the supervision of school feeding programs and indicated that a substantial increase in supervisory capacity[47] would be required for such programs to operate effectively.

In addition to the food aid programs operated by the three CSs, **GOSS has subsidized maize and sorghum** in some communities. Descriptions of this initiative have been largely anecdotal

[46] An example might be the construction of a school, whereby a community would receive food for making and laying bricks for the main structure. The awardee would also supply roofing materials and school furniture.
[47] Effective operation of WFP programs would require at least 50 more staff working in the field throughout Southern Sudan.

and very little concrete information is available.[48] The BEST field team found only one instance of subsidized sorghum (in Wau) and subsidized maize (in EES). The sorghum was selling at SDP 120/100kg – only SDP 20/100kg less than sorghum imported from the North, and was said to be one year older than the imported commodity. The maize was intended for community distribution, but the conditions (sale, subsidized sale or free distribution) had not been communicated to the local community. The grain was poorly stored, largely spoiled and inadequately supervised. The general impression of this program is that it is not well administered. Consequently, there is significant potential for those receiving the subsidized commodities to sell them at close to market prices so that there is little benefit to the consumer.

It would appear that government, both GOSS and the state administrations are concerned that the poorest should not be excluded from the markets and that prices should be kept low to achieve this. The study team was told that subsidized sorghum was supposed to be retailed at a low price, but the lack of any supervisory capacity meant that instead traders were able to sell at market prices, capitalizing on the additional margin. In another small market outside Kuajok, retailers had been told simply to reduce the price of the sorghum that they were selling from the going rate of SDP 8 per Malwa (US$880/MT) to SDP 5.5 (US$605/MT). The result was that four out of five of the retailers boycotted the market for three days and then returned to sell at their original price.

Awardee capacity constraints also affect whether or not timing of food aid deliveries coincides with the lean season. In many areas, the main hunger season of three to four months overlaps to a considerable extent with the rainy season, during which many roads become impassable and areas become unreachable. In these areas, food aid is prepositioned according to anticipated need, and then stores are opened and food distributed at regular intervals. However, accurate assessment and distribution depend upon the capacity of the awardee, which may not always be adequate under such circumstances.

The study team observed that widespread distribution and lack of clear characterization of beneficiaries, together with the impediments to transport and communication and limited capacity on the ground, have often resulted in standardized food aid distribution that relies upon community-based targeting. It has been reported elsewhere,[49] and Awardee staff reinforced the perspective, that such targeting is not necessarily efficient. Indeed, kinship obligations may result in the redistribution of food away from those who might need it most.

Regarding the **suitability of food aid commodities**, USAID Title II sorghum is appropriate to the country, given its predominance in the local diet. Indeed, sorghum is more appropriate, over a wider area, than any other cereal. Red sorghum is less preferred than local varieties, such as the imported white sorghum from the north, which are generally used for multiple purposes. Though not widely grown, if at all, lentils are preferred to many other pulses. They also have a short cooking time which makes them both less costly in terms of fuel, more environmentally friendly and less of a hazard to the respiratory health of those tasked with household cooking. Vitamin A fortified soybean oil, which is not produced locally, is widely considered to be a high value cooking oil. Oil is appreciated as a food, but not consumed in great quantities, mainly due to its price.

As for the **timing of food aid distributions**, the greatest need for food aid is during the cultivation period, April through August inclusive, in the southern parts, and a month later further

[48] GOSS has not officially replied to any requests for information regarding this program.
[49] FANTA Sudan Food Assistance Transition Study, December 2007.

north. However, if in the previous year the harvest was poor (e.g., harvesting period for green maize begins in August), then food aid is required earlier than this.

5.8 IMPORTANT TARGETING CONSIDERATIONS FOR FUTURE FOOD AID PROGRAMMING

Both the ANLA report and field staff noted the key significance of residence status and asset wealth to food security. The provision of food to IDPs and returnees has been a substantial component of existing food aid initiatives. Much of this has been on an emergency short-term basis addressing the acute food insecurity experienced by IDPs and by returnees who have yet to harvest a crop. In the longer-term, residency status is of less significance to chronic food insecurity, and would not be expected to play a major role in the targeting of MYAPs (except within the context of a multi-year program targeting a specific number of returnees on an annually-rotating basis).

Asset wealth (which varies only slightly between returnees and residents) appears to be the most easily measurable indicator on which *initial* targeting might be based in Southern Sudan. If more effective targeting, based upon poverty as indicated by asset wealth (and ongoing supervision) can be achieved, then the level of inclusion error will be reduced. Targeting based upon asset wealth alone may not completely prevent market impact of food aid initiatives. True additionality of food aid (in which each kg of food provided is consumed by beneficiaries without any effect upon their market purchases or household production/sales) is not easily achieved, and may well require a stringency of targeting that would be infeasible even in a less difficult context than Southern Sudan. Households rarely experience a food deficit without an accompanying cash deficit, so that even under conditions of considerable food deficit, food will still compete with other household necessities for available cash. Even the poorest food insecure households, given cash constraints, may nevertheless spend 30% of any additional income (in-kind or in cash) on non-food items.

True additionality will more likely occur in relatively extreme conditions characterized either by the adoption of severe coping strategies or by an absence of any interaction with the market. In the first instance, by targeting only the most food insecure households who have engaged in coping strategies that involve food reduction such as skipping meals or days of feeding, the impact of food aid on the market is much less likely, provided that the amounts distributed matched the food deficit experienced by the beneficiaries. Where beneficiaries are unable to access commercial markets at all, and are obliged to survive on their own production, then the provision of additional food that matched the perceived food deficit would be very unlikely to impact the market.

In practice, although neither of these absolute circumstances prevail in Southern Sudan, there are certainly tendencies toward both. With regard to coping strategies, ANLA data indicated that of the households experiencing a food shortage in the month prior to the survey, between 40% and 45% restricted consumption, 41% skipped meals and 33% skipped days of eating. The frequencies of market-based coping strategies (such as selling animals or assets, buying food on credit, or outmigration for food) were generally less than 20% (i.e. approximately half those of the food-reduction based coping strategies). With regard to market access, ANLA data shows that the poorest households source less than half (35%) of their food from markets.

MYAPs that initially target on the basis of asset wealth, and are focused on households that have engaged in coping strategies involving reduced food intake, and have limited access to

markets (i.e. a high dependence upon their own production) will therefore have the greatest probability of achieving additionality and thereby minimizing market impacts.

The effectiveness of targeting and supervision of existing food aid initiatives varies considerably. This is partly due to the difficulties in terms of access to beneficiaries, many of whom live some distance from traversable roads, partly due to limited capacity on the ground, and partly due to the philosophy behind much of the existing food aid distribution initiatives that accept a degree of leakage to non-food insecure households in order to ensure full coverage of the food insecure. Each of these aspects is considered in more detail below.

5.8.1 Access

Southern Sudan's road network is in very poor condition. Most beneficiaries live some distance from passable roads in small and widely-dispersed communities. The predominant settlement pattern is one of small groups of households (up to ten households made up of 50-100 people), living without immediate road access, surrounded by small plots of cropped area with cattle kept in the surrounding bush and often herded into roofed enclosures at night. The concentration of households into towns and even villages is relatively limited, although it is increasing.[50] The assessment of food aid requirements under such conditions is difficult. Ideally, beneficiaries would be visited at their own homes so that productive capacity, assets and needs could all be determined. The BEST field team noted that in many cases, Awardee's lack resources to undertake such assessments (NPA appeared to be the exception in this regard), so that beneficiaries were often targeted by implementing agencies on the basis of numbers supplied by WFP, but with few direct criteria for targeting. The result is often that food is supplied to local communities, who are then expected to undertake community-based targeting. Reliance on community-based targeting is problematic, however, because those in authority may allocate resources in favor of their own clan.

5.8.2 Resources

Based on observation of field operations and discussions with field agents, it is evident that available resources to cover all assessment needs and to supervise food distribution are fully stretched and that further administrative and supervisory capacity will be required to allow even existing programs to function as effectively as might be desired.

Discussions with food aid implementing organizations revealed that a single field agent might be able to assess and supervise 1,000 households receiving GFD, i.e. a total of 5,000 to 8,000 beneficiaries according to household size. The same agent supervising FFR programs might be able to oversee ten such programs, encompassing up to 1,000 beneficiaries overall, while a field agent engaged in FFW assessment and supervision would expect to supervise no more than 100 people.

This situation is further exacerbated by the lack of capacity within local government to direct and supervise community projects that might be undertaken on a FFW basis. The introduction of programs with a more developmental focus will require an even greater level of supervision than is currently available. To ensure the most efficient use of Title II resources and maximization of non-emergency food aid impact, awardee proposals should reflect not only this requirement, but

[50] The increasing urbanization is noted by some producers as one reason why it is not poss ble to cultivate more land. The pool of available labor is continually reduced.

also the additional engineering and accounting skills necessary to manage such projects effectively.

5.8.3 Coverage of Beneficiaries

Many existing food aid programs face significant challenges in efforts to effectively target beneficiaries. Capacity constraints often result in provision of food aid to unintended beneficiaries. Field visits and discussions with key informants revealed the following:

1. Restricted access during the rainy season and/or lack of access generally has obliged some programs to rely upon community-based targeting. This has led to food being redistributed in response to kinship obligations rather than on the basis of need. FFR programs are particularly susceptible to such community-based targeting.

2. Supplementary feeding programs generally provide some food for the entire family, irrespective of need, to ensure that the supplementary food aid is not taken from the targeted family member(s) and redistributed within the family.

3. School feeding programs tend to feed all children within the school, rather than only children with identified needs. In addition, there is some divergence of objective with regard to such programs. Some intend school feeding to encourage school attendance and, therefore, are not concerned that some children who do not require assistance may nevertheless receive food aid. Others intend school feeding programs as a means of assisting malnourished children and, as a result, might be concerned that food aid should be targeted to the most needy. In practice, school feeding is implemented on a blanket basis, achieving effective nutrition of children, but with an inevitable degree of inclusion error.

4. General food distribution to returnees is frequently implemented on an initial three-month basis irrespective of the wealth, asset base or food procurement capacity of each household. While this may be the most practicable approach given existing administrative constraints, it may also result in quite substantial inclusion error, especially given the ANLA 2008/09 assessment that more than 50% of returnee households are food secure.

Given current conditions in Southern Sudan, effective implementation of food aid programs is very labor intensive. USAID and other funding agencies should be prepared to program for these additional administrative and staffing costs, and expect potential CSs to propose this in their MYAPs to ensure minimal leakage.

5.9 IMPACT OF EXISTING INTERVENTIONS

While existing food aid provides essential humanitarian relief and there appears promise for future developmental food aid programming, the BEST field visit suggests the following potentially-negative impacts of food aid distribution which should be considered in future food aid programming.

Commercial Sale of Food Aid

In some parts of the country, especially NBG and WBG, CES (Juba) and Warab (Wau), USAID Title II sorghum and soybean oil in ECHO bottles were commonly available in most markets. It was impossible to quantify the USAID Title II commodities in the markets, but USAID Title II sorghum was more prevalent in the smaller markets in rural areas[51] than in the larger urban markets, although it could be found in both. The soybean oil was almost always sold in ECHO bottles, but might equally well have been decanted USAID Title II oil. The price of the USAID Title II sorghum was always lower than either locally-produced or imported sorghum. Occasional information from traders suggested that this sorghum was derived from local distribution (i.e. not imported from Darfur).

Depressed Markets

Although the most obvious sign of potentially deleterious impacts of food aid is its presence in commercial markets, even if food aid is completely consumed by beneficiaries, it may nevertheless impact the market if that consumption results in reduced market purchases of staples by beneficiaries. Traders in Wau, Aweil, Malual Kon and Kuajok all noted a marked reduction in the sales of their commonly imported sorghum[52] when food aid distribution was being undertaken in the area. Most traders noted a drop in price generally of about SDP 20 per 100kg bag (based upon prices of approximately SDP 110-150 per bag), a drop in price of approximately 14%-18%). All noted a drop in sales volumes. In some cases, the reduced sales extended beyond the immediate alternative of imported sorghum to include maize and also wheat, and retail outlets recorded that sales would fall (e.g., from three to five bags per week to one to two bags).

Surprisingly, only one trader reported the phenomenon of depressed sales as detrimental to his business. Most regarded the presence and impact of food aid as an annual event that was part of the business environment. Some reduced their prices to remain competitive, while others did not, recognizing that the impact of the food aid was transient and that higher prices would return. Most traders in the urban centers claimed to know when food aid was being distributed in the surrounding areas and noted that sales were depressed through the four-month period of September to December. Price data collected by WFP does show price depression during this period, but this can also be ascribed to the increased availability of local production, particularly during the latter two months of November and December. Nevertheless, the overwhelming consensus of traders canvassed in the northern part of Southern Sudan was that the distribution of food aid temporarily reduced sales volumes and occasionally reduced prices by approximately 10-15%, and therefore was a clear case of market disincentive.

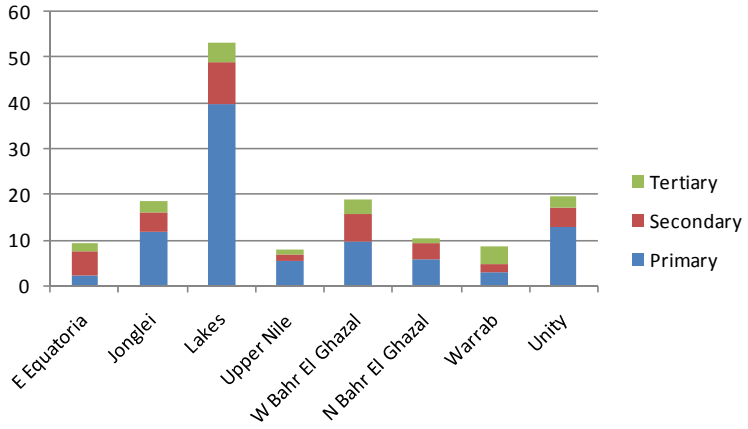
Impacts on Producers

In contrast to traders, the impact of food aid on local production appears to be relatively slight. This is due to: (1) almost complete absence of commercial production; and (2) the limited reliance of most households upon grain sales as a source of income (and the relative importance of the non-market constraints to expansion of production described in Section 5.6.2 above). Producers, producer representatives and Awardees corroborate the main factors outlined above which dampen the supply response to price incentives: high transport costs; risk

[51] On the road between Wau and Gogrial, USAID Title II sorghum was found in every market visited.
[52] As noted elsewhere most traders sold imported sorghum or maize. In the northern states, it was difficult to find locally produced sorghum in the markets. Traders generally indicated that this was not due to annual variation in availability and that in fact they were rarely able to purchase local sorghum for onward sale.

due to conflict and/or cattle and high labor costs (and concomitant lack of credit). Less than 11% of households surveyed by ANLA 2008/09 indicated sale of cereals as a primary source of cash/barter income. Less than 20% of all households in the most food insecure states considered cereal sales to be a source of income.

Figure 6. Percentage of Households Reporting Grain Sales as a Source of Income



Source: ANLA 2008/09

Local authorities in both the north and southern parts of Southern Sudan observed that crop producers are not market-focused. In particular, they do not take advantage of the high prices of an import-dominated market, nor do they take advantage of opportunities for temporal arbitrage; it is possible this is because they are obliged to make sales when prices are low, either for lack of storage, or to repay debts that have accumulated during the cropping season. In rural areas in the north, local authorities had difficulty identifying small-scale farmers who regularly brought a commercial surplus to market.[53] Instead casual labor, sales of livestock or of firewood or other collected goods predominate.

Dependency

The issue of dependency is not easily assessed, particularly within the context of an economic analysis. However, the converse of dependency implies a degree of investment in terms of time, resources and energy expended in the development of productive assets. The existing political and social climate is not conducive to such investment, and very little investment can be seen by individual households beyond that required to achieve survival. The continued availability of food aid undoubtedly facilitates a strategy of minimal investment, particularly if the food aid is not clearly and directly related to a program of development. However, it is beyond the scope of this assessment to determine the magnitude of this impact, other than to note that in atmosphere of impending conflict and lack of faith in the future, such minimal investment and associated dependency may be a rational survival strategy.

5.10 POTENTIAL FOR MYAP INITIATIVES

The foregoing analysis at national and state levels indicates that from a Bellmon perspective, a range of different food aid-based initiatives might be effective in different areas of the country.

[53] This may not necessarily be the case in WES, Lakes or parts of CES, where surplus production is more common.

However, the heterogeneous nature of each state is such that most initiatives could be relevant in the six states where chronic food security is most frequent. It is important to note that the potential for disincentive effects will depend more upon the effectiveness of targeting and supervision of subsequent food distribution, than upon the type of program that is implemented.

School Feeding Programs

Educational specialists have suggested that the primary goal of school feeding programs is to encourage school attendance.[54] From a Bellmon perspective, it is evident that if the primary program objective is to increase school attendance, then such programs will not be selective in nature, and some food will inevitably be supplied to food-secure children.

Increasing Food Production

Increased food production is a key development objective throughout Southern Sudan. Future programs intended to increase agricultural production must address the current constraints to production (lack of technical skills, risk aversion and cash shortages to purchase inputs).

Grain crop production in particular is constrained by the cost of increased planting and subsequent weeding. Initiatives that can reduce the cost of increased production, or offset the risk of loss, could definitely assist in increasing overall production. Such initiatives could be managed by the awardee, but could also be undertaken on a more commercial basis. For example, if grain were lent to farmers at the beginning of the cropping cycle, it could be used as direct payment for land clearance, drainage works or plowing. Thereafter, grain could be borrowed by farmers to pay for the increased costs of weeding and harvesting the increased productive area. At harvest time, the farmer would pay back the grain that had been borrowed and would then be able to sell the balance of the extra grain produced. The details of such an initiative would need considerable elaboration (individual vs. group lending, repayment conditions, etc). Moreover, initiatives to increase production without reducing risks of crop loss might increase the vulnerability of the farmer, but if viable, such initiatives would have two clear advantages. First, they are effectively neutral from a Bellmon perspective. Grain that is placed on the market (through the farmer) is eventually paid back. This would also allow successful initiatives to be sustained. Second, individual farmers would effectively act as agents of a FFW program. They would manage the workers receiving food aid and awardee supervision could be limited to ensuring that exploitation is avoided and grain is repaid.

Income Generation

Similar schemes to those identified above could be used to enhance cash crop production (especially of sesame, which is widely grown), but food aid could also be used to encourage attendance at training sessions and to subsidize the initial costs of starting a small business. In particular, the costs of employment could be offset by supplying the employer with food on a loan basis, to be provided to employees as part payment for service and repaid on a pre-agreed basis once business revenues had increased.

[54] It was noted that at present there are some imperfections in school feeding programs that will have to be corrected if this primary goal is to be achieved. In some cases, the study team noted that schools that had applied for food did not have the attendance levels claimed and in other cases, children attended school mainly at food distribution time, leaving promptly thereafter.

Modifying Food Prices

This potential function of food aid might under other circumstances result in a disincentive to production and marketing. In practice, this is unlikely to occur at least in the short term (the next three years), since even at import parity prices, producers are unwilling to increase production. The possibility of achieving prices above import parity is remote, so that whatever the market price, producers have no incentive to increase production under prevailing conditions of risk and cost. While these conditions remain, markets will not offer an incentive to production. However, should risks or costs diminish, the modification of prices below import parity levels might definitely impact upon production in the future.

Increasing Food Utilization Efficiency

Such programs would include both supplementary and therapeutic feeding, but would be necessarily linked to adult Food For Training (FFT) initiatives to improve knowledge of nutrition, health and hygienic practices. From a Bellmon perspective, such programs will require highly effective targeting and supervision to ensure accurate distribution of food aid to those that need it in the amounts required. In both cases, on-site feeding is to be preferred, since the chance of other family members taking the food aid is thereby reduced. The potential for this practice to occur in off-site supplementary feeding programs often results in additional food being provided to each household in order to ensure that targeted beneficiaries receive the food. From a Bellmon perspective, this increases the potential negative impact of the food aid program.

Improving Early Childhood Nutritional Outcomes

As both the FANTA and ANLA reports highlight, there is a substantial need in Southern Sudan for early childhood nutritional interventions, to prevent long-term human capital losses associated with under-two malnutrition. While a multi-pronged approach like PM2A, which incorporates BCC, health services and a food ration might be ideal, the difficulty of successfully implementing such a complex program in Southern Sudan under current civil society conditions and with current NGO program capacity, may necessitate either: (1) a geographically-concentrated program in relatively stable environments where chronic food insecurity predominates; or (2) an expansion of programs which provide conditional cash transfers, rations or a combination of cash and rations as incentives for attendance at health clinics or training on proper feeding practices. Regardless of the approach, basic research on the determinants of malnutrition in Southern Sudan would help inform future programming. The high rates of stunting in the two states considered food secure (32.8% in CES and 38% WES) underscore this need, and also suggest there is a need for early childhood interventions to prevent malnutrition even in food surplus areas

Improving Water and Sanitation

FFW could be widely utilized for water and sanitation improvements. Although the sinking of boreholes does not lend itself to manual labor, the development of hand dug wells is suitable for FFW, as is the construction of pit latrines, garbage disposal sites, hygienically designed markets and other simple structures. All of these activities can be undertaken on a FFW basis provided that adequate engineering and supervisory skills can be made available.

5.11 PROJECTED IMPACT OF FOOD AID MYAPS

Irrespective of the location or objective of MYAP programs, impacts from a Bellmon perspective will depend primarily upon the efficiency with which they are implemented, in particular the level of assessment and ongoing supervision that can be achieved. Current food aid initiatives are subject to inclusion errors that result in food being distributed to those who are not necessarily food insecure. This will inevitably affect commercial grain sales. If current levels of supervision are maintained and community-based targeting and redistribution is accepted, then it must also be expected that considerable volumes of food aid will impact local markets.

If more effective targeting, based upon poverty, as indicated by asset wealth (and ongoing supervision) can be achieved, then the level of inclusion error will be reduced. However, programs targeted primarily upon the indicator of asset wealth will still be liable to impact markets to some extent. Additional targeting of households engaged in food reduction coping strategies and/or with limited access to commercial markets will be required to minimize food aid impacts on the market.

As discussed above, growers' production is not constrained by depressed market prices. In fact, for most of the year, grain is sold close to ceiling prices of import parity. Although global grain prices have reverted to normal levels, the current wholesale price of sorghum in Southern Sudan exceeds US$600/MT. There are no indications that in the absence of food aid, market prices would rise beyond current levels. Instead, prices are constrained by imports and production is constrained not a depressed price but by the lack of technical skills, risk aversion, (due to insecurity and the threat of crop destruction by cattle), and the lack of resources/assets to purchase inputs (tools and labor) to increase productivity and/or expand production on the other. Under current circumstances, the potential impact of well targeted MYAP-based food aid on growers (substituting for a proportion of existing emergency initiatives) should be expected to be negligible.

Conversely, well-supervised and targeted MYAP programs will help to minimize the localized disruption of markets apparent from discussion with traders. Though traders report they are not "substantially affected" by distributed food aid on the market – rather, they consider it to be a normal aspect of business – they did report price declines of 10-15% and drops in sales volumes over three-four month periods during food aid distributions. The fact that traders appear to have adapted to the effects of food aid, suggests that traders are able to compensate for the transient effects of food aid by adjusting their prices and volumes during other times of the year. The extent to which consumers are affected by this practice is not possible to determine without further surveying markets and households. However, it is reasonable to expect that the poorest households would suffer most when traders raise prices to compensate for the losses associated with food aid distributions. Provided that MYAPS substitute for existing emergency food aid distribution, and are undertaken with improved targeting and supervision, the presence and impact of food aid on the market can be expected to be substantially reduced compared with the current experience.

Constraints

There are two key constraints to food-related development in Southern Sudan. Notably, neither are related to immediate market conditions, but depend more upon the availability of human and material resources. However, both effective markets and the availability of resources are important to program success.

Limited Non-labor Resources

It is important to recognize that the availability of basic resources beyond labor is extremely limited and even basic tools must be provided before any FFW project can begin. This constraint has been particularly evident in FFR programs of school construction. In some instances, the FFR component enabled construction of bricks and the basic framework of schools, but lacked the materials to roof or otherwise complete construction. Conversely, some programs that appear to be ideally suited to FFW are not. In particular, road construction is not only viewed by some communities as a low priority (because “roads bring soldiers”), but under the conditions prevailing in Southern Sudan, roads are more efficiently constructed and managed using commercial plant and equipment. The same is true of sinking boreholes. Consequently, unless additional resources (especially cash) are available, FFW projects should be limited to those involving not only a high labor requirement but very minimal additional requirements of any kind. If however, FFW can be combined with cash resources, the scope for this type of initiative will be much wider.

Integration of Development Programs within the Community

The proposed initiatives will not of themselves succeed in improving food security unless they are integrated within the framework of community practice. Clearly, increased food availability will be of little benefit unless water, sanitation, health and hygiene are also improved, but other less obvious integration is also essential. For example, the benefits of increasing the amount of land under cultivation could be completely offset unless community grazing practices are modified to respect cropped land.

Community assets and formal and informal structures are largely degraded and very little can be assumed in terms of law, practice or security. All aspects of community development must move forward together if any one aspect is to succeed. There is a significant risk that isolated initiatives will fail due to the impact of one or more extraneous factors or incorrect assumptions. A logical framework analysis for increased food security within a rural community in Southern Sudan would be obliged to encompass a wide range of different initiatives before it could be considered to be valid, self supporting and not susceptible to failure.

The overriding impression gained from field visits was that under current circumstances an integrated rural development approach is more appropriate to the development of communities within Southern Sudan than the introduction of isolated food-based initiatives. This is particularly relevant to potential MYAP programs, which should be designed to complement existing initiatives within each community, or if no such initiatives exist, should be sufficiently broad in scope (bringing more tools to bear than the provision of food alone) that they can be self supporting and sustainable.

6.0: ADEQUACY OF PORTS, DISTRIBUTION & STORAGE

There is adequate port capacity in Djibouti. Mombasa port is also available, though a recent report by RATIN (a trade data system in Nairobi under the USAID/COMPETE project) notes substantial congestion at the port, with vessels required to wait for up to 7 to 10 days to secure berths. It further notes,

> *Grain Bulk Handlers Ltd in Mombasa has been discharging around 7,000 MT per weather working day. Around 40% of the vessels are now discharging conventionally. The port is struggling to handle more than 250,000 MT a month which is 20,000 MT below monthly maize consumption demand and does not take into account additional reductions when wheat and other grains are discharged.*

There are adequate, clean and secure storage facilities available in Juba and to a limited extent up-country. WFP have over 93,000 MT capacity under their or partner control and across all areas. See Annex I for further details.

Annex I: Distribution and Storage

NB: All information below gained from UNJLC and WFP sites as an updated LCA for WFP is still under process.

STORAGE AND TRANSPORT

During many years of war, Southern Sudan could only viably receive goods transported from its southern neighbors, Uganda and Kenya, with commodities shipped through the latter nation's port city of Mombasa. This remains a key transport route for southern states, but more a more cost effective option for the northern states would be via Port Sudan in Northern Sudan and then by road, rail and barge to major towns and by way of the River Nile towards the capital, Juba. Also during the war, WFP had to use the expensive option of airdropping food aid launched from the airstrips of Lokichoggio in northern Kenya and El Obeid in North Sudan. WFP now uses a combination of road, rail, and barge transport options to move bulk food shipments to major warehouse sites.

Recent information about substantial congestion at Mombasa also makes this is a much less desirable choice, though these conditions will need to be reassessed as programs draw nearer to implementation. All three current food aid providers (WFP, NPA, and CRS) use the port of Mombasa for shipments into the region. The port has substantial capacity to handle all food aid type commodities, although it has been known to experience congestion and resulting delays given its shared role (with Dar es Salaam) as a major regional entry point for the landlocked countries of Uganda, Burundi, Rwanda, and DRC. There is adequate storage available in Mombasa, with NPA and CRS renting storage and WFP having its own regional storage facilities.

The two main exit points from Kenya and Uganda into Sudan are at Lokichoggio (Loki) and Koboko, where WFP also maintains two storage facilities of 7,550 MT and 6,700 MT, respectively. NPA and CRS move their commodities directly by road into various stores throughout their locations, which are typically rub halls of 500 MT capacity each.

It is 1,385 km from Mombasa to Lokichoggio and 1,718 km to Koboko. The roads are generally good with each destination requiring between $144 and $218 per MT for Loki and Koboko. On occasion, WFP use rail transport as far as Kampala, but has increasingly found this resulting in considerably more time, cost, and damages in handling and transshipment onto trucks.

Port Sudan

Port Sudan is the major port for Sudan as a whole and is key for WFP in servicing all of its operations nationwide, north and south. Transport by road takes five and seven days, respectively (1,200 and 1,550 km), and costs $52.80 and $68.20, respectively. There is an alternative by rail to El Obeid that costs $58.90 per MT. From these locations some of the major towns in the northern states can be served, although the status of the roads may be questionable.

On the western side out of El Obeid there are "all weather" roads (murram) to Raja in WBG, Aweil in NBG, Wau in Warab, Rumbek in Lakes, and further south toward Juba and Yei in CES.

The distances and transport costs to Raja are 765km and $256/MT and 850km and $138.5/MT to Aweil.

On the eastern side out of Kosti, the road only comes as far as Kodok (between Renk and Malakal) and there is no “all weather” access to all the northern states of Unity, Jonglei, and the major section of Upper Nile.

From the southwest (Koboko), there is an “all weather” road to Yei and on to Juba and as far as Bor in Jonglei State, but nothing further to serve the northern states. The road also reaches Rumbek (561km), up to Wau (743km), and to Raja in WBG (1,023km), but transport costs increase markedly when serving such areas from the south. From Loki on the eastern side, “all weather” roads reach Juba and on to Bor once again and all major locations in EES State. Internal transport costs vary depending on availability of trucks and their condition and distance and timing of transport, but range from $0.20 to 0.40 per MT per kilometer.

It should be noted that the description of these roads as “all weather” in Southern Sudan is somewhat optimistic as there are no truck weight restrictions or a halt to movement during or following heavy rain. Therefore, many trucks become stuck, bridges are damaged, and roads soon become impassible during the rainy season despite major road rehabilitation, continuing work, and demining activities.

As can be seen from the above, many locations are only reachable during the dry season’s window of opportunity, which may be for only three to four months. Other locations on “all weather” roads may be accessible all year round, but there is always risk of goods being delayed or spoilt en route. This places a heavy burden on WFP, NPA, and CRS to use the few months of dry weather to preposition all commodities needed during the year, even for relatively local movement from major store sites around Southern Sudan. WFP has 137 warehouses (owned or partner owned) in 82 locations within Southern Sudan, with the major sites having capacity to store between 3,000 and 5,000 MT. This is a logistical challenge, and occasionally WFP or NPA are faced with an extraordinary event that and they must then return to expensive food airdrops (or, in the case of NPA, internal airlifts) to supply the commodities required.

On one year funding cycles that must have commodities and budgets approved each year can cause pipeline problems. Ideally commodities are required in port to be transported in the very first months of the year, but may not arrive until later if there is a shortfall in USAID TITLE II prepositioned stocks in the region.

Djibouti

During the past few years up to and including 2009, NPA has been encouraged to use an alternative option to serve the eastern counties of Upper Nile and southern counties of Southern Blue Nile. This was due to the reasons stated above, that road access to this north eastern area was practically impossible for many years from the south and from Kosti in the north. NPA obtained agreement through the SSRRC (then SRRA) and the Ethiopian government to open the border that had been officially closed for 13 years to allow the much needed food aid to pass through. Storage is sufficient in Djibouti and transport available across Ethiopia to the border at Pagak, where loading onto smaller multi-wheel drive trucks is carried out for transport to storage sites inside Sudan.

Annex II: State-Specific Analyses

Although it has been argued that targeting of future initiatives should be based upon wealth status within LZ, this report assessed current conditions in the six states recommended by the FANTA study for further consideration as candidates for long-term developmental assistance. Additional general information is presented on the 4 states not included in FANTA's study. Each state is briefly described in the following sections.

II.1 CENTRAL EQUATORIA (CES)

Together with Western Equatoria State, Central Equatoria State has abundant agricultural potential within the traditional surplus-producing Greenbelt Zone along its southern border with Uganda. In the northeast of the state towards the Ironstone Plateau Zone, agricultural production becomes somewhat more marginal and livestock become increasingly important to the inhabitants, while in the center-east, agriculture remains predominant in the Hills and Mountains Zone. Juba, the capital of Southern Sudan, lies within CES State. One of the two major access routes from Uganda crosses the border at Kaya for transport of many goods bound for Yei and onwards to Juba as well as the states of Lakes, Western Bahr el Ghazal, Northern Bahr el Ghazal and Unity.

The population of CES State was estimated to be 726,000 in 2008, though the recently concluded, but disputed, national population census may reduce that estimate. Agriculture is the main livelihood, followed by livestock, labor and petty trade. Rainfall is not a limiting factor to production in CES. Indeed, there is potential for the majority of the state's smallholder farmers to produce a surplus. Since the signing of the CPA in 2005, the relative security and stability have allowed farmers in the state to increase yearly cereal production from 77,000 MT to 132,000 MT in 2008.

The ANLA 2008/09 report estimates that CES's 78,000 farming households, cultivating an average of 1.1 ha each, should have produced a surplus of cereal production in the region of 23,000 MT during 2008/9. Despite this potential, the majority of farmers operate at a subsistence level only, with little movement of the main staple commodities of sorghum, millet, maize, groundnuts and root crops around the state, or even to the main markets of Juba and Yei towns which are dominated by produce from Uganda. The primary reasons for this are years of local insecurity, presence of large cattle herds in some areas since the signing of the CPA, poor market structures and roads.

In times of crisis, root crop production can be expanded and coupled with increased use of wild and naturally-occurring foods. Improved feeder roads would allow trade/barter for households particularly in the Ironstone Plateau for grain from the Greenbelt Zone, either of wild foods and root crops, or of cattle.

In the southern part of CES, there is potential to produce commercial surpluses as this lies in the Greenbelt Zone and leads into the Hills and Mountains Zone, which both enjoy relatively good rainfall and fertile soils. Farmers appear to have basic agricultural knowledge, and were quite progressive in the years before the war (1972 – 83) in establishing cooperatives and considerable trade. However, most lack improved production techniques (such as a move from hand tool-led cultivation to use of ox ploughs and further mechanized farming) which would

allow much greater areas to be cultivated. Farmers are unlikely to embrace this, however, as long as there is poor market integration and poor access to markets from rural areas due to the state of the roads.

In the northern Ironstone Plateau area, there is capacity for some improved production but only to a level of subsistence for cattle-owning households, with some potential for a small surplus for trade in a good year. Along with the common constraints due to poor roads and poor market access, this area faces additional natural constraints related to the amount of rainfall, poor water retention capacity of the soil, and risk of cattle destroying crops.

II.1.1 Ongoing Development Programs

Since the SPLM/A recaptured the major towns in 1997, CES State has been favored with the presence of many international organizations running programs spanning relief to development. Compared to many other states, CES's relatively good access and security, and proximity to Uganda, have encouraged many donors and NGOs to operate here. WFP and NPA have been supporting returnees and displaced and vulnerable residents during this period with general food distributions supported by agriculture programs that have generally allowed a return to food security for most of the population. At present, there are still pockets of insecurity and resulting displacement, requiring more GFD, but WFP's main strategy is to support development activities through Food for Education, Food for Recovery, Food for Training and Inpatient support. NPA has a small time-bound program of support to returnees and vulnerable residents in a particular insecure area.

As previously noted, CES has great potential for self-sufficiency and is well positioned geographically for supply of agricultural produce to the growing towns of Juba and Yei, instead of those towns relying on trade from Uganda. Policy statements to encourage this self-sufficiency have been made, but must be backed by practical assistance. It is encouraging to see the nascent, but small Purchase For Progress Program of WFP targeting CES and Western Equatoria for local surplus to supply school feeding and other programs in CES, and displaced and refugees in WES. This first small step should give practical encouragement to farmers to produce a surplus. Food aid could be further used for development purposes in the northern part of the state since, compared to the southern and central areas, infrastructure is very poor and, therefore, services very limited. An expanded program of FFR/FFW could assist in this.

Table 8: Ongoing Food Aid and Cash Transfer Programs in CES

awardee	Coverage	Timing	Ration (kcals)	Program Duration	*Planned* Total Number of Beneficiaries *Per Year*	*Actual* Number of Beneficiaries *To Date 1st Qtr*
WFP	GFD Returnees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) **x 3**	Jan 2009 - Dec 2009	1,844 (22,608 total)	15,082
	GFD IDPs	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	10,000 (120,000 total)	7,864
	GFD Residents	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	11,095
	GFD Refugees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	8,000 (96,000 total)	21,360
	DDR	90 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Mar 2009 – May 2009	4,000 (12,000 total)	-
	Food For Education	270 days	Cereals 100g, pulses 20g, veg oil 15g, salt 5g, sugar 10g	April 2009 – Dec 2009	50,000 - 70,000 (610,000 total)	-
	Food For Training	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 – Dec 2009	2,000 (24,000 total)	-
	Girl's Incentive	270 days	Cereals 625g, veg oil 180g	April 2009 – Dec 2009	10,000 - 14,000 (122,000 total)	-
	Food For Recovery	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 5	Jan 2009 – Dec 2009	3,000 – 10,000 (85,000 total)	-
	Supplementary Feeding	360 days	Veg oil 20g, sugar 20g, CSB 200g	Jan 2009 - Dec 2009	130 - 260 (2,080 total)	-
	Institutional Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, sugar 30g, CSB 50g, salt 10g	Jan 2009 - Dec 2009	4,000 (48,000 total)	-
	Institutional Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	-
NPA	GFD Returnees	210 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	Jan 2009 – July 2009	1,340 (9,380 total)	Nil
	GFD Residents	120 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	April 2009 – July 2009	12,811 (51,244 total)	Nil

Note: "-" indicates data not available at time of study

Please note, for this and all other tables of ongoing programs, beneficiaries figures refer to both the total number of beneficiary months (one beneficiary month being equivalent to one ration), and the number of beneficiaries that are expected to be assisted per month. Note that in some cases programs last less than 12 months.

II.2 EASTERN EQUATORIA (EES)

Situated on the East Bank of the River Nile, Eastern Equatoria shares a long southern border with Uganda and Kenya. Crucial road access routes have been recently upgraded from Uganda via Atiaka/Nimule and from Lokichoggio in Kenya. Both of these routes link directly to Juba and Jonglei State (with its main market town of Bor on the East Bank of the Nile), and thereafter, up to Rumbek in Lakes and Wau in Western Bahr el Ghazal and beyond.

EES State is dominated by the typically pastoral Arid Zone in the southeast corner of Southern Sudan, and the Hills and Mountains Zone in the south and western parts of the state, leading up to Flood Plains in the northern areas that extend far up through Jonglei State. Drought is the norm in the Arid Zone, an area populated mostly by nomadic pastoralists who depend on livestock for grain exchange, livestock products and wild foods. households rarely invest time and resources cultivating sorghum because of the arid conditions that prevail most years. Seasonal migration in search of water and pasture can lead to conflict with neighboring pastoralists both within Sudan and in Kenya, though generally supply is good and high market prices for animals provide good terms of trade for the pastoralist majority in EES. In the Hills and Mountains Zone, farmers can typically cultivate two seasons in the highlands and one on the plains, allowing employment of different livelihood strategies. A variety of crops are grown, including cassava, which helps to insure against food insecurity in drought years.

The population of EES State was estimated to be 840,000 in 2008. The 2008/09 ANLA report estimates that this state would have a cereal production deficit in the region of 22,000 MT during 2008. The average area cultivated per household across the state is only 0.73 ha, reflecting conditions in the Arid Zone. This contrasts with a high of 1.22 ha in the productive areas in WES. As has been noted, own crop production is not the only source of basic grain for households in this state as long as markets function and road infrastructure allows access to surplus areas of Central Equatoria and market towns such as Torit and Kapoeta, where produce from Uganda and Kenya are sold.

The southern and western regions in the Hills and Mountains Zone have produced surplus in the past and could do so again. Even with the hosting of large numbers of IDPs, reception and resettlement of substantial numbers of returnees and disturbance from LRA activities, EES state has managed to more than double cereal production since 2005 to reach 87,000 MT. There is potential for commercial production. However, there are a number of ongoing constraints including poor market access, need to revive cooperatives, insufficient access to tools and improved seeds, need to ensure returnees are given a package to help them resettle so as to quickly recover some level of food security.

In the south-eastern Arid Zone it may not be possible for households to produce enough grain even for subsistence. However, with their reliance on cattle, as long as there is good access to the western part of the state and beyond to enable trade for grain, food security for these pastoralists should be assured.

As noted previously, there is a prospect of much-improved food production in the state compared to previous years. Over the past years, returnees have been assisted in resettlement. The majority of the Bor Dinka IDPs has belatedly been assisted back to their home area along with their cattle, thus freeing up land for returnees. The majority of goods into the state are from Uganda and Kenya, including sufficient staple crops to supply demand from residents, who are able to sell livestock or engage in trade which provides sufficient income to cover food needs.

Table 9: Key Characteristics Related to Food Insecurity within EES State

Characteristic		EES	8 State Average*
****HHs at risk:**	Lives at Risk	13%	11.2%
	Livelihoods at Risk	23%	23.8%
	No Risk	63%	64.3%
Main Livelihood Source:	Livestock	31.6%	13.7%
	Crops	35.1%	53.2%
	Casual labor	19.0%	10.7%
	Salary	6.8%	8.6%
	Fishing	0.3%	2.3%
	Petty trade	7.3%	11.5%
3 Main Income Sources:	Sale of livestock	24.8%	
	Firewood/charcoal sales	14.9%	
	Sale of alcoholic beverages	13.7%	
Asset Wealth:	Poor	69.8%	34.5%
	Medium	19.2%	36%
	Good	10.9%	29.5%
Food Expenditure (access indicator):	<50%	49.5%	51.5%
	50-65%	25.3%	21.0%
	>65%	25.3%	27.5%

**Note data taken from ANLA 2008/09 that did not assess WES or CES States on the presumed knowledge that these two states are generally food secure, with exception only when insecurity occurs.*
***Three elements used to determine the food security of households in 2009: Food Consumption, Food Access and Coping Strategies.*

II.2.1 Ongoing Development Programs

WFP has a major Field Level Agreement partner in Catholic Relief Services in EES. Much of the returnee support is channeled through CRS in coordination with UNHCR and GTZ. Both agencies continue to operate substantial Food For Education programs, FFW/FFR and institutional and therapeutic feeding programs.

Developmental food aid programs could be expanded in EES state to increase provision of infrastructure and services. In the south eastern Arid Zone, expansion of FFR/FFW programs could help the pastoralists maintain their assets, particularly livestock, through FFW schemes which could help them avoid having to sell or barter cattle for grain. FFE could also increase children's school attendance. Currently, children are not attending school in many cases because they help with cattle and other household chores. The chance for the family to have children fed a porridge "breakfast" and a cereals/pulses "lunch" before they leave the school is a significant incentive for parents to encourage school attendance.

If coupled with provision of inputs via small loans, initiation of a small local purchase program through revived cooperatives would enable local produce to support the above-mentioned programs.

Table 10: Ongoing Food Aid and Cash Transfer Programs in EES

awardee	Coverage	Timing	Ration (kcals)	Program Duration	Planned Total Number of Beneficiaries Per Year	Actual Number of Beneficiaries To Date 1st Qtr
WFP	GFD Returnees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 3	Jan 2009 - Dec 2009	1,844 (22,608 total)	1,572
	GFD IDPs	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	10,000 (120,000 total)	Nil
	GFD Residents	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	45,456
	GFD Refugees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	8,000 (96,000 total)	Nil
	DDR	90 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Mar 2009 – May 2009	4,000 (12,000 total)	-
	Food For Education	270 days	Cereals 100g, pulses 20g, veg oil 15g, salt 5g, sugar 10g	April 2009 – Dec 2009	50,000 - 70,000 (610,000 total)	-
	Food For Training	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 – Dec 2009	2,000 (24,000 total)	-
	Girl's Incentive	270 days	Cereals 625g, veg oil 180g	April 2009 – Dec 2009	10,000 - 14,000 (122,000 total)	-
	Food For Recovery	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 5	Jan 2009 – Dec 2009	3,000 – 10,000 (85,000 total)	-
	Supplementary Feeding	360 days	Veg oil 20g, sugar 20g, CSB 200g	Jan 2009 - Dec 2009	130 - 260 (2,080 total)	-
	Institutional Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, sugar 30g, CSB 50g, salt 10g	Jan 2009 - Dec 2009	4,000 (48,000 total)	-
	Institutional Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	-
CRS	GFD Returnees	180 days	Cereals 450g, pulses 50g, veg oil 30g	As required	16,270 (97,620 total)	Nil
	Food For Education Day Schools	210 days	Cereals 250g, pulses 27.5g, veg oil 16.5g, CSB 55g	April 2009, June – Aug 2009, Sept – Nov 2009	18,300 (128,100 total))	12,707
	Food For Education Boarding	210 days	Cereals 450g, pulses 50g, veg oil 30g, CSB 50g	April 2009, June – Aug 2009, Oct – Dec 2009	3,800 (26,600 total)	4,639
	Food For Education Orphanages	360 days	Cereals 450g, pulses 50g, veg oil 30g, CSB 50g	Jan 2009 – Dec 2009	200 (2,400 total)	146
	Food For Education VTCs	180 days	Cereals 250g, pulses 27.5g, veg oil 16.5g	April 2009, June – Aug 2009, Oct – Nov 2009	650 (3,900 total)	283
	Food For Work	210 days	Cereals 450g, pulses 50g, veg oil 30g	As required	6,770 (47,390 total)	3,422
	Inpatient Feeding	360 days	Cereals 450g, pulses 50g, veg	Jan 2009 –	950	1,317

awardee	Coverage	Timing	Ration (kcals)	Program Duration	Planned Total Number of Beneficiaries Per Year	Actual Number of Beneficiaries To Date 1st Qtr
			oil 30g, CSB 50g	Dec 2009	(11,400)	
	Inpatient Feeding HIV/TB	360 days	Cereals 583g, pulses 66.6g, veg oil 30g, CSB 66.6g	Jan 2009 – Dec 2009	200 (2,400 total)	30
	Supplementary Feeding	360 days	Veg oil 30g, CSB 225g	Jan 2009 – Dec 2009	1,500 (18,000)	2,150
	Contingency	90 days	Cereals 450g, pulses 50g, veg oil 30g	As required	2,000	Nil

Note: "-" indicates data not available at time of study

II.3 NORTHERN BAHR EL GHAZAL (NBG)

Northern Bahr el Ghazal is one of the northernmost states of Southern Sudan. The state has five counties, namely Aweil South, North, East, West and Centre. It is bordered to the northeast and north by the GOS states of Southern Kordofan and Southern Darfur; and to the west, south and east are the states of WBG, Warab and Unity respectively. NBG's location facilitates trade with both north and south as Ugandan and Kenyan goods reach Aweil via Yei, Rumbek and Wau, while sorghum and wheat come down from Darfur and North Kordofan.

NBG lies mostly in the Western Flood Plains Livelihood Zone, with the Ironstone Plateau covered in the extreme south western corner. Extensive flooding occurs in the rainy season due to a network of rivers while, by contrast, in the dry season water is scarce. Villages are small with widely-dispersed households. The Dinka inhabitants survive mostly through their cattle, with some cultivation done by the middle and better off households who do not have to sell their cattle to purchase or exchange for grains. Cultivation is carried out in both lowlands and highlands as land is generally available. Staple crops include sorghum and groundnuts, with the addition of rice, maize and sesame as minor crops. The limiting factor is often labor, especially for the poor, who have to expand options of fishing, wild food collection, selling of labor and petty trade to survive each year. Due to a combination of war and recurrent natural disasters (both flooding and droughts), this area is asset poor for many, leaving them chronically food insecure.

The population of NBG is estimated to be close to 1.4 million, made up mostly of the Dinka tribe. Due to many years of insecurity and drought within the state, NBG has faced large numbers of returnees following displacement, such as when conflict-related famine hit the area in 1998 killing upwards of 75,000 people and forcing hundreds of thousands to flee. The estimated 179,448 farming households only cultivate an average area of 0.62 ha (compared to the Southern Sudan average of 0.7 ha). The 2008/09 ANLA estimates a shortfall of cereal production in the state of over 51,000 MT compared to tonnage required for consumption.

There is potential to produce occasional surpluses on top of satisfying subsistence needs for staple crops. This could be achieved through assisting all wealth groups of the community in this Flood Plains Zone to cultivate as well as concentrate on cattle. Different levels of support would be appropriate for different wealth groups. Middle to wealthy farmers need credit to enable them to pay for needed labor and expansion of ox plowing. Poor households, often female-headed, need subsidized or loaned inputs to enable them to break out of the cycle of chronic food insecurity. Even when local insecurity ceases and people have resettled, there will

always be the constraint of the vagaries of weather patterns in NBG that will limit commercial investment and production. Concurrent opening of rural access roads is also needed.

Recurrent natural disasters, coupled with the burden for residents of absorbing the many returnees, leave many inhabitants of NBG vulnerable. This is especially true for those households who, for whatever reason, cannot access kinship support.

Table 11: Key Characteristics Related to Food Insecurity within NBG State

Characteristic		NBG	8 State Average*
****HHs at risk:**	Lives at Risk	14%	11.2%
	Livelihoods at Risk	24%	23.8%
	No Risk	62%	64.3%
Main Livelihood Source:	Livestock	4.6%	13.7%
	Crops	61.3%	53.2%
	Casual labor	6.0%	10.7%
	Salary	8.1%	8.6%
	Fishing	3.0%	2.3%
	Petty trade	19.7%	11.5%
3 Main Income Sources:	Sale of alcoholic beverages	17.8%	
	Firewood/charcoal sales	12.8%	
	Sale of other agric products	11.5%	
Asset Wealth:	Poor	15.7%	34.5%
	Medium	46.9%	36%
	Good	37.4%	29.5%
Food Expenditure (access indicator):	<50%	59.9%	51.5%
	50-65%	18.6%	21.0%
	>65%	21.6%	27.5%

**Note: data taken from ANLA 2008/09 that did not assess WES or CES States on the presumed knowledge that these two states are generally food secure, with exception only when insecurity occurs.*
***Three elements used to determine the food security of households in 2009: Food Consumption, Food Access and Coping Strategies.*

II.3.1 Ongoing Development Programs

WFP is the major agency bringing food aid to NBG State and have Field Level Agreements with several agencies, but must also directly implement distributions at times when no NGO is available to work in the field.

There is a large number of IDPs and refugees expected in the state during 2009, which reflects both the continuing local insecurity in the region and the possibility of displaced populations from Darfur coming south into NBG in an attempt to receive services disrupted due to insecurity and the Khartoum's banning of agencies operating in Darfur.

WFP is undertaking large programs of Food For Education (610,000 planned beneficiaries), FFT (25,000) and FFR (85,000). It is to be hoped that local security and climatic conditions do not affect these programs that need beneficiary populations to be relatively settled.

Kinship relations are very strong in NBG and the obligations involved strongly influence food sharing and consumption patterns as sharing food, especially among "close relatives" is both

socially sanctioned and legally enforced by the traditional justice system. Any food aid program must take this into account when attempting to target only the most vulnerable.

An expansion of developmental food aid programs could be viable for NBG, particularly if they focused on efforts to improve agricultural production amongst the poor. Food For Agriculture could assist in this aim because it would permit targeted households to devote time and energy to crop cultivation.

Table 12: Ongoing Food Aid and Cash Transfer Programs in NBG

awardee	Coverage	Timing	Ration (kcals)	Program Duration	*Planned* Total Number of Beneficiaries *Per Year*	*Actual* Number of Beneficiaries *To Date 1st Qtr*
WFP	GFD Returnees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 3	Jan 2009 - Dec 2009	1,844 (22,608 total)	13,901
	GFD IDPs	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	10,000 (120,000 total)	15,322
	GFD Residents	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	59,533
	GFD Refugees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	8,000 (96,000 total)	4
	DDR	90 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Mar 2009 – May 2009	4,000 (12,000 total)	-
	Food For Education	270 days	Cereals 100g, pulses 20g, veg oil 15g, salt 5g, sugar 10g	April 2009 – Dec 2009	50,000 - 70,000 (610,000 total)	-
	Food For Training	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 – Dec 2009	2,000 (24,000 total)	-
	Girl's Incentive	270 days	Cereals 625g, veg oil 180g	April 2009 – Dec 2009	10,000 - 14,000 (122,000 total)	-
	Food For Recovery	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 5	Jan 2009 – Dec 2009	3,000 – 10,000 (85,000 total)	-
	Supplementary Feeding	360 days	Veg oil 20g, sugar 20g, CSB 200g	Jan 2009 - Dec 2009	130 - 260 (2,080 total)	-
	Institutional Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, sugar 30g, CSB 50g, salt 10g	Jan 2009 - Dec 2009	4,000 (48,000 total)	-
	Institutional Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	-

Note: "-" indicates data not available at time of study

II.4 WESTERN BAHR EL GHAZAL (WBG)

Western Bahr el Ghazal is in the north-western corner of Southern Sudan. It borders Chad in the west, Darfur in the north, NBG and Warab in the east and WES in the south. There are 3 counties in WBG, namely Wau (which holds the state capital – Wau town), Raga and Jur River. Links to surplus-producing areas of WES and the towns of Yambio, Tambura and Ezo have been closed to any meaningful traffic due to very poor roads that have not yet been cleared of mines. However, work is now starting on the Tambura – Wau road which, once completed, will open up market opportunities.

The majority of the state lies in the Ironstone Plateau Zone, with the southern- and northern-most tips in the Greenbelt and Western Flood Plain Zones, respectively. Due to the prevalence of Tsetse fly in many parts of WBG, only a few cattle, goats and sheep are kept. The soils are high in ironstone and, therefore, do not retain moisture effectively. This often leads to drought conditions for crops and general water shortages for the population during the dry season. Sorghum, sesame and groundnuts are the main crops produced in WBG. For other states in the region (NBG and Warab), potential is high but production remains low due to poor agricultural practices related to many years of insecurity and neglect. However, cassava is an important crop in the state and abundant wild foods such as honey and the lulu/shea nut help people cope during times of stress.

The population of WBG is estimated to be 415,000 by mid-2009, of which there are approximately 54,160 farming households cultivating on average of 0.81 ha each. There is an expected surplus over local consumption of cereals of 390 MT only. As the population grows, there will be increased pressure on wild foods collection.

To achieve increased crop production in the state, improved techniques, credit and improved market links with both the Greenbelt and Western Flood Plains zones could be the crucial stimulus, while improved access to water would free up labor that is currently devoted to collecting water for more productive activities. However, a large commercial crop surplus cannot be expected across the state due to the presence of tsetse fly and poor soil conditions in the Ironstone Plateau Zone. Most households are currently moderately food secure, but a significant 15% of households remain food insecure.

Table 13: Key Characteristics Related to Food Insecurity within WBG State

Characteristic		WBG	8 State Average*
****HHs at risk:**	Lives at Risk	15%	11.2%
	Livelihoods at Risk	28%	23.8%
	No Risk	57%	64.3%
Main Livelihood Source:	Livestock	1.8%	13.7%
	Crops	47.4%	53.2%
	Casual labor	20.1%	10.7%
	Salary	10.9%	8.6%
	Fishing	2.2%	2.3%
	Petty trade	17.5%	11.5%
3 Main Income Sources:	Firewood/charcoal sales	16.6%	
	Sale of other agric products	13.4%	
	Sale of alcoholic beverages	12.7%	
Asset Wealth:	Poor	34.6%	34.5%
	Medium	30.0%	36%
	Good	35.3%	29.5%
Food Expenditure (access indicator):	<50%	45.5%	51.5%
	50-65%	27.4%	21.0%
	>65%	27.1%	27.5%

**Note: data taken from ANLA 2008/09 that did not assess WES or CES States on the presumed knowledge that these two states are generally food secure, with exception only when insecurity occurs.*

***Three elements used to determine the food security of households in 2009: Food Consumption, Food Access and Coping Strategies.*

Coupled with poor regional market access, poor agricultural practices leave households in the drier Ironstone Plateau area vulnerable in particularly dry years. Given the nature of the traditional cultivation systems, availability of land for cultivation will become a constraint as the population grows.

II.4.1 Ongoing Development Programs

WFP is the major agency bringing food aid to WBG State. It has Field Level Agreements with several agencies, but must also directly implement distributions at times when no NGO is available to work in the field.

There are large numbers of IDPs and refugees expected in the state during 2009. This reflects both continuing local insecurity in the region and the possibility of IDPs and/or refugees from Darfur coming south into WBG in an attempt to receive services that have been disrupted due to insecurity and banning of several agencies operating in Darfur by the Khartoum government. A provision to cover 120,000 IDPs in the state and an incoming 96,000 refugees is incorporated in WFP plans and food pre-positioned accordingly. Returnees numbering in the region of 22,000 are expected, but little direct food aid support for residents is planned. Instead, FFR and FFT programs will support 85,000 and 24,000 people, respectively.

WFP plans to undertake large Food For Education programs (50,000-70,000 planned beneficiaries), with corresponding Girls Incentive support for up to 10,000-14,000 girls. It will be a challenge for these more development-oriented food aid programs to be effectively carried out in areas where a large influx of IDPs and refugees are expected.

Once the immediate needs of IDPs and refugees are met, development food aid programs that target resettlement of returnees and substantial recovery projects for vulnerable residents could ensure that the capacity for some surplus production is maintained.

Table 14: Ongoing Food Aid and Cash Transfer Programs in WBG

awardee	Coverage	Timing	Ration (kcals)	Program Duration	*Planned* Total Number of Beneficiaries= *Per Year*	*Actual* Number of Beneficiaries *To Date 1st Qtr*
WFP	GFD Returnees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 3	Jan 2009 - Dec 2009	1,844 (22,608 total)	346
	GFD IDPs	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	10,000 (120,000 total)	10,835
	GFD Residents	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	65,873
	GFD Refugees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	8,000 (96,000 total)	-
	DDR	90 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Mar 2009 – May 2009	4,000 (12,000 total)	-
	Food For Education	270 days	Cereals 100g, pulses 20g, veg oil 15g, salt 5g, sugar 10g	April 2009 – Dec 2009	50,000 - 70,000 (610,000 total)	-
	Food For Training	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 – Dec 2009	2,000 (24,000 total)	-
	Girl's Incentive	270 days	Cereals 625g, veg oil 180g	April 2009 – Dec 2009	10,000 - 14,000 (122,000 total)	-

awardee	Coverage	Timing	Ration (kcals)	Program Duration	*Planned* Total Number of Beneficiaries= *Per Year*	*Actual* Number of Beneficiaries *To Date 1st Qtr*
	Food For Recovery	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 5	Jan 2009 – Dec 2009	3,000 – 10,000 (85,000 total)	-
	Supplementary Feeding	360 days	Veg oil 20g, sugar 20g, CSB 200g	Jan 2009 - Dec 2009	130 - 260 (2,080 total)	-
	Institutional Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, sugar 30g, CSB 50g, salt 10g	Jan 2009 - Dec 2009	4,000 (48,000 total)	-
	Institutional Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	-

Note: "-" indicates data not available at time of study

II.5 WARAB

The six counties of Warab State border the GOS state of Southern Kordofan to the north, and NBG, WBG, Unity and Lakes States to the northwest, west, east and southeast, respectively. Warab benefits from recent road improvements from Wau to Gogrial (allowing goods to come from Kenya and Uganda via Juba, Yei and Rumbek) and further road access to El Obeid in the North. Most livestock from this area are sold to northern traders.

Warab State lies mostly in the Western Flood Plains Zone, with the southern part located in the Ironstone Plateau. The state has a high potential for agriculture. The majority of the population, primarily Dinka, is agro-pastoralists who rely economically, socially and traditionally on their cattle. Annual floods influence livelihood rhythms in the north of Warab, which is characterized by seasonal migration of cattle for water and pasture. Variable weather patterns increase the vulnerability of the poorest. In the southern part of the state, the presence of tsetse flies limits the ownership of cattle and households are more dependent on cultivating their own crops of rain-fed sorghum, groundnuts and sesame, supplemented by fishing, petty trade (involving sale of grass, charcoal, small food items and local brews) and collection of wild foods. Agricultural production systems are very basic, with much use of the local flat hoe maloda that barely scrapes a few inches in the soil, coupled with low quality seeds and high prevalence of pests, diseases and weeds.

The ANLA has estimated the population of Warab State to be 1.9 million in 2009. Approximately 270,000 farming households are able to cultivate an average of 0.81 ha. Tonj, the largest production area in the state, contributes to a forecast state surplus cereal production of 30,000 MT. Despite having the third highest projected surplus cereal production (behind WES and CES), Warab also has the highest food aid needs (26,400 MT) according to WFP estimates for 2009.

The fact that Warab produces a substantial surplus cereal crop in spite of reliance on very basic agricultural technology and constrained market access underscores the potential for expansion of production. However, any further growth in production should not be expected until stability is achieved as Warab is still a scene of considerable local insecurity and expects an influx of IDPs, refugees and returnees. Recurrent natural disasters, coupled with the burden for residents of absorbing the many returnees leave many inhabitants of Warab vulnerable, particularly those

returning from the urban north who are unable to adjust to village life and migrate to the towns, but still depend on rural relatives for food. In addition, variable weather patterns may limit production.

Table 15: Key Characteristics Related to Food Insecurity within Warab State

Characteristic		Warab	8 State Average*
****HHs at risk:**	Lives at Risk	20%	11.2%
	Livelihoods at Risk	34%	23.8%
	No Risk	46%	64.3%
Main Livelihood Source:	Livestock	10.1%	13.7%
	Crops	59.7%	53.2%
	Casual labor	13.4%	10.7%
	Salary	5.0%	8.6%
	Fishing	0.9%	2.3%
	Petty trade	10.9%	11.5%
3 Main Income Sources:	Casual labor (agric)	22.5%	
	Sale of alcoholic beverages	17.7%	
	Sale of livestock	11.5%	
Asset Wealth:	Poor	52.3%	34.5%
	Medium	35.1%	36%
	Good	12.6%	29.5%
Food Expenditure (access indicator):	<50%	33.1%	51.5%
	50-65%	19.7%	21.0%
	>65%	47.2%	27.5%

**Note: data taken from ANLA 2008/09 that did not assess WES or CES States on the presumed knowledge that these two states are generally food secure, with exception only when insecurity occurs.*
***Three elements used to determine the food security of households in 2009: Food Consumption, Food Access and Coping Strategies.*

II.5.1 Ongoing Development Programs

WFP is the major agency bringing food aid to Warab State and has Field Level Agreements with several agencies, but must also directly implement distributions at times as there is a lack of international agencies available to undertake food assistance programs in Warab and other northern states.

There is a large number of IDPs and refugees (over 290,000) expected in the state during 2009, which reflects the continuing local insecurity in the region and the possibility of displaced populations from Darfur coming south into Warab in an attempt to receive services that have been disrupted due to insecurity and banning of several agencies operating in Darfur by the Khartoum government. Nearly 22,000 returnees are expected in 2009. Only a small number of residents are expected to require food aid by way of GFD.

WFP is undertaking large programs of Food For Education (610,000 planned beneficiaries), FFT (24,000) and FFR (85,000). The effectiveness of these programs will depend on beneficiary populations being relatively settled, which will in turn depend on local security and climatic conditions.

Developmental food aid programs are already significant in Warab and could further be oriented towards food production through Food For Agriculture for poorer and female-headed households.

Local purchase on a small scale could be started to further encourage those already contributing to production of a state surplus, and the commodities could be used for GFD support and later to support ongoing development programs.

Table 16: Ongoing Food Aid and Cash Transfer Programs in Warab

awardee	Coverage	Timing	Ration (kcals)	Program Duration	Planned Total Number of Beneficiaries Per Year	Actual Number of Beneficiaries To Date 1st Qtr
WFP	GFD Returnees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 3	Jan 2009 - Dec 2009	1,844 (22,608 total)	1.045
	GFD IDPs	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	10,000 (120,000 total)	16,393
	GFD Residents	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	42,135
	GFD Refugees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	8,000 (96,000 total)	Nil
	DDR	90 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Mar 2009 - May 2009	4,000 (12,000 total)	-
	Food For Education	270 days	Cereals 100g, pulses 20g, veg oil 15g, salt 5g, sugar 10g	April 2009 – Dec 2009	50,000 - 70,000 (610,000 total)	-
	Food For Training	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 – Dec 2009	2,000 (24,000 total)	-
	Girl's Incentive	270 days	Cereals 625g, veg oil 180g	April 2009 – Dec 2009	10,000 - 14,000 (122,000 total)	-
	Food For Recovery	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 5	Jan 2009 – Dec 2009	3,000 – 10,000 (85,000 total)	-
	Supplementary Feeding	360 days	Veg oil 20g, sugar 20g, CSB 200g	Jan 2009 - Dec 2009	130 - 260 (2,080 total)	-
	Institutional Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, sugar 30g, CSB 50g, salt 10g	Jan 2009 - Dec 2009	4,000 (48,000 total)	-
	Institutional Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	-

Note: "-" indicates data not available at time of study

II.6 UPPER NILE (UN)

Upper Nile State is one of the northern-most states of Southern Sudan, bordering White Nile State to the north, Blue Nile State and Ethiopia to the east, South Kordofan and Unity States to the west and Jonglei State to the south. The road linking UN to the north (Kosti and Khartoum) is paved tarmac from Renk northwards. Together with the crucial River Nile link for barge transport, this road enables year-round access for goods from the north to reach Renk, Malakal

and proceed further down to Bor and ultimately Juba. Despite the improvement of some roads further south from Renk due to oil exploration, large parts of rural areas remain inaccessible especially during the rainy season, because roads are made from mostly black cotton soils.

The households in UN State mostly live in the Eastern Flood Plains Livelihood Zone, while households closer to the rivers Nile and Sobat live within the Nile and Sobat Rivers Zone. Livestock, particularly cattle and goats, are important to the people here. There is minimal cultivation except closer to the rivers. Wild game and wild foods are important resources as is fishing for those near the rivers. The area is prone to annual flooding from July–December every year. The various tribes who inhabit the state are constrained in accessing markets or taking advantage of any trade opportunities for much of the year, including with Ethiopia. Much of the food available in markets comes from the north and is sold at prices that compare favorably with local production. There are some increasingly important mechanized farms in the Renk area that are managed by farmers/traders from the north, which also supply local markets with two or more varieties of sorghum and sesame.

Prior to the recently released but contested census figures, the United Nations, WFP and all agencies have been working with a population figure of 705,000 for UN, comprising 88,628 farming households that cultivate an average area of 0.67 ha per household (compared to an average across Southern Sudan of 0.7 ha). The recent ANLA estimated a deficit of 25,000 MT in cereal production for the state in 2008/9, but was unable to confirm the amounts produced in the mechanized farms, which could be significant. As already noted, at least in the major towns alongside the rivers, access to staple crops is not problematic as a very large amount of grain (and a multitude of other goods) is brought down from the north by road or barge depending on the time of year. Purchasing power for those with a household grain deficit seems to be fuelled by sales of fish and increasingly firewood and charcoal that is back-loaded on transport to the north, and has an increasingly negative impact on the local environment.

Due to the constraints of insecurity, variable weather patterns and large numbers of returnees, UN State is currently only producing a tonnage of cereal crops similar to production at the time of peace in 2005. It is possible for the state to easily cover subsistence production of cereal crops through, in particular, expansion of mechanized farming. Rural households in the Flood Plains Zone have many sources of income and options for achieving food security and, as a consequence, expansion of own crop production is not necessarily seen as a priority. However, if trade routes from the north were ever broken, there would be considerable concern in this state.

Table 17: Key Characteristics Related to Food Insecurity within UN State

Characteristic		UN[55]	8 State Average*
****HHs at risk:**	Lives at Risk	5%	11.2%
	Livelihoods at Risk	21%	23.8%
	No Risk	74%	64.3%
Main Livelihood Source:	Livestock	6.8%	13.7%
	Crops	24.4%	53.2%
	Casual labor	20.5%	10.7%
	Salary	23.6%	8.6%

[55] The ANLA report noted that the survey included a disproportionately large sample of urban and peri-urban respondents. As a result, some results may be distorted. In particular, the extremely high levels of salaried income, asset wealth, and low proportional expenditure on food appear to be an inaccurate representation of the majority of communities and, thus, the UN averages very likely mask the extent of rural food insecurity.

Characteristic		UN[55]	8 State Average*
	Fishing	14.5%	2.3%
	Petty trade	10.1%	11.5%
3 Main Income Sources:	Salaried work	23.9%	
	Casual labor (agric)	12.4%	
	Sale of fish	11.8%	
Asset Wealth:	Poor	13.1%	34.5%
	Medium	23.4%	36%
	Good	63.5%	29.5%
Food Expenditure (access indicator):	<50%	67.6%	51.5%
	50-65%	19.1%	21.0%
	>65%	13.3%	27.5%

**Note: data taken from ANLA 2008/09 that did not assess WES or CES States on the presumed knowledge that these two states are generally food secure, with exception only when insecurity occurs.*
The ANLA authors acknowledge that the data for UN may be somewhat misleading as many urban households were interviewed.
***Three elements used to determine the food security of households in 2009: Food Consumption, Food Access and Coping Strategies.*

II.6.1 Ongoing Development Programs

WFP is the major agency bringing food aid to UN State. WFP has Field Level Agreements with 14 agencies including WVI, ADRA, MSF and a host of local NGOs. The majority of their projected food aid, whether GFD or Food For Education, FFR, institution feeding, therapeutic feeding etc, is actually handled by their partner agencies, with WFP only directly distributing when called on to serve unscheduled IDPs by the SSRRC.

There are a high number of IDPs and refugees expected in the state during 2009, which is a reflection of the continuing local insecurity in UN. Despite the relatively good overall prospects for food security in UN for 2009, up to 60,000 residents are expected to also receive food aid via WFP – most likely former returnees who have had resettlement disturbed by insecurity and flooding/drought. Food For Education and FFR programs are of significant size.

NPA is also programming food aid in UN in 2009. For 5 years, NPA has brought in commodities via Djibouti port and through Ethiopia as a way of serving returnees and vulnerable residents in the far eastern counties of Maiwut, Maban and Longichuk when WFP and other agencies were unable to be assured of achieving timely deliveries and distributions. NPA continues to target food aid to returnees and residents in these 3 counties in UN.

Developmental food aid is already having an impact in UN and could be expanded to encourage more children to come to school (FFE and FFW) through linkages with other development programs and funds that are supporting education in the state. However, there are huge constraints in monitoring food aid programs due to the very poor roads and inability of agencies to be on hand to monitor food aid use.

Table 18: Ongoing Food Aid and Cash Transfer Programs in UN

awardee	Coverage	Timing	Ration (kcals)	Program Duration	Planned Total Number of Beneficiaries Per Year	Actual Number of Beneficiaries To Date 1st Qtr
WFP	GFD Returnees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 3	Jan 2009 - Dec 2009	2,837 (34,044 total)	980
	GFD IDPs	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	10,000 (120,000 total)	7,186
	GFD Residents	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	5,000 (60,000 total)	64,583
	GFD Refugees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	5,000 (60,000 total)	1,290
	DDR	150 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 – May 2009	100 – 7,000 (22,100 total)	-
	Food For Education	270 days	Cereals 100g, pulses 20g, veg oil 15g, salt 5g, sugar 10g	April 2009 – Dec 2009	50,000 - 65,000 (557,000 total)	-
	Food For Training	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 – Dec 2009	3,000 (36,000 total)	-
	Girl's Incentive	270 days	Cereals 625g, veg oil 180g	April 2009 – Dec 2009	10,000 - 13,000 (111,400 total)	-
	Food For Recovery	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 5	Jan 2009 – Dec 2009	3,000 – 10,000 (85,000 total)	-
	Supplementary Feeding	360 days	Veg oil 20g, sugar 20g, CSB 200g	Jan 2009 - Dec 2009	1,000 – 2,100 (22,400 total)	-
	Institutional Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, sugar 30g, CSB 50g, salt 10g	Jan 2009 - Dec 2009	1,000 – 1,250 (14,000 total)	-
	Institutional Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 – 1,250 (14,000 total)	-
	Therapeutic Feeding	360 days	Veg oil 15g, CSB 100g, sugar 10g	Jan 2009 - Dec 2009	40 – 130 (960 total)	-
	Therapeutic Feeding Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 – 1,250 (960 total)	-
NPA	GFD Returnees	270 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	Jan 2009 – Sept 2009	21,000 (189,000 total)	Nil
	GFD Residents	150 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	May 2009 – Sept 2009	31,482 (157,410 total)	Nil

Note: "-" indicates data not available at time of study

II.7 JONGLEI

Jonglei State is the largest state in Southern Sudan, lying to the centre/east of the country. It has a long border with Ethiopia to the east, Upper Nile to the north, Unity and Lakes to the west and EES and CES to the south. The border with CES allows road access via Juba to Bor town, the capital of the state on an all weather road. However, Bor is in the southwest corner of the

state and roads to other parts of the state are at best seasonal. The state has eleven counties and is considered even by Southern Sudan standards to have poor infrastructure and a population of majority Dinka and Nuer who have little in the way of assets and who generally remain in poverty. However, there is a great dependency in every sense on cattle and the majority pastoralists and agro-pastoralists in some areas are often in competition for the resources of water and pasture at crucial times of the dry season.

The households in Jonglei State mostly live in the Eastern Flood Plain LZ with to the north and west part of the state falling in the Nile and Sobat Rivers LZ. As noted, cattle are the prime livelihood source with little agriculture carried out in many areas, except by the women of the household. Wild foods and wild game are also important resources tapped by the people in Jonglei state and those near the rivers also have fish as a main food source. Flooding is an annual event, but the extent and timing changes from year to year, thus impacting on different communities' livelihoods at different times. Access to the main markets of Bor, Lankien and Pieri is constrained by the poor roads and annual flooding thus being a major disincentive to any efforts at surplus production.

To date, the United Nations, WFP and all agencies have been working with an estimated population figure of 1,117,000 by mid 2009 for Jonglei, and having 148,000 farming households that cultivate an average area of 0.6 ha only per household (showing the importance placed on cattle and other livelihood strategies). The recent ANLA estimated a deficit of almost 23,000 MT in cereal production for the state in 2008/09 after local consumption, but the trade routes from Juba by road and from Kosti in the north via Renk and Malakal by barge, allows at least those in the Bor and riverside areas to access cereals to purchase.

Jonglei State is currently only producing a tonnage of cereal crops slightly above that produced at the time of peace in 2005 (101,000 MT compared to 84,000 MT) and this has been due to continual insecurity between the traditionally hostile tribes in the area of Dinka, Nuer and Murle who all instigate cattle rustling and related killings of increasing brutality and numbers. The variable rainfall patterns and number of returnees has also been an influence on this figure as returnees are often given limited support only that is not sufficient to help them re-establish their livelihoods. If security can be maintained and provision made for support to any affected by flooding (and mitigated by construction of dykes) then returnees could be properly supported to reintegrate and the state could become sufficient in cereal crop production. There are a range of livelihood options open to the majority of households in the state, which means that more than sufficiency of crop production may not be readily achieved as the traditional priority remains the cattle.

Table 19: Key Characteristics Related to Food Insecurity within Jonglei State

Characteristic		Jonglei	8 State Average*
**HHs at risk:	Lives at Risk	13%	11.2%
	Livelihoods at Risk	18%	23.8%
	No Risk	69%	64.3%
Main Livelihood Source:	Livestock	28.4%	13.7%
	Crops	51.2%	53.2%
	Casual labour	3.5%	10.7%
	Salary	8.0%	8.6%
	Fishing	0.9%	2.3%
	Petty trade	8.0%	11.5%
3 Main Income Sources:	Casual labor (agric)	28.5%	

Characteristic		Jonglei	8 State Average*
	Sale of livestock	22.8%	
	Sale of cereals	11.6%	
Asset Wealth:	Poor	36.9%	34.5%
	Medium	37.2%	36%
	Good	25.9%	29.5%
Food Expenditure (access indicator):	<50%	37.2%	51.5%
	50-65%	24.8%	21.0%
	>65%	38.0%	27.5%

**Note: data taken from ANLA 2008/09 that did not assess WES or CES States on the presumed knowledge that these two states are generally food secure, with exception only when insecurity occurs.*
***Three elements used to determine the food security of households in 2009: Food Consumption, Food Access and Coping Strategies.*

II.7.1 Ongoing Development Programs

WFP is the major agency bringing food aid to Jonglei State, supported by NPA in 5 Counties of Twic East, Duk, Nyirol, Uror, and Ayod and CRS in Bor South County. NPA's program is almost exclusively one of GFD to a projected 30,750 returnees and 51,876 vulnerable residents for targeted support for 7 months, while WFP and CRS have a combined program of GFD and development food aid. WFP reports high levels of returnees and vulnerable residents expected throughout the state but has programmed 1,790 returnees requiring support per month, 1,000 residents, 2,000 IDPs and 6,000 refugees per month from Ethiopia. CRS plans to support 7,030 returnees in South Bor per month.

The high number of returnees and IDPs expected in the state during 2009 is a reflection of the continuing and increasing local insecurity in Jonglei and a large number of residents are expected to also receive food aid via WFP and NPA – most likely former returnees who have had resettlement disturbed by insecurity and flooding/drought. Food for Education, FFR and FFT programs are of significant size.

Developmental food aid is already having some impact in Jonglei and could be expanded. However, this may be most viable as a start in the southern counties that at least have relatively easier access throughout the year as an effort to build up much needed infrastructure by way of schools, health centers and other community resources, while supporting chronically food insecure who have not been able to resettle sufficiently to date. However, there are huge constraints in monitoring food aid programs due to the very poor roads and inability of agencies to be on hand to monitor food aid use.

Table 20: Ongoing Food Aid and Cash Transfer Programs in Jonglei

awardee	Coverage	Timing	Ration (kcals)	Program Duration	*Planned* Total Number of Beneficiaries *Per Year*	*Actual* Number of Beneficiaries *To Date 1st Qtr*
WFP	GFD Returnees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 3	Jan 2009 - Dec 2009	1,790 (21,480 total)	6,496
	GFD IDPs	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	2,000 (24,000 total)	7,865
	GFD Residents	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	57,107
	GFD Refugees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	6,000 (72,000 total)	3,223
	DDR	90 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Mar 2009 – May 2009	1,500 (4,500 total)	-
	Food For Education	270 days	Cereals 100g, pulses 20g, veg oil 15g, salt 5g, sugar 10g	April 2009 – Dec 2009	10,000 - 27,000 (221,000 total)	-
	Food For Training	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 – Dec 2009	2,000 (24,000 total)	-
	Girl's Incentive	270 days	Cereals 625g, veg oil 180g	April 2009 – Dec 2009	2,000 - 5,400 (44,200 total)	-
	Food For Recovery	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 5	Jan 2009 – Dec 2009	2,000 – 7,500 (40,500 total)	-
	Supplementary Feeding	360 days	Veg oil 20g, sugar 20g, CSB 200g	Jan 2009 - Dec 2009	500 – 2,500 (17,750 total)	-
	Institutional Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, sugar 30g, CSB 50g, salt 10g	Jan 2009 - Dec 2009	1,000 (12,000 total)	-
	Institutional Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	-
	Therapeutic Feeding	360 days	Veg oil 15g, CSB 100g, sugar 10g	Jan 2009 - Dec 2009	70 – 100 (1,040 total)	-
	Therapeutic Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	70 – 100 (1,040 total)	-
NPA	GFD Returnees	210 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	Jan 2009 – July 2009	30,750 (215,250 total)	22,952
	GFD Residents	90 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	May 2009 – July 2009	51,876 (155,628 total)	Nil
	Food For Recovery	360 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	Jan 2009 – Dec 2009	1,510 (18,120 total)	Nil
CRS	GFD Returnees	180 days	Cereals 450g, pulses 50g, veg oil 30g	As required	7,030 (42,180 total)	Nil
	Food For Education Day Schools	210 days	Cereals 250g, pulses 27.5g, veg oil 16.5g, CSB 55g	April 2009, June – Aug 2009, Sept – Nov 2009	9,700 (67,900 total))	11,140
	Food For Education	210 days	Cereals 450g, pulses 50g, veg oil 30g, CSB 50g	April 2009, June – Aug	900 (6,300 total)	664

awar dee	Coverage	Timing	Ration (kcals)	Program Duration	*Planned* Total Number of Beneficiaries *Per Year*	*Actual* Number of Beneficiaries *To Date 1st Qtr*
	Boarding			2009, Sept – Dec 2009		
	Food For Education VTCs	180 days	Cereals 250g, pulses 27.5g, veg oil 16.5g	April 2009, June – Aug 2009, Oct – Nov 2009	350 (2,100 total)	Nil
	Food For Work	210 days	Cereals 450g, pulses 50g, veg oil 30g	As required	3,220 (22,540 total)	Nil
	Girl's Incentive	180 days	Veg oil 92.5g	April – July 2009, Oct – Nov 2009	4,000 (24,000 total)	Nil
	Inpatient Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, CSB 50g	Jan 2009 – Dec 2009	250 (3,000)	136
	Contingency	90 days	Cereals 450g, pulses 50g, veg oil 30g	As required	2,000	Nil

Note: "-" indicates data not available at time of study

II.8 LAKES

Lakes State lies to the centre of Southern Sudan and is made up of 8 counties. It is bordered to the south by WES, to the east by Jonglei, to the north by Unity and to the northwest by Warab State. There is a crucial "all weather" road linking the state capital – Rumbek – with the Ugandan border that allows the bulk of goods and food products to be transported from the south and onwards to Wau in WBG. However the road can be closed during the rainy season which quickly affects supply of commodities in the market and prices.

Lakes State has a highly diversified farming system as the northern and eastern parts of the state lie in the Western Flood Plains LZ, while the south western part forms part of the Ironstone Plateau LZ. This allows agro-pastoralism to dominate in the northeast, with additional dependency on fishing and wild foods, while in the southwest crop cultivation is the prime activity supported by wild foods collection and wild game hunting. The livestock population is noted to be high in the state and the main crops are sorghum and increasingly groundnuts.

The estimated population figure for Unity by mid 2009 is close to one million with 125,000 farming households cultivating an average of 0.76 hectare per household and the recent ANLA estimated a surplus of over 17,000 MT in cereal production for the state in 2008/09 after local consumption.

There have been problems in resettling returnees as they have faced a lack of agricultural inputs and periods of serious local insecurity, which has hampered their efforts at becoming food secure, but the potential in the state is clearly there for a surplus to be produced and marketed once an improved road infrastructure is in place.

Table 21: Key Characteristics Related to Food Insecurity within Lakes State

Characteristic		Lakes	8 State Average*
**HHs at risk:	Lives at Risk	7%	11.2%

	Livelihoods at Risk	22%	23.8%
	No Risk	70%	64.3%
Main Livelihood Source:	Livestock	7.1%	13.7%
	Crops	77.7%	53.2%
	Casual labour	6.2%	10.7%
	Salary	4.4%	8.6%
	Fishing	1.0%	2.3%
	Petty trade	3.7%	11.5%
3 Main Income Sources:	Sale of cereals	39.7%	
	Sale of alcohol bev.	17.2%	
	Sale of livestock	12.2%	
Asset Wealth:	Poor	19.6%	34.5%
	Medium	47.9%	36.0%
	Good	32.5%	29.5%
Food Expenditure (access indicator):	<50%	81.3%	51.5%
	50-65%	12.6%	21.0%
	>65%	6.1%	27.5%

**Note: data taken from ANLA 2008/09 that did not assess WES or CES States on the presumed knowledge that these two states are generally food secure, with exception only when insecurity occurs.*
***Three elements used to determine the food security of households in 2009: Food Consumption, Food Access and Coping Strategies.*

II.8.1 Ongoing Development Programs

WFP is the major agency bringing food aid to Lakes State and have planned support for high numbers of IDPs and refugees during the year (120,000 and 96,000) in response to expected local insecurity but by the end of the first quarter had not supported any refugees and much fewer IDPs than the projected number. However, resources were switched to assist higher numbers of vulnerable residents and returnees than planned.

WFP has planned for up to 70,000 school children to benefit from feeding programs in the state per month with up to 14,000 additional rations provided as an incentive to girl students. FFR and FFT initiatives are to support 10,000 and 2,000 beneficiaries per month and other institutional and supplementary feeding programs assist 5,000 including caretakers.

Developmental food aid is already having some impact in Lakes and could be further used to develop additional community resources. However, with competition to food aid from livelihoods that have a range of coping options, there may be a limit to the number of people ready to work for food aid if they are already generally food secure at least in production of own crops. As in all other states, the capacity to deliver food aid on time, establish projects and sufficiently supervise and monitor them, remains a challenge that would only become larger as developmental food aid programs expanded.

Table 22: Ongoing Food Aid and Cash Transfer Programs in Lakes

awardee	Coverage	Timing	Ration (kcals)	Program Duration	*Planned* Total Number of Beneficiaries *Per Year*	*Actual* Number of Beneficiaries *To Date 1st Qtr*
WFP	GFD Returnees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 3	Jan 2009 - Dec 2009	1,844 (22,608 total)	6,513

awardee	Coverage	Timing	Ration (kcals)	Program Duration	*Planned* Total Number of Beneficiaries *Per Year*	*Actual* Number of Beneficiaries *To Date 1st Qtr*
	GFD IDPs	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	10,000 (120,000 total)	6,460
	GFD Residents	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	9,703
	GFD Refugees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	8,000 (96,000 total)	nil
	DDR	90 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Mar 2009 – May 2009	4,000 (12,000 total)	-
	Food For Education	270 days	Cereals 100g, pulses 20g, veg oil 15g, salt 5g, sugar 10g	April 2009 – Dec 2009	50,000 - 70,000 (610,000 total)	-
	Food For Training	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 – Dec 2009	2,000 (24,000 total)	-
	Girl's Incentive	270 days	Cereals 625g, veg oil 180g	April 2009 – Dec 2009	10,000 - 14,000 (122,000 total)	-
	Food For Recovery	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 5	Jan 2009 – Dec 2009	3,000 – 10,000 (85,000 total)	-
	Supplementary Feeding	360 days	Veg oil 20g, sugar 20g, CSB 200g	Jan 2009 - Dec 2009	130 - 260 (2,080 total)	-
	Institutional Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, sugar 30g, CSB 50g, salt 10g	Jan 2009 - Dec 2009	4,000 (48,000 total)	-
	Institutional Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	-

Note: "-" indicates data not available at time of study

II.9 UNITY

Unity State lies to the centre north of Southern Sudan and borders Abyei and South Kordofan to the north, Warab State to the west, Lakes to the south and Jonglei to the east. It comprises nine counties and major towns are Bentiu as the state capital and Leer. Many roads in the northern part of the state have been improved due to the oil fields, but there are no recognised "all weather" roads linking Unity with Wau to the west in WBG or Rumbek to the south in Lakes State. The opening up of oil fields in Unity gives great opportunities for work to many people in the state, but except for basic labour positions, most are unqualified for such work.

The households in Unity State reside in the Western Flood Plains LZ to the west and in the Nile Sobat River LZ to the east. The livelihood in general is a mixture of agro-pastoralism, fishing and some more sedentary agriculture to the south. Other food options include wild food collection and sale of labour in the state towns and further afield in the north. As noted above, the oil exploration is also opening up some additional labour opportunities and has also increased petty trade. Maize is an important cereal crop, coupled with sorghum and groundnuts, but there remains a heavy reliance on cattle and goats.

The estimated population figure for Unity by mid 2009 is over 661,000 with 78,000 farming households cultivating an average of 0.61 hectare per household (while the median area across Southern Sudan is 0.7 ha). The recent ANLA estimated a deficit of almost 23,000 MT in cereal production for the state in 2008/09 after local consumption, and the population must depend on other livelihood sources to purchase or barter sufficient cereals for household consumption.

The deficit in local cereal production can be partly due to the impact of flooding in some areas during the past two years, and the influx of returnees who are taking time to settle, while relative security in the past two years (in an area heavily affected by the war and subsequent displacement to open up oilfields by the northern government) has led to greater local market access.

Unity state could be assisted to become self-sufficient in cereal crop production as returnees are helped to resettle and with expectation that serious insecurity is a thing of the past. However, surplus crop production will not become a priority for most households while they have so many other livelihood options that are employed.

Table 23: Key Characteristics Related to Food Insecurity within Unity State

Characteristic		Unity	8 State Average*
****HHs at risk:**	Lives at Risk	4%	11.2%
	Livelihoods at Risk	21%	23.8%
	No Risk	74%	64.3%
Main Livelihood Source:	Livestock	12.3%	13.7%
	Crops	42.5%	53.2%
	Casual labour	9.3%	10.7%
	Salary	12.0%	8.6%
	Fishing	5.1%	2.3%
	Petty trade	18.9%	11.5%
3 Main Income Sources:	F'wood/ch'coal sales	17.0%	
	Sale of cereals.	12.9%	
	Sale of alc/salaried wk	11.8% each	
Asset Wealth:	Poor	21.6%	34.5%
	Medium	33.9%	36%
	Good	44.5%	29.5%
Food Expenditure (access indicator):	<50%	63.8%	51.5%
	50-65%	24.3%	21.0%
	>65%	11.9%	27.5%

**Note: data taken from ANLA 2008/09 that did not assess WES or CES States on the presumed knowledge that these two states are generally food secure, with exception only when insecurity occurs.*
***Three elements used to determine the food security of households in 2009: Food Consumption, Food Access and Coping Strategies.*

II.9.1 Ongoing Development Programs

WFP is the major agency bringing food aid to Unity State, supported by NPA in response to areas defined during the course of the year as needing interventions in areas that WFP has challenges to meet.

WFP originally projected that there would be few residents or returnees requiring food aid support but by the end of the first quarter had already assisted over 30,000 residents deemed to be in need. NPA have projected to support over 36,000 returnees, residents and IDPS during 9 months of the year with GFD rations of between 30 – 60% as support for either temporary or longer term settlement.

WFP has planned for up to 35,000 school children to benefit from feeding programs in the state with up to 7,000 additional rations provided as an incentive to girl students. FFR and FFT initiatives are to support 5,000 each per month and other institutional and therapeutic feeding programs assist 1,200 including caretakers.

Developmental food aid is already having some impact in Unity and could be further used to develop additional community resources. However, with competition to food aid from labour sales and petty trade opportunities, there may be a limit to the number of people ready to work for food aid, though this depends on ration sizes. As in all other states, the capacity to deliver food aid on time, establish projects and sufficiently supervise and monitor them, remains a challenge that would only become larger as developmental food aid programs expanded.

Table 24: Ongoing Food Aid and Cash Transfer Programs in Unity

awardee	Coverage	Timing	Ration (kcals)	Program Duration	*Planned* Total Number of Beneficiaries *Per Year*	*Actual* Number of Beneficiaries *To Date 1st Qtr*
WFP	GFD Returnees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) **x 3**	Jan 2009 - Dec 2009	429 (5,148 total)	2,602
	GFD IDPs	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	500 (6,000 total)	3,144
	GFD Residents	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	500 (6,000 total)	30,259
	DDR	90 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Mar 2009 – May 2009	750 (2,250 total)	6,500
	Food For Education	270 days	Cereals 100g, pulses 20g, veg oil 15g, salt 5g, sugar 10g	April 2009 – Dec 2009	23,000 - 35,000 (302,000 total)	-
	Food For Training	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 – Dec 2009	5,000 (60,000 total)	-
	Girl's Incentive	270 days	Cereals 625g, veg oil 180g	April 2009 – Dec 2009	4,600 - 7,000 (60,400 total)	-
	Food For Recovery	210 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 5	Jan-Apr 2009 Oct-Dec 2009	5,000 (35,000 total)	-
	Supplementary Feeding	360 days	Veg oil 20g, sugar 20g, CSB 200g	Jan 2009 - Dec 2009	100 - 400 (3,100 total)	-
	Institutional Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, sugar 30g, CSB 50g, salt 10g	Jan 2009 - Dec 2009	500 - 550 (6,250 total)	-

awar dee	Coverage	Timing	Ration (kcals)	Program Duration	*Planned* Total Number of Beneficiaries *Per Year*	*Actual* Number of Beneficiaries *To Date 1st Qtr*
	Institutional Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	500 - 550 (6,250 total)	-
	Therapeutic Feeding	360 days	Veg oil 15g, CSB 100g, sugar 10g	Jan 2009 - Dec 2009	50 – 75 (625 total)	-
	Therapeutic Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	50 – 75 (625 total)	-
NPA	GFD Returnees	270 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	Jan 2009 – Sept 2009	10,000 (90,000 total)	Nil
	GFD IDPs	150 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	May 2009 – Sept 2009	12,835 (64,175 total)	Nil
	GFD Residents	150 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	May 2009 – Sept 2009	13,755 (68,775 total)	Nil

Note: "-" indicates data not available at time of study

II.10 WESTERN EQUATORIA (WES)

Western Equatoria State has been a surplus producing state for many years and even during the war NGOs committed at times to support cooperatives through purchase of surplus production. WES lies in the Greenbelt LZ, extending northwards into the Ironstone Plateau LZ where agricultural production becomes somewhat more marginal and livestock become increasingly important to the inhabitants. There is a long western border with DRC and CAR and the area around towns of Tambura, Yambio and Ezo have traditionally had considerable food crops trade with these countries, selling maize and cassava primarily. To the southeast lies CES, with Lakes State to the northeast and WBG to the north. There is potential once road infrastructure is improved, for export of food crops to the towns of Yei and Juba in CES and northwards to Wau and other towns in WBG.

The population of WES State is estimated to be 877,000 by mid 2009 and over 122,000 farming households are expected to cultivate 1.22 hectares per household (the largest average area in Southern Sudan) and to produce a surplus after local consumption of almost 121,000 MT. Agriculture is the main livelihood, followed by sale of farm labour, livestock in the Ironstone Plateau LZ and petty trade. At least two cereal crops are grown in the long rainfall season (March – December) in the Greenbelt LZ effectively doubling the area under cultivation. Maize is the major cereal crop but there is also a large scale cultivation of cassava, which serves as an important resource should rainfall patterns affect the maize crop.

It is reported that surplus maize lies in stores from previous years if not sold across the border in DRC, and there is known to be high storage losses. Recent insecurity in WES and in neighboring DRC has been caused by the presence of the Lords Resistance Army and this has halted much of the cross border trade again this year. Development of the road infrastructure is desperately needed to open up access to markets. Important road links to Wau in WBG and a further road east to Maridi (linking to Yei and Juba to the south and Rumbek to the north) are

said to be prioritised and cannot come quick enough for WES farmers. This state, together with parts of CES should be the breadbasket of Southern Sudan.

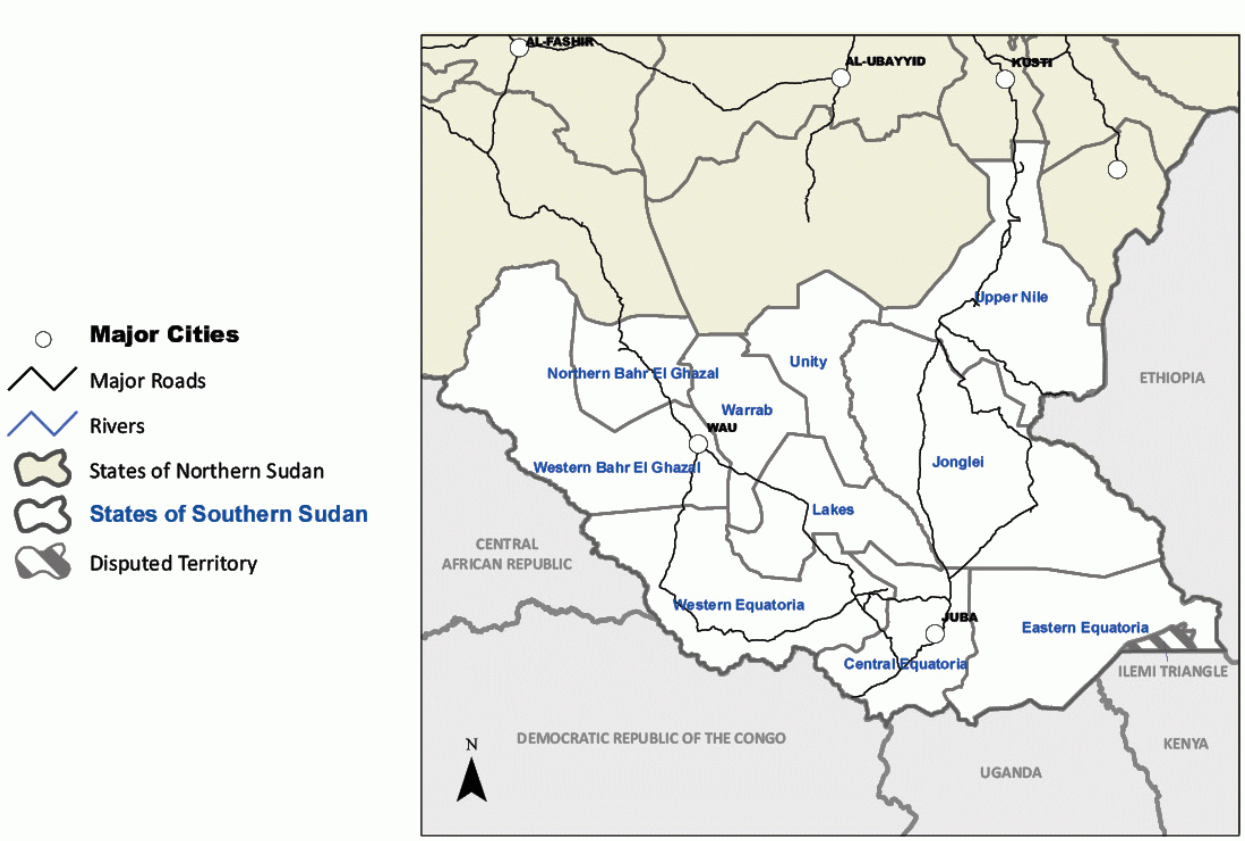
In the northern Ironstone Plateau LZ, there is capacity for some improved production but only to a level of subsistence for cattle-owning households as they employ a variety of livelihood options and would not risk too much time and effort on cereal production while there is risk of a year with poor rainfall compounding the poor water retention capacity of the soil, and risk of cattle destroying crops.

II.10.1 Ongoing Development Programs

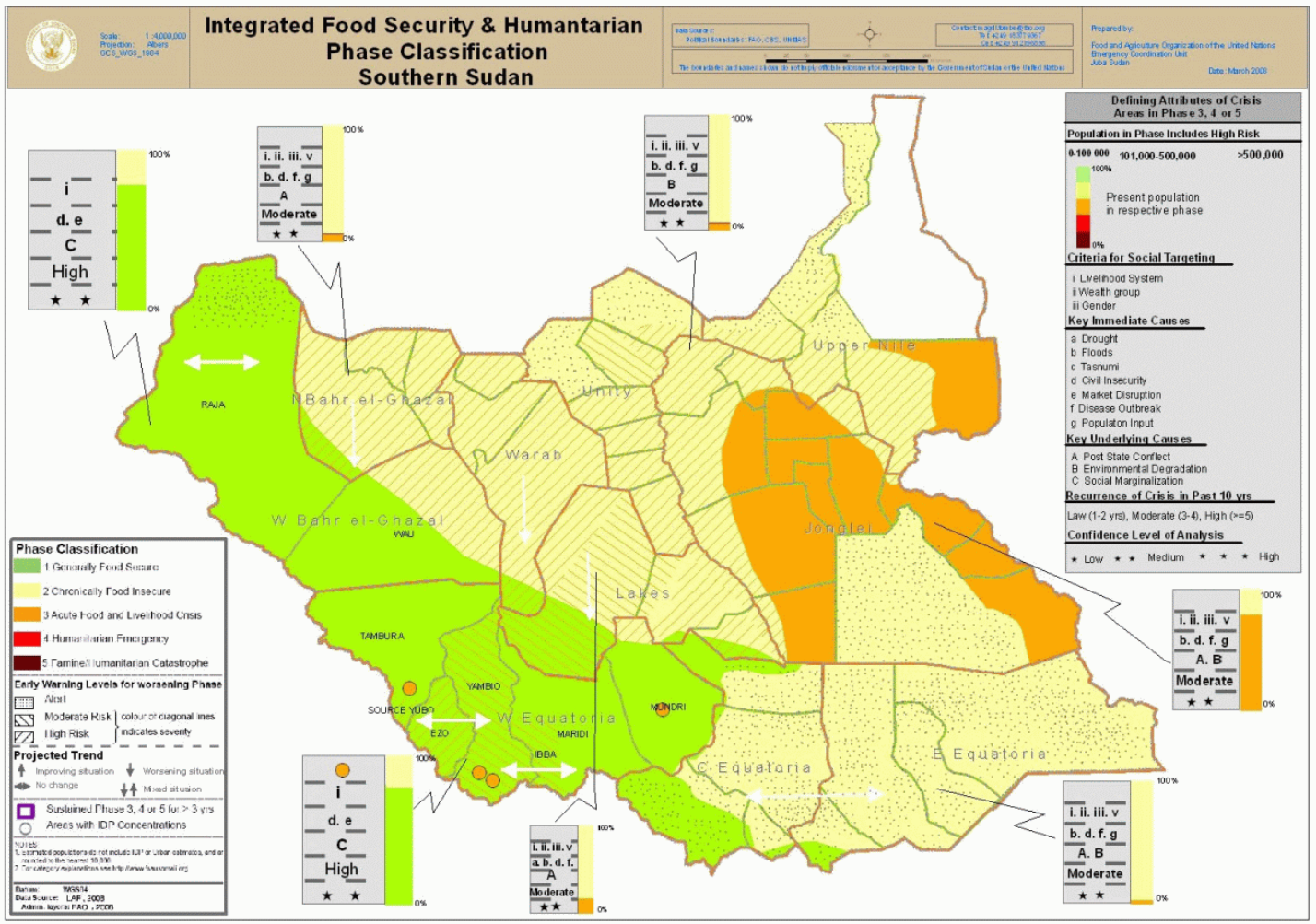
There were no specific plans for food aid for WES in 2009, with exception for support to returnees. The repeated local insecurity in the Mvolo area as pastoralists from Warab/Lakes bring their cattle down for water and pasture in the Jur area has caused local displacement, and the considerable attacks on villages by the LRA in DRC and parts of (western) WES has again caused displacement and an influx of refugees that are being supported by WFP.

There is potential that is being followed by WFP for local purchase of surplus in WES that will be used to serve the displaced and refugees. This will undertaken with EU funding. Obviously, this area should be a priority area in the future for local purchase, that could be transported to nearby states to support returnees and other developmental food aid programs. Any 7developmental food aid programs in WES could be supported with local production.

Annex III: States of Southern Sudan

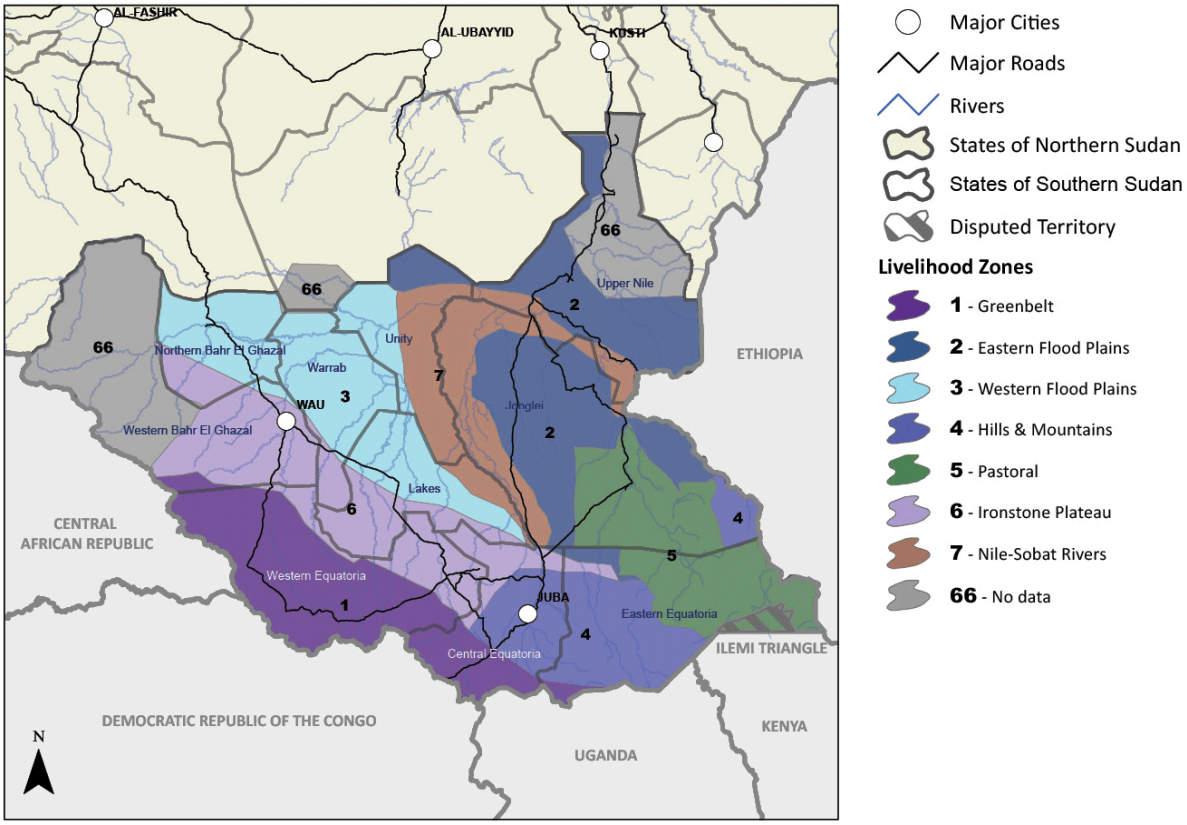


Annex IV: IPC Map for Southern Sudan



Source: IPC, April 2009

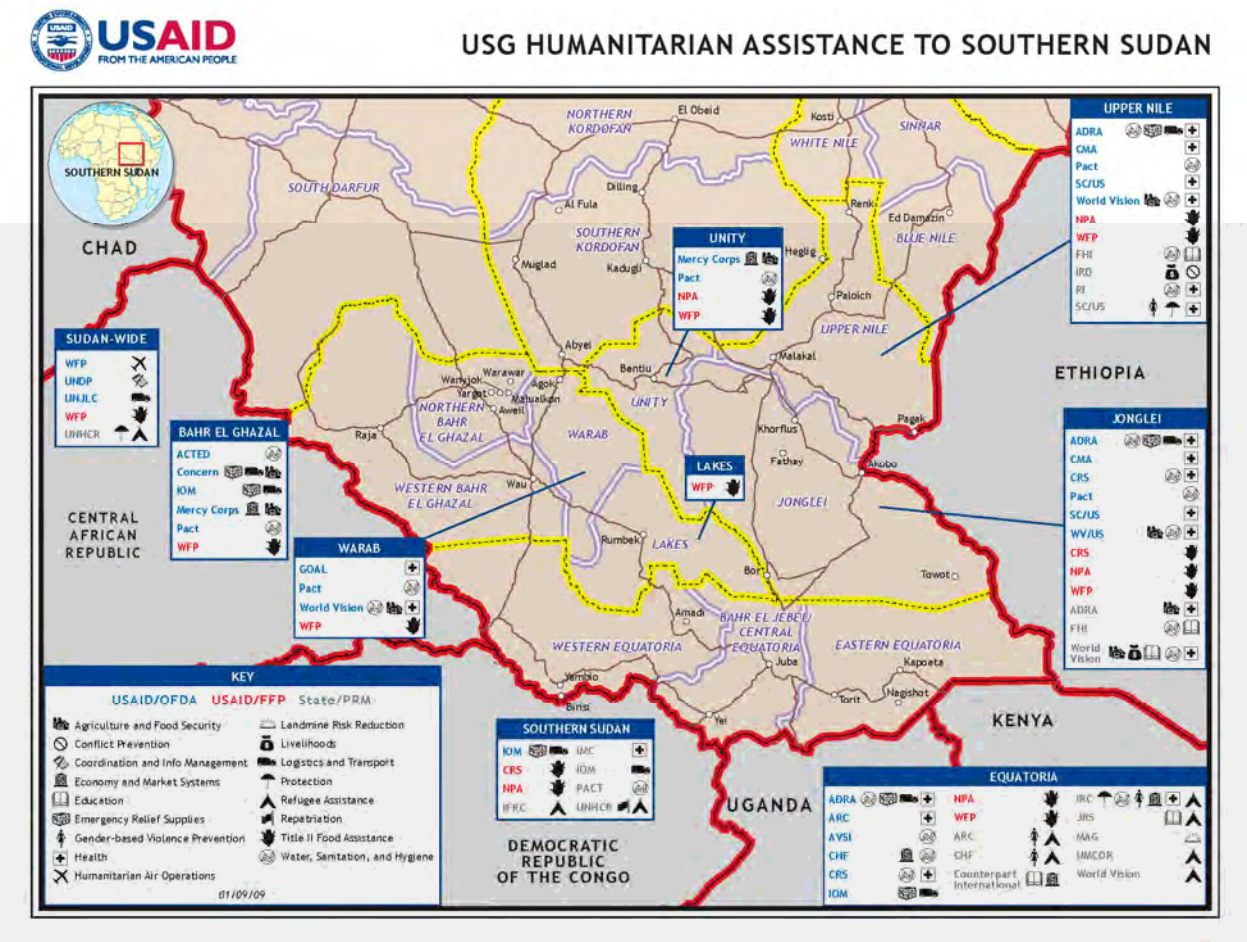
Annex V: Livelihood Zones in Southern Sudan



Livelihood zone	Characteristics
Greenbelt	Wet area, almost exclusively agricultural surplus production, in dry years increased reliance on root crops and exchange
Arid	Pure pastoralism, seasonal migration in search of water and pasture provide opportunities for trade
Hills and Mountains	Mix of agriculture and pastoralism, reliance of cattle, trade and root crops increased in difficult years
Western Flood Plains	Livestock and agriculture supplemented by fish and wild foods.
Eastern Flood Plains	Similar to the Western Flood plains, but with the additional option of game hunting.
Ironstone Plateau	Depend more heavily on crop production and access the surplus production from the Greenbelt zone
Nile and Sobat Rivers	Wild foods and fish contr bute significantly in addition to crops and livestock

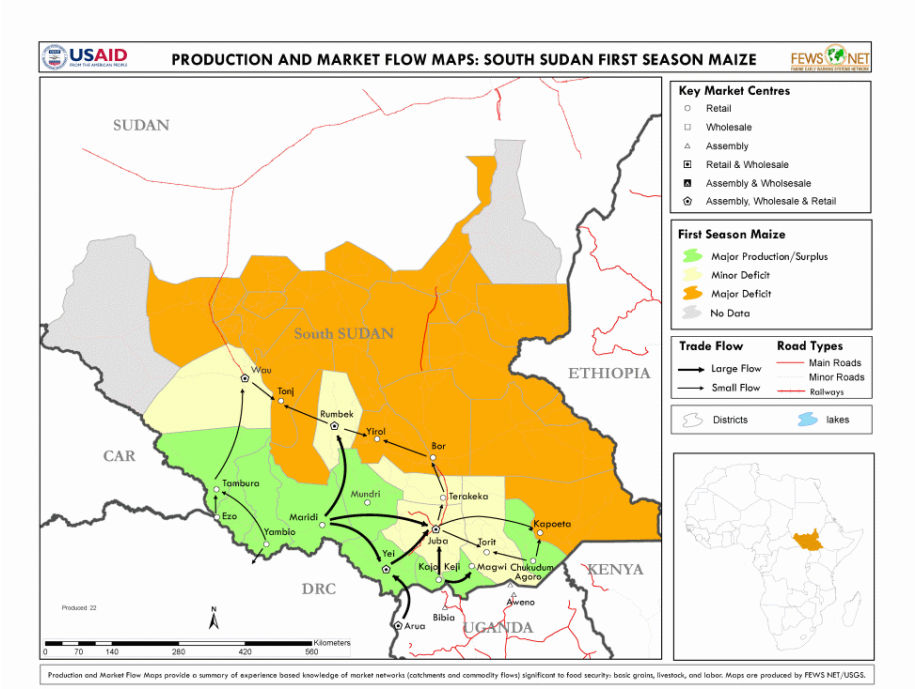
Sources:
Data for Map: USAID FEWS NET
Livelihood Zone Information: ANLA Report 2008/09

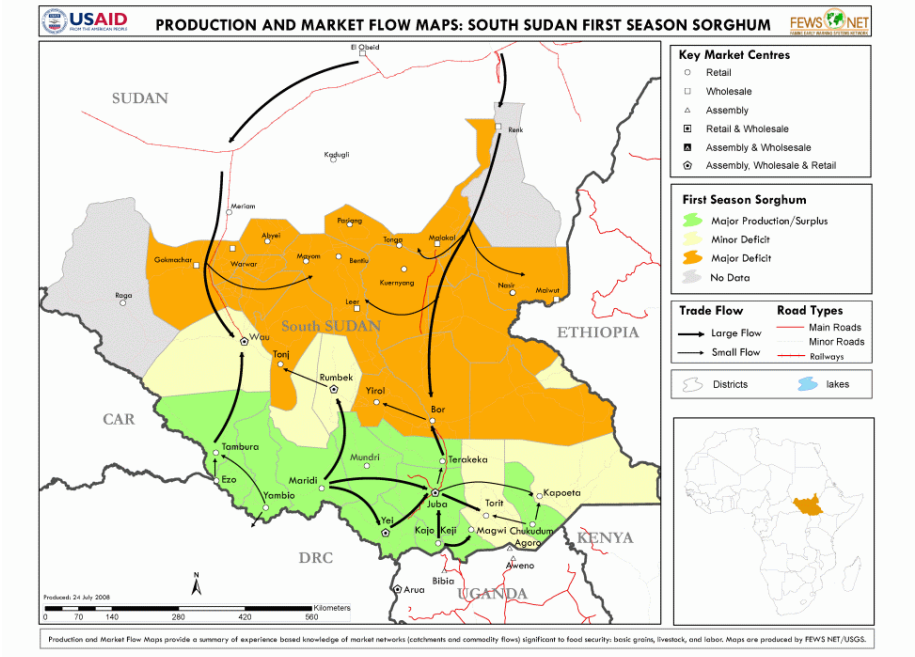
Annex VI: USG Humanitarian Assistance To Southern Sudan

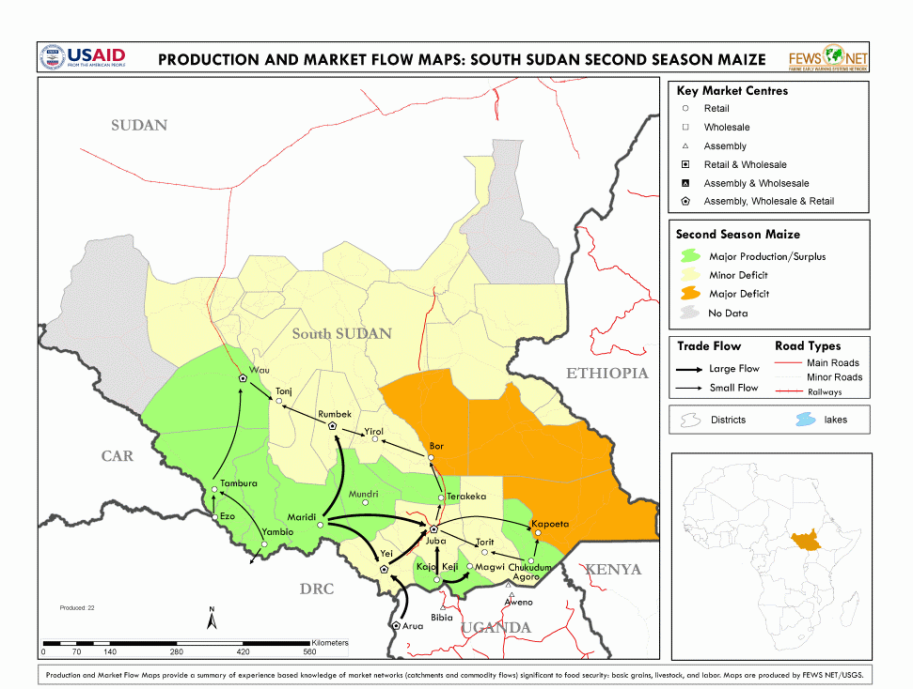


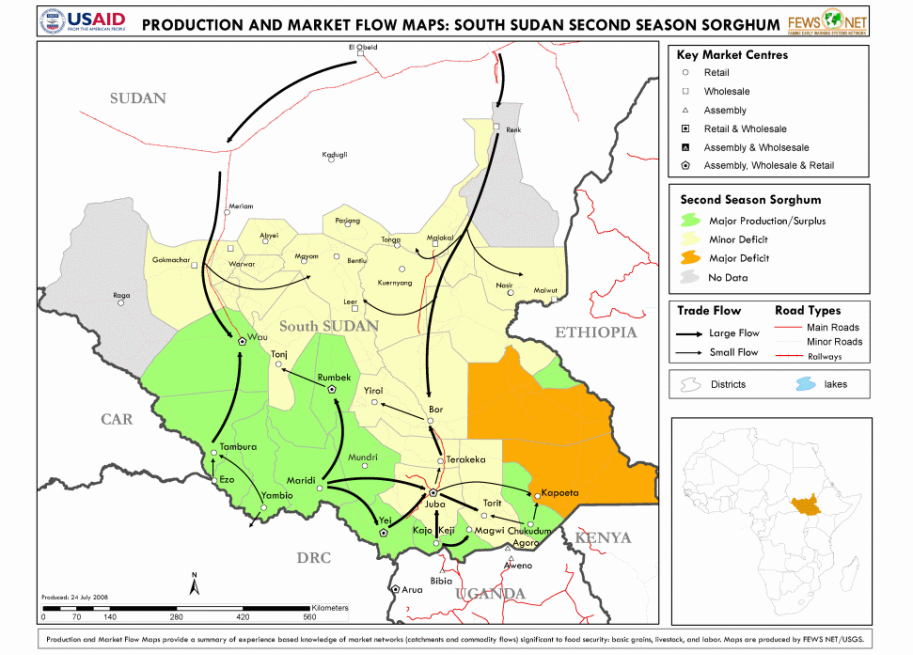
Source: USAID

Annex VII: Production and Market Flow Maps



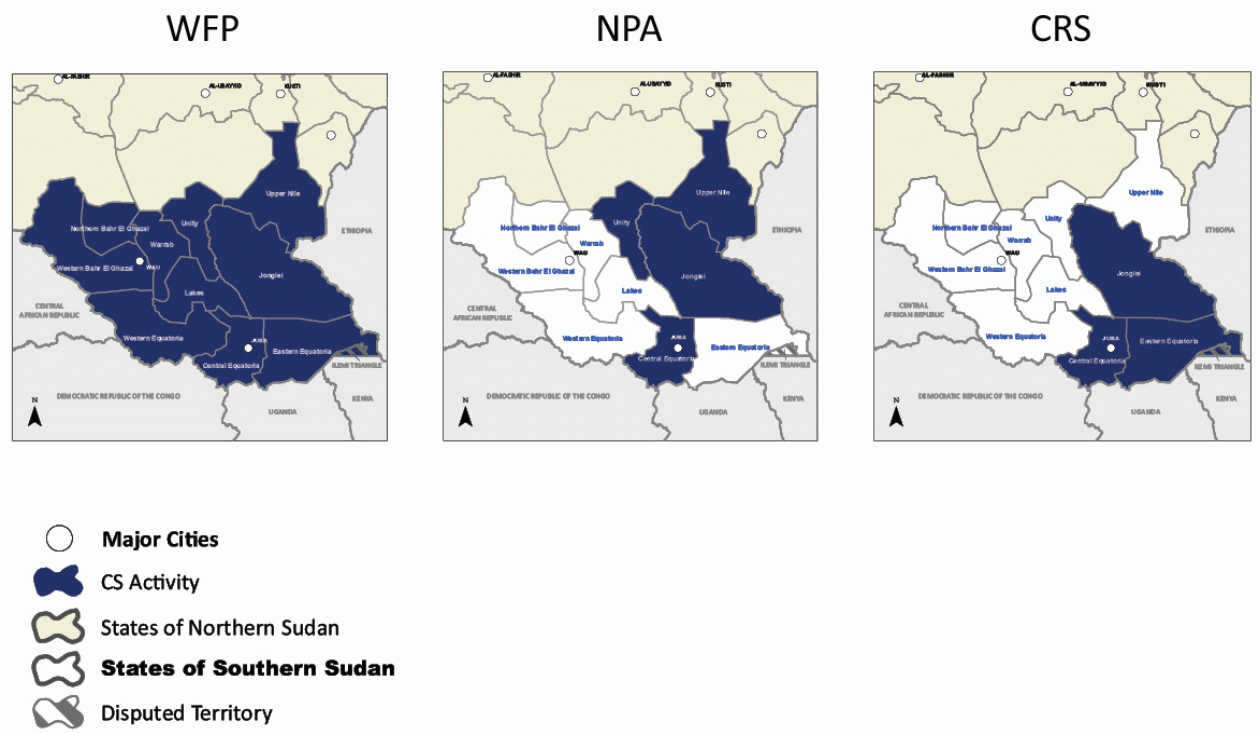






Source: USAID FEWS NET

Annex VIII: Awardee Activity by State



Source: Awardees

Annex IX: Ongoing Food Aid & Cash Transfer Programs in Southern Sudan

awardee	Coverage	Timing	Ration (kcals)	Program Duration	Planned Total Number of Beneficiaries Per Year	Actual Number of Beneficiaries To Date (1st Qtr)
CENTRAL EQUATORIA						
WFP	GFD Returnees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 3	Jan 2009 - Dec 2009	1,844 (22,608 total)	15,082
	GFD IDPs	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	10,000 (120,000 total)	7,864
	GFD Residents	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	11,095
	GFD Refugees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	8,000 (96,000 total)	21,360
	DDR	90 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Mar 2009 –May 2009	4,000 (12,000 total)	-
	Food For Education	270 days	Cereals 100g, pulses 20g, veg oil 15g, salt 5g, sugar 10g	April 2009 – Dec 2009	50,000 - 70,000 (610,000 total)	-
	Food For Training	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 – Dec 2009	2,000 (24,000 total)	-
	Girl's Incentive	270 days	Cereals 625g, veg oil 180g	April 2009 – Dec 2009	10,000 - 14,000 (122,000 total)	-
	Food For Recovery	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 5	Jan 2009 – Dec 2009	3,000 – 10,000 (85,000 total)	-
	Supplementary Feeding	360 days	Veg oil 20g, sugar 20g, CSB 200g	Jan 2009 - Dec 2009	130 - 260 (2,080 total)	-
	Institutional Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, sugar 30g, CSB 50g, salt 10g	Jan 2009 - Dec 2009	4,000 (48,000 total)	-
	Institutional Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	-
NPA	GFD Returnees	210 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	Jan 2009 – July 2009	1,340 (9,380 total)	Nil
	GFD Residents	120 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	April 2009 – July 2009	12,811 (51,244 total)	Nil
EASTERN EQUATORIA						
WFP	GFD Returnees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 3	Jan 2009 - Dec 2009	1,844 (22,608 total)	1,572
	GFD IDPs	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	10,000 (120,000 total)	Nil
	GFD Residents	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	45,456
	GFD Refugees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	8,000 (96,000 total)	Nil

awardee	Coverage	Timing	Ration (kcals)	Program Duration	Planned Total Number of Beneficiaries Per Year	Actual Number of Beneficiaries To Date (1st Qtr)
	DDR	90 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Mar 2009 –May 2009	4,000 (12,000 total)	-
	Food For Education	270 days	Cereals 100g, pulses 20g, veg oil 15g, salt 5g, sugar 10g	April 2009 – Dec 2009	50,000 - 70,000 (610,000 total)	-
	Food For Training	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 – Dec 2009	2,000 (24,000 total)	-
	Girl's Incentive	270 days	Cereals 625g, veg oil 180g	April 2009 – Dec 2009	10,000 - 14,000 (122,000 total)	-
	Food For Recovery	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 5	Jan 2009 – Dec 2009	3,000 – 10,000 (85,000 total)	-
	Supplementary Feeding	360 days	Veg oil 20g, sugar 20g, CSB 200g	Jan 2009 - Dec 2009	130 - 260 (2,080 total)	-
	Institutional Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, sugar 30g, CSB 50g, salt 10g	Jan 2009 - Dec 2009	4,000 (48,000 total)	-
	Institutional Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	-
CRS	GFD Returnees	180 days	Cereals 450g, pulses 50g, veg oil 30g	As required	16,270 (97,620 total)	Nil
	Food For Education Day Schools	210 days	Cereals 250g, pulses 27.5g, veg oil 16.5g, CSB 55g	April 2009, June – Aug 2009, Sept – Nov 2009	18,300 (128,100 total))	12,707
	Food For Education Boarding	210 days	Cereals 450g, pulses 50g, veg oil 30g, CSB 50g	April 2009, June – Aug 2009, Oct – Dec 2009	3,800 (26,600 total)	4,639
	Food For Education Orphanages	360 days	Cereals 450g, pulses 50g, veg oil 30g, CSB 50g	Jan 2009 – Dec 2009	200 (2,400 total)	146
	Food For Education VTCs	180 days	Cereals 250g, pulses 27.5g, veg oil 16.5g	April 2009, June – Aug 2009, Oct – Nov 2009	650 (3,900 total)	283
	Food For Work	210 days	Cereals 450g, pulses 50g, veg oil 30g	As required	6,770 (47,390 total)	3,422
	Inpatient Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, CSB 50g	Jan 2009 – Dec 2009	950 (11,400)	1,317
	Inpatient Feeding HIV/TB	360 days	Cereals 583g, pulses 66.6g, veg oil 30g, CSB 66.6g	Jan 2009 – Dec 2009	200 (2,400 total)	30
	Supplementary Feeding	360 days	Veg oil 30g, CSB 225g	Jan 2009 – Dec 2009	1,500 (18,000)	2,150
	Contingency	90 days	Cereals 450g, pulses 50g, veg oil g	As required	2000	Nil
Jonglei						
WFP	GFD Returnees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 3	Jan 2009 - Dec 2009	1,790 (21,480 total)	6,496
	GFD IDPs	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	2,000 (24,000 total)	7,865
	GFD Residents	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	57,107
	GFD Refugees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	6,000 (72,000 total)	3,223

awardee	Coverage	Timing	Ration (kcals)	Program Duration	Planned Total Number of Beneficiaries Per Year	Actual Number of Beneficiaries To Date (1st Qtr)
	DDR	90 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Mar 2009 –May 2009	1,500 (4,500 total)	-
	Food For Education	270 days	Cereals 100g, pulses 20g, veg oil 15g, salt 5g, sugar 10g	April 2009 – Dec 2009	10,000 - 27,000 (221,000 total)	-
	Food For Training	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 – Dec 2009	2,000 (24,000 total)	-
	Girl's Incentive	270 days	Cereals 625g, veg oil 180g	April 2009 – Dec 2009	2,000 - 5,400 (44,200 total)	-
	Food For Recovery	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 5	Jan 2009 – Dec 2009	2,000 – 7,500 (40,500 total)	-
	Supplementary Feeding	360 days	Veg oil 20g, sugar 20g, CSB 200g	Jan 2009 - Dec 2009	500 – 2,500 (17,750 total)	-
	Institutional Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, sugar 30g, CSB 50g, salt 10g	Jan 2009 - Dec 2009	1,000 (12,000 total)	-
	Institutional Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	-
	Therapeutic Feeding	360 days	Veg oil 15g, CSB 100g, sugar 10g	Jan 2009 - Dec 2009	70 – 100 (1,040 total)	-
	Therapeutic Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	70 – 100 (1,040 total)	-
NPA	GFD Returnees	210 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	Jan 2009 – July 2009	30,750 (215,250 total)	22,952
	GFD Residents	90 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	May 2009 – July 2009	51,876 (155,628 total)	Nil
	Food For Recovery	360 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	Jan 2009 – Dec 2009	1,510 (18,120 total)	Nil
CRS	GFD Returnees	180 days	Cereals 450g, pulses 50g, veg oil 30g	As required	7,030 (42,180 total)	Nil
	Food For Education Day Schools	210 days	Cereals 250g, pulses 27.5g, veg oil 16.5g, CSB 55g	April 2009, June – Aug 2009, Sept – Nov 2009	9,700 (67,900 total))	11,140
	Food For Education Boarding	210 days	Cereals 450g, pulses 50g, veg oil 30g, CSB 50g	April 2009, June – Aug 2009, Sept – Dec 2009	900 (6,300 total)	664
	Food For Education VTCs	180 days	Cereals 250g, pulses 27.5g, veg oil 16.5g	April 2009, June – Aug 2009, Oct – Nov 2009	350 (2,100 total)	Nil
	Food For Work	210 days	Cereals 450g, pulses 50g, veg oil 30g	As required	3,220 (22,540 total)	Nil
	Girl's Incentive	180 days	Veg oil 92.5g	April – July 2009, Oct – Nov 2009	4,000 (24,000 total)	Nil
	Inpatient Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, CSB 50g	Jan 2009 – Dec 2009	250 (3,000)	136
	Contingency	90 days	Cereals 450g, pulses 50g, veg oil 30g	As required	2000	Nil
LAKES						
WFP	GFD Returnees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 3	Jan 2009 - Dec 2009	1,844 (22,608 total)	6,513
	GFD IDPs	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	10,000 (120,000 total)	6,460

awardee	Coverage	Timing	Ration (kcals)	Program Duration	Planned Total Number of Beneficiaries Per Year	Actual Number of Beneficiaries To Date (1st Qtr)
	GFD Residents	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	9,703
	GFD Refugees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	8,000 (96,000 total)	Nil
	DDR	90 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Mar 2009 –May 2009	4,000 (12,000 total)	-
	Food For Education	270 days	Cereals 100g, pulses 20g, veg oil 15g, salt 5g, sugar 10g	April 2009 – Dec 2009	50,000 - 70,000 (610,000 total)	-
	Food For Training	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 – Dec 2009	2,000 (24,000 total)	-
	Food For Work	nil	Nil	nil	nil	-
	Girl's Incentive	270 days	Cereals 625g, veg oil 180g	April 2009 – Dec 2009	10,000 - 14,000 (122,000 total)	-
	Food For Recovery	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 5	Jan 2009 – Dec 2009	3,000 – 10,000 (85,000 total)	-
	Supplementary Feeding	360 days	Veg oil 20g, sugar 20g, CSB 200g	Jan 2009 - Dec 2009	130 - 260 (2,080 total)	-
	Institutional Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, sugar 30g, CSB 50g, salt 10g	Jan 2009 - Dec 2009	4,000 (48,000 total)	-
	Institutional Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	-
NORTHERN BAHR – EL – GHAZAL						
WFP	GFD Returnees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 3	Jan 2009 - Dec 2009	1,844 (22,608 total)	13,901
	GFD IDPs	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	10,000 (120,000 total)	15,322
	GFD Residents	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	59,533
	GFD Refugees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	8,000 (96,000 total)	4
	DDR	90 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Mar 2009 –May 2009	4,000 (12,000 total)	-
	Food For Education	270 days	Cereals 100g, pulses 20g, veg oil 15g, salt 5g, sugar 10g	April 2009 – Dec 2009	50,000 - 70,000 (610,000 total)	-
	Food For Training	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 – Dec 2009	2,000 (24,000 total)	-
	Food For Work	nil	nil	nil	nil	-
	Girl's Incentive	270 days	Cereals 625g, veg oil 180g	April 2009 – Dec 2009	10,000 - 14,000 (122,000 total)	-
	Food For Recovery	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 5	Jan 2009 – Dec 2009	3,000 – 10,000 (85,000 total)	-
	Supplementary Feeding	360 days	Veg oil 20g, sugar 20g, CSB 200g	Jan 2009 - Dec 2009	130 - 260 (2,080 total)	-
	Institutional Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, sugar 30g, CSB 50g, salt 10g	Jan 2009 - Dec 2009	4,000 (48,000 total)	-
	Institutional Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	-

awardee	Coverage	Timing	Ration (kcals)	Program Duration	Planned Total Number of Beneficiaries Per Year	Actual Number of Beneficiaries To Date (1st Qtr)
WFP	GFD Returnees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 3	Jan 2009 - Dec 2009	1,844 (22,608 total)	346
	GFD IDPs	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	10,000 (120,000 total)	10,835
	GFD Residents	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	65,873
	GFD Refugees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	8,000 (96,000 total)	-
	DDR	90 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Mar 2009 –May 2009	4,000 (12,000 total)	-
	Food For Education	270 days	Cereals 100g, pulses 20g, veg oil 15g, salt 5g, sugar 10g	April 2009 – Dec 2009	50,000 - 70,000 (610,000 total)	-
	Food For Training	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 – Dec 2009	2,000 (24,000 total)	-
	Girl's Incentive	270 days	Cereals 625g, veg oil 180g	April 2009 – Dec 2009	10,000 - 14,000 (122,000 total)	-
	Food For Recovery	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 5	Jan 2009 – Dec 2009	3,000 – 10,000 (85,000 total)	-
	Supplementary Feeding	360 days	Veg oil 20g, sugar 20g, CSB 200g	Jan 2009 - Dec 2009	130 - 260 (2,080 total)	-
	Institutional Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, sugar 30g, CSB 50g, salt 10g	Jan 2009 - Dec 2009	4,000 (48,000 total)	-
	Institutional Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	-
UNITY						
WFP	GFD Returnees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 3	Jan 2009 - Dec 2009	429 (5,148 total)	2,602
	GFD IDPs	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	500 (6,000 total)	3,144
	GFD Residents	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	500 (6,000 total)	30,259
	DDR	90 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Mar 2009 –May 2009	750 (2,250 total)	6,500
	Food For Education	270 days	Cereals 100g, pulses 20g, veg oil 15g, salt 5g, sugar 10g	April 2009 – Dec 2009	23,000 - 35,000 (302,000 total)	-
	Food For Training	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 – Dec 2009	5,000 (60,000 total)	-
	Girl's Incentive	270 days	Cereals 625g, veg oil 180g	April 2009 – Dec 2009	4,600 - 7,000 (60,400 total)	-
	Food For Recovery	210 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 5	Jan-Apr 2009, Oct-Dec 2009	5,000 (35,000 total)	-
	Supplementary Feeding	360 days	Veg oil 20g, sugar 20g, CSB 200g	Jan 2009 - Dec 2009	100 - 400 (3,100 total)	-
	Institutional Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, sugar 30g, CSB 50g, salt 10g	Jan 2009 - Dec 2009	500 - 550 (6,250 total)	-
	Institutional Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	500 - 550 (6,250 total)	-

awardee	Coverage	Timing	Ration (kcals)	Program Duration	Planned Total Number of Beneficiaries Per Year	Actual Number of Beneficiaries To Date (1st Qtr)
	Therapeutic Feeding	360 days	Veg oil 15g, CSB 100g, sugar 10g	Jan 2009 - Dec 2009	50 – 75 (625 total)	-
	Therapeutic Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	50 – 75 (625 total)	-
NPA	GFD Returnees	270 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	Jan 2009 – Sept 2009	10,000 (90,000 total)	Nil
	GFD IDPs	150 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	May 2009 – Sept 2009	12,835 (64,175 total)	Nil
	GFD Residents	150 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	May 2009 – Sept 2009	13,755 (68,775 total)	Nil
UPPER NILE						
WFP	GFD Returnees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 3	Jan 2009 - Dec 2009	2,837 (34,044 total)	980
	GFD IDPs	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	10,000 (120,000 total)	7,186
	GFD Residents	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	5,000 (60,000 total)	64,583
	GFD Refugees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	5,000 (60,000 total)	1,290
	DDR	150 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 –May 2009	100 – 7,000 (22,100 total)	-
	Food For Education	270 days	Cereals 100g, pulses 20g, veg oil 15g, salt 5g, sugar 10g	April 2009 – Dec 2009	50,000 - 65,000 (557,000 total)	-
	Food For Training	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 – Dec 2009	3,000 (36,000 total)	-
	Girl's Incentive	270 days	Cereals 625g, veg oil 180g	April 2009 – Dec 2009	10,000 - 13,000 (111,400 total)	-
	Food For Recovery	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 5	Jan 2009 – Dec 2009	3,000 – 10,000 (85,000 total)	-
	Supplementary Feeding	360 days	Veg oil 20g, sugar 20g, CSB 200g	Jan 2009 - Dec 2009	1,000 – 2,100 (22,400 total)	-
	Institutional Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, sugar 30g, CSB 50g, salt 10g	Jan 2009 - Dec 2009	1,000 – 1,250 (14,000 total)	-
	Institutional Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 – 1,250 (14,000 total)	-
	Therapeutic Feeding	360 days	Veg oil 15g, CSB 100g, sugar 10g	Jan 2009 - Dec 2009	40 – 130 (960 total)	-
	Therapeutic Feeding Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 – 1,250	-
NPA	GFD Returnees	270 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	Jan 2009 – Sept 2009	21,000 (189,000 total)	Nil
	GFD Residents	150 days	Cereals 450g, pulses 65g, veg oil 30g (2,100 kcal)	May 2009 – Sept 2009	31,482 (157,410 total)	Nil
WARAB						
WFP	GFD Returnees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 3	Jan 2009 - Dec 2009	1,844 (22,608 total)	1,045
	GFD IDPs	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	10,000 (120,000 total)	16,393

awardee	Coverage	Timing	Ration (kcals)	Program Duration	Planned Total Number of Beneficiaries Per Year	Actual Number of Beneficiaries To Date (1st Qtr)
	GFD Residents	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	42,135
	GFD Refugees	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g, sugar 30g, CSB 50g	Jan 2009 - Dec 2009	8,000 (96,000 total)	Nil
	DDR	90 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Mar 2009 –May 2009	4,000 (12,000 total)	-
	Food For Education	270 days	Cereals 100g, pulses 20g, veg oil 15g, salt 5g, sugar 10g	April 2009 – Dec 2009	50,000 - 70,000 (610,000 total)	-
	Food For Training	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g x 5	Jan 2009 – Dec 2009	2,000 (24,000 total)	-
	Girl's Incentive	270 days	Cereals 625g, veg oil 180g	April 2009 – Dec 2009	10,000 - 14,000 (122,000 total)	-
	Food For Recovery	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal) x 5	Jan 2009 – Dec 2009	3,000 – 10,000 (85,000 total)	-
	Supplementary Feeding	360 days	Veg oil 20g, sugar 20g, CSB 200g	Jan 2009 - Dec 2009	130 - 260 (2,080 total)	-
	Institutional Feeding	360 days	Cereals 450g, pulses 50g, veg oil 30g, sugar 30g, CSB 50g, salt 10g	Jan 2009 - Dec 2009	4,000 (48,000 total)	-
	Institutional Feeding/ Caretakers ration	360 days	Cereals 450g, pulses 50g, veg oil 30g, salt 10g (1,942 kcal)	Jan 2009 - Dec 2009	1,000 (12,000 total)	-

Notes:

1. *For this and all other tables of ongoing programs, beneficiary figures refer to both the total number of beneficiary months (one beneficiary month being equivalent to one ration), and the number of beneficiaries that are expected to be assisted per month. Note that in some cases programs last less than 12 months*
2. *Western Equatoria State was not in WFP or other awardee Plans for 2009. Nonetheless, the following has been distributed in Western Equatoria during the 1st Quarter of 2009:*
    a. *IDPs: 32,224 beneficiaries have received 376 MT of commodities*
    b. *Refugees: 2,416 beneficiaries have received 50 MT of commodities*
    c. *Returnees: 1,592 beneficiaries have received 107 MT of commodities*
3. *"-" indicates data not available at time of study*

Annex X: Planned Initiatives

X.1 WFP

WFP has issued an EMOP for 2009 for Sudan as a whole (including Darfur) valued originally at $921 million. This has subsequently been reduced to a figure of $829 million due to having been forced to reduce rations in Darfur for a long period due to insecurity (still in place), which has substantially reduced overall needs for 2009. WFP has a range of distribution modalities across all ten states of Southern Sudan and works whenever possible through other agencies, both international and local (Sudanese), through Field Level Agreements and includes the following activities:

- A relief component of general food distribution and support for vulnerable groups;
- Recovery interventions including school feeding, asset creation, skills training, institutional feeding and nutrition.

Food distribution programs will target beneficiaries in the following ways:

1. For refugees and IDPs, WFP will provide a full ration of 620 grams for 882,000 beneficiaries (234,000 and 648,000 respectively) requiring 14,288.4 MT for the year;
2. For returnees and residents, WFP will provide a ration of 540 grams for 658,764 beneficiaries (238,764 and 420,000 respectively) requiring 18,407.93 MT for the year;
3. For demobilized soldiers (DDR), WFP will provide a ration of 540 grams for 67,850 beneficiaries requiring 3,297.51 MT for the year;
4. School feeding of up to 3,485,000 pupils across the 10 states of 150 grams per day, requiring 11,500.5 MT of food aid for the year;
5. Provide an additional ration of 16.1kg per month as an incentive to girls for 697,000 beneficiaries, requiring 11,221.7 MT of food aid for the year;
6. Food for Training will provide a ration of 540 grams for 324,000 beneficiaries, requiring 3,499.2 MT of food aid for the year;
7. Food for Recovery programs will provide 540 grams per day for 726,500 beneficiaries, requiring 11,769.3 MT of food aid for the year;
8. Supplementary feeding programs will support 183,470 beneficiaries with 240 grams per day, requiring 1,320.98 MT of food aid for the year;
9. Institutional feeding programs will target TB, HIV/AIDS, Kalazar and chronically ill patients numbering 147,875 who will receive 620 grams per day, requiring 2,750.48 MT of food aid for the year;
10. Caretakers for inpatients numbering 84,275 will be supported with 540 grams per day, requiring 1,365.26 MT of food aid for the year;

11. Therapeutic feeding programs will support 8,285 beneficiaries with 125 grams per day, requiring 31.07 MT of food aid for the year;

12. Caretakers for therapeutic feeding patients numbering 8,285 beneficiaries will be supported with 540 grams per day, requiring 134.22 MT of food aid for the year.

WFP expects to reach 7,273,304 beneficiaries with monthly rations (highest 764,187 per month) during the year, requiring 79,586 MT of food aid for the year. The 2009 WFP program is split between relief and developmental food aid interventions as follows:

General Food Distribution comprising refugees, IDPs, returnees, residents and DDR, will require 35,991 MT (45%) of the total and will serve 150,647 beneficiaries (19.7%) per month.

The balance is for developmental food aid programs.

X.2 NPA

NPA has received funding for a SYAP from USAID/USAID TITLE II for 2009 to continue mostly emergency/relief-based activities in four states of Southern Sudan, with programs made up of the following:

1. For returnees, IDPs and residents, NPA will provide a ration of 535 grams per day at levels between 30 – 50% to an average of 195,279 beneficiaries per month, requiring 7,661 MT of food aid for the year;

2. Food for community projects (Food For Recovery) will support 1,510 beneficiaries with 535 grams per day for 12 months, requiring 300.38 MT of food aid for the year.

NPA expects to reach a total of 1,113,328 beneficiaries with daily rations during the year at ration levels of 30 - 50%, with exception of food for community projects at 100% ration levels, requiring 7,961 MT for the year. Of this, 97% will be distributed to 99% of the beneficiary population as GFD.

X.3 CRS

CRS continues with one year funding from USAID TITLE II in 2009, with a mixture of direct food aid for returnees and development food aid programs. CRS is mostly active in Eastern Equatoria State, with some activities in Bor County of Jonglei State. The program is made up as follows:

1. For returnees, a ration of 540 grams will be given to 23,300 beneficiaries, requiring 2,246 MT of food aid for the year;

2. School feeding for 14,150 pupils in day and boarding schools will require 1,740.36 MT of food aid for the year;

3. Provide an additional ration of 1.85kg per month as an incentive to girls for 4,000 beneficiaries, requiring 44.4 MT of food aid for the year;

4. Institutional feeding programs will target TB, HIV/AIDS, and chronically ill patients numbering 850 per month who will receive 746 grams per day, requiring 189.48 MT of food aid for the year;

5. Supplementary feeding for malnourished children and mothers numbering 1,200 will require 110.16 MT of food aid for the year;

6. Food for work for community and family assets will 6,720 beneficiaries, requiring 725.42 MT of food aid for the year;

7. A contingency stock for 4,000 beneficiaries will require 190.8 MT of food aid for the year.

CRS expects to reach 81,100 beneficiaries per month with 28% (27,300) of them receiving GFD of 2,246 MT or 33% of the total MT for the year of 6,720 MT.

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SOUTHERN SUDAN

BELLMON ESTIMATION

June 2009
This publication was produced for review by the United States Agency for International Development. It was prepared by Fintrac Inc.