S P E C I A L R E P O R T

FAO/WFP MID-SEASON CROP AND FOOD SECURITY ASSESSMENT MISSION, SOUTHERN SUDAN

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Mission Highlights

- Generally unfavourable onset of rains and outbreaks of pests and diseases, together, may resulted in a below average cereal harvest of about 30-40% of average annual production assuming the climatic conditions continue to perform favourably.
- Should floods occur in some States, the cereal reduction may increase to about 40-50%.
- Satisfactory livestock and pasture conditions have prevailed over most of Southern Sudan except for livestock diseases reported in most States including Jonglei, Warrap and Northen Bahr el Ghazal.
- Conflict related displacements and new arrivals of the returnee population, continued to place physical and financial constraints on access to food and make large numbers of vulnerable people dependent on food assistance.
- Food prices in all markets are much higher than in 2008 and are still rising especially due to the poor prospects of 2009/10 agricultural season and reductions are not foreseen in the near future.
- The recently concluded Annual Needs and Livelihoods Assessment (ANLA) concluded that sorghum prices are extremely high while at the same time, livestock prices are very low.
- In all the visited locations reports indicate that there is an abnormal amount of distress sale of livestock.
- WFP will be targeting almost 300,000 people, mostly residents not currently covered by WFP assistance.

1. Overview

Normally, a Crop and Food Food Security Assesment (CFSAM) is conducted in October/November of each agricultural year to estimate cereal production and assess the overall food supply situation. In 2009, a mid-season CFSAM was conducted for the very first time in Southern Sudan. This was necessitated by the poor onset of rainfall during the 2009 agricultural season. The assessment had to be conducted to gauge the prospects of the 2009/10 agricultural production in view of the fact that 80-90% of the agricultural production is dependent on rainfall.

An FAO/WFP Crop and Food Security Assessment Mission (CFSAM) worked in Southern Sudan from 10 to 21 August 2009. The Mission included representatives from the Government of Southern Sudan (GOSS) Ministry of Agriculture and Forestry (MoAF) and the Southern Sudan Relief and Rehabilitation Commission (SSRRC), Southern Sudan Centre for Census, Statistics and Evaluation (SSCCSE), FEWSNet, WFP and FAO.

The Mission held meetings with officials of various ministries including the Ministry of Agriculture and Forestry (MoAF), the Southern Sudan Relief and Rehabilitation Commission and the Southern Sudan Centre for Census, Statistics and Evaluation. State and location specific information was obtained from relevant state and local authorities and the NGOs including Concern World Wide, ACF and AMURT.

The Mission, comprised of 5 teams and 20 persons and were able to cover all 10 States of Southern Sudan. With relative peace as a result of the Comprehensive Peace Agreement (CPA), the teams covered most States by road. Only locations that required chartered flights were not covered.

The following locations were visited:

N. Bahr el Ghazal State: Aweil South & West Counties; **W. Bahr el Ghazal State**: Wau and Jur River Counties; **Unity State**: Bentiu, Leer, Koch, Guit, Mayendit, Ruweng; **Central Equatoria State**: Juba, Kejo Keji; **East Equatoria State;** Torit, Ikotos, Magwi, Kapoeta; **Upper Nile State**: Renk, Malakal, Panyikang; **Jonglei State**: Bor; **Warrap State**: Gogrial east, Gogrial West; **Lakes State**: Rumbek East, Rumbek Central, Cuibet; **West Equatoria State**: Yambio, Ibba, Nzara.

Information obtained from State Ministries of Agriculture, Extension staff, County Officers/Inspectors, farmers, traders, staff of NGOs and international agencies were cross-checked against information obtained from the results of transects driven through agricultural areas, field observations taken by most teams, and from secondary data including FAO, WFP and NGO Reports. The Mission also undertook spot-check market surveys. The Mission Team received invaluable support (both technical and logistics) from the FAO Emergency Unit in Juba and in the States, Food Security Information for Action (SIFSIA) -Juba and Sudan Productivity Capacity Recovery Programme (SPCRP)-Juba and the States and the WFP Vulnerability

Analysis and Mapping (VAM) Unit. Rainfall Estimates (RFE) imagery and NDVI analysis were provided by FAO SIFSIA Project.

The Mission estimated cereal production deficit based on respondents views on the performance of the agricultural season and the missions' observations made during the field visits including impact of weeds and insects and the current state of the crops. However, it was too early to make an accurate estimate of the production although indications were more towards a reduced production compared to last year (2008). The fields were still vulnerable and production may even be reduced further a) if the floods come as the crops were still in vegetative stages, b) if the rains stopped too early and c) if the crops were attacked by migratory *Quelea quelea* birds. The farming practices remained basically the same although there was a lot more use of the tractors which the Government delivered to all States. However, some farmers could not afford the cost of hiring tractors. In Wau, the cost of hiring a tractor was 50SDG per feddan. Although there were adequate seed supplies among the settled farmers, IDPs and returnees and the vulnerable families in host areas, that benefited from FAO supported seed distributions, cereral production will be reduced at the end of the 2009 agricultural season due to poor onset and impact of dry spells. The replanting process after the poor onset of the rainfall created challenges in the availability of seed as farmers exhausted the seed due to several replantings. Some farmers in Lakes and Unity, replanted up to 4 times.

The crops in the mechanized farms of Renk were generally doing well and the rainfall had started picking up with substantial amounts of rainfall received. Traditionally, most of the cereal produced from the mechanized sector, especially in Renk, is marketed in northern parts of Sudan, due to better roads and lower transport costs, with only little volumes moved southwards to the rest of Upper Nile State.

Livestock in most parts of Southern Sudan were generally in good condition although the livestock prices have plummeted. With the livestock prices at their lowest, the terms of trade have deteriorated in the last several months due to the exorbitant rise in the prices of food commodities putting livestock based livelihoods at a disadvantage.

Based on the Annual Needs and Livelihoods Assessment (ANLA) estimates, WFP estimates that there is 50,500 MT of food needed to assist vulnerable communities and that they will be targeting almost 300,000 people, mostly residents not currently covered by WFP assistance.

Despite efforts by Government to provide mainly sorghum and maize at strategic locations in different parts of Southern Sudan, possibly for subsidised sale or distribution, the Mission was unable to obtain hard data and information on either the total amount of cereals involved or the size of the target population or indeed the remaining quantities of grain in storage. Further investigation is necessary on this matter especially in the coming CFSAM in November, 2009.

2. Background to Southern Sudan

2.1 General

The Republic of the Sudan is the largest country in Africa, with a land mass of 2.5 million square kilometres and a population of almost 40 million people. Southern Sudan has a land mass of about 640,000 square kilometers, with an estimated population ranging between 8.5 and 10.0 million. The population is expected to grow in the next couple of years as a result of natural increase in population and the return of refugees and internally displaced people. Decades of war, insecurity and lack of access to basic services in many parts of Southern Sudan have undermined livelihoods, increased levels of poverty, reduced economic and educational opportunities and led to high rates of malnutrition.

The Comprehensive Peace Agreement (CPA) signed on 9th January 2005 ushered in an era of peace in Southern Sudan and opened the way for the return of over 3.5 million IDPs and refugees (UN Sustainable Return Team, 2005). Over one million people (UN Return, Reintegration and Resettlement (RRR) Working Group, 2008) have returned to areas in the ten states of Southern Sudan. The relative stability in Southern Sudan has stimulated various kinds of livelihood activities. However, the overall underlying socio-economic situation in rural areas remains subsistance agriculture with communities in the lower rainfall zones, predominantly of the north and south-east, depending ultimately on humanitarian aid for food security.

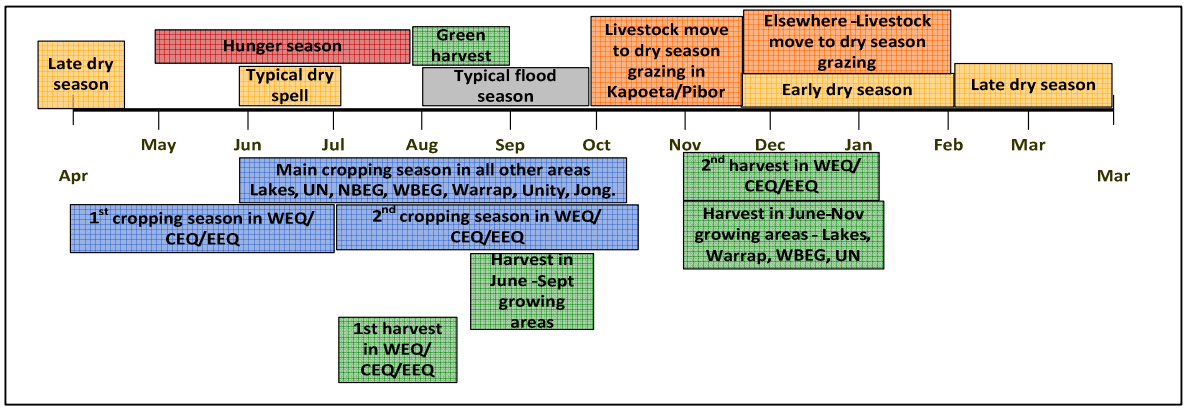
2.2 Agriculture

Agriculture in Sudan forms the backbone of the country's economy; it contributed 45 percent to the GNP in 2004 and supported 87 percent of the population. The contribution of Agriculture has slowly declind over the years. There are no official statistics of GDP composition in the areas of Southern Sudan affected by conflict, but agriculture is the most important sector. The vast majority of Sudanese practice subsistence agriculture within the traditional, rain-fed farming system which is vulnerable to climatic and environmental changes. Nevertheless, agriculture remains the main source of employment and income for the rural households.

Southern Sudan experiences bi-modal and uni-modal rainfall regimes (Figure 1). The bi-modal areas include the Greater Equatoria (Western, Central and Eastern Equatoria). The rest of Southern Sudan experiences a uni-modal rainfall pattern. The above indicated rainfall regimes provide growing seasons varying from 130-150 days per annum in the northern parts of Southern Sudan to 280-300 days in the southern parts. Consequently, agricultural performance varies considerably from place-to-place and from year-to-year ranging from the regular possibility of at least two consecutive harvests from the same area in the Greater Equaroria from Tambura to Kejo-Keji to one harvest in the uni-modal areas of the northern Southern Sudan. However, there are crop failures in the marginal areas of the East Equatoria and Northern Bahr el Ghazal.

Only in the Upper Nile State districts of Renk, Melut and Wadakona and to a much more limited extent in Malakal and Bentiu (Unity State), is tractor-farming conducted at a level that could be identified with the commercial farms of South Kordofan and Blue Nile States. However, the Government of Southern Sudan purchased more than 90 tractors from India which have since been distributed to all the States. The Government will in future increase the number of tractors per State. The tractors are availed to the farmers, farmer groups, cooperatives through hiring and paying a fee. In Western Bahr el Ghazal, the fee charged per feddan ploughing was 50SDG.

Figure 1. Agricultural Seasonal Calender for Southern Sudan



In terms of crops grown, small-holder farmers in Southern Sudan grow a number of sorghum varieties ranging from early maturing varieties to late maturing varieties which take up to 6 months to mature. Other crops include maize, bulrush millet and finger millet (Table 1). In the northern parts of Southern Sudan, other crops grown include groundnuts, which make a significant contribution to the household food economy and provides a regular staple and cash crop in the higher localities with sandier soils.

Most agricultural activities are performed by women with hand tools whose contribution to agricultural labour is estimated at 90%.[1] Sorghum and maize performs well in a clay-loam or clay soil and groundnuts in sandy-loam soil. Major crops grown in southern Sudan are shown in Table 1. Root crops like sweet potatoes and cassava are mainly grown in the greater Equatoria region and are uncommon in other regions of southern Sudan.

[1] FAO/WFP (2008): Crop and Food Security Assessment Mission to Southern Sudan Report

Table 1.1: Major crops grown in southern Sudan

Category	Crops
Cereals	Sorghum (short, medium and long term varieties), maize, millet
Pulses	Cowpeas, peas, beans
Oil crops	Groundnuts, sesame
Root crops	Cassava, sweet potatoes
Others	Vegetables, cucumber, watermelon, pumpkins

In the south and central areas, although groundnuts and the other crops are also grown in substantial quantities, cassava is the most important contributor to the household food economy providing *at least half* of the carbohydrate ration. Minor crops of sweet potatoes, yams, coffee, mangoes, papayas and teak are also grown for home and some localized commercial use.

3. Cereal Production, 2009

In Southern Sudan, the gathering of agriculture statistics by the relevant ministries in all but a few areas is limited to areas around the State capitals. Even in these towns, the Ministry offices lacked equipment, simple materials and transport, which, compounded by access difficulties, undermined any intention of serious information collection. However, there has been significant improvement in the transportation due to the motor vehicles provided by the Sudan Productivity and Capacity Recovery Programme (SPCRP) Project. Motor bikes have also been provided to the ministries by Sudan Institutional Capacity Programme; Food Security Information for Action (SIFSIA) Project and SPCRP. In addition, Ministry of Agriculture, Forestry, Animal Resources and Fisheries infrustructure has improved in the States although data collection is yet to improve becuase field staff lack even the most rudimentary means of materials, equipment and training. Therefore, the ability to collect data and the understanding of the usefulness of accurate data remain relatively unchanged from previous years.

Against this background, the Mission visited a total of 28 Counties in all 10 States encompassing the seven agro-ecological systems of Southern Sudan. In all, 135 case studies/key informant interviews were conducted as were field inspections of growing crops and their condition considering that the asessment was instituted due to poor on-set of rainfall and market surveys. Transect observations were made from the roads into the villages and farms. Farms in use, fields cropped and the type and performance of crops grown were recorded. These practices were entrenched in the mission participants in a one-day training session prior to undertaking the assessment. Transects add a further dimension to the assessing process placing case-studies of single farms into the general context of the areas visited. The sum of all activities of the five teams enabled the Mission to obtain an independent picture of agricultural performance and possible production deficit across the southern Sudan in a short period of time.

3.1 Area estimates

Normally, area cultivated estimates by the traditional sector are compiled from derived population statistics. Given the data situation noted above and the fact that this was a mid-season assessment, it was challenging to estimate area cultivated due to the delayed onset and the fact that the crops were at various phenological stages and some were still yet to be planted. Analysis of the questionnaires based on the question requesting for an indication of how much area was planted in 2009, indicated that there was a 20-30% reduction in the area planted from the previous year 2009. This is applicable for all the crops grown in Southern Sudan.

Typical flooding period in Southern Sudan occurs between August and October every year. At the time of the assessment, no significant flooding was observed. However, if the floods occur, crop production may be affected and thereby reducing the cereal production. In Unity and Upper Nile States, local flooding normally occurs in what are essentially flood plains. In summary, no significant extreme events were noted in 2009, however, these floods may occur. Consequently, in 2009 no deductions were made for numbers of household (hh) affected by floods farming in any state.

Given the poor onset of the rainy season in 2009, cereal area cultivated per household is expected to be lower than in 2008. This is despite the tendency for farmers to take advantage of improved access to agricultural land as well as the relatively improved security offers, to plant crops away from their houses in far

fields. Presently, the greatest obstacles to an expansion of growing activities in the Greenbelt wherein lies a huge potential, within the confines of traditional hand-cultivation, are the poor state of the main roads, non-existent feeder roads, inadequate storage and an absence of buyers and the Lords Resistance Army activities.

3.2 Factors affecting yields

3.2.1 Assessment method

Cereal production is determined by multiplying yield per unit area by the area estimates taking into consideration a number of factors. The Rapid Crop Assessment mission was undertaken to establish the crop and livestock status following the poor commencement of the 2009 rainfall season. The assessment comprised five teams covering all the 10 States of Southern Sudan and visiting the counties indicated earlier. The assessment tool used covered types of production system, growing conditions – rainfed and irrigated, agricultural input availability, area and yield and production in the previous years, occurrence of pests and diseases, availability of water for livestock and pastures, livestock condition, local grain markets and livestock markets. This was done using the assessment tool as well as visual assessments of the crops and livestock.

Normally, the Mission derive estimates for the probable average yields in each state, which involves studying the factors that have affected yield during the season *viz* rainfall, seed supply, cultivation and weeding timing and methods, use of inputs, pest and disease challenges and local conditions vis-à-vis security and, regarding mechanised farming, access to credit. Such information was gained from detailed case studies with sample farmers and key informant interviews and combined with Mission observations. More information was obtained through review of secondary data from reports from GOSS and NGO sources and NDVI imagery for the season compared with previous seasons and the long-term average.

In all the States visited, no single crop had been harvested at the time of the Mission but some sesame was harvested and being dried were found to provide food for the communities in Warrap State. Qualitative production estimates were arrived at taking into consideration the following factors ascertained from the semi structured key informant interviews, area planted, delayed rainfall onset, input availability, LRA attacks and many other localised intra and inter ethinic conflicts and the NDVI imagery for the critical period of the agricultural season compared to long-term averages.

3.2.2 Rainfall

Annual rainfall in Southern Sudan usually increases from north to south and from east to west ranging from less than 500 mm in the semi-arid lands of Northern Bahr el Ghazal and East Equatoria to a possible 1 800 mm in the Greenbelt. The Mission collected remote sensed data (Rainfall Estimates) and rain-gauge data and analysed to provide a comprehensive picture of the rainfall pattern and quantity throughout Southern Sudan. The basic rainfall pattern, discernable across the Southern Sudan, was more variable than in 2008, with rains starting poorly in most places at the expected time (May and June, 2009) and continuing more erratically but with less intensity than in 2008. The onset of the rainy season during the 2009 agricultural season can be described as very poor.

During the month of August, moderate rains were received despite the prolonged dry spell in June and July that disrupted crop development and performance especially in areas where crops were at vegetative stage. These rains covered most parts of the Southern Sudan, with highest amounts being received in the uni-modal rainfall areas especially over most parts of Upper Nile and Bahr el Ghazal as well as parts of Western and Northern Bahr el Ghazal. In comparison to long term average rainfall, only Western Bahr el Ghazal received rainfall of more than 120% of what it would have received by the second dekad of June (Figure 2). The rest of southern Sudan received between 60-80% of the expected rainfall. As observed in figure 2, central parts of Jonglei and parts of Upper Nile received 40-60% of the normal rainfall. Figure 4 shows that most of southern Sudan received at least 60-80% of the rainfall by August. Agricultural activities in the period were confined to planting, replanting and weeding in the Greater Upper Nile and Bahr el Ghazal and crops development ranged from emergence to flowering stage. There was an obvious delay in the development of the crops due to the delayed onset of the rainfall this season (Figure 6).

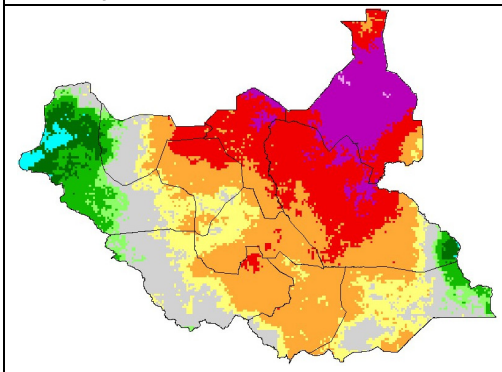
In all Southern Sudan States (uni-modal and bi-modal rainfall areas), crops such as maize, bulrush millet and groundnuts were at various phenological stages ranging from late vegetative to flowering stages. The different stages were an indication of rainfall variability in the 2009 agricultural season. The late onset, false

start of the season and the long dry spells experienced over most parts of Southern Sudan contributed to crops being at different stages. The poor rainfall performance has led to inadequate soil moisture in the Upper Nile, Unity and Northern Bahr el Ghazal States and this hampered planting activities and farmers in these areas have had to replant more than three times. Information collection from the State Ministries of Agriculture, Animal Resource and Fisheries and physical observations indicate that pastures and water availability for livestock and wildlife have generally improved over pastoral areas. The situation is expected to improve even further if the rainfall continues.

More detailed demonstrations of the rainfall distribution and comparative vegetation indices in Southern Sudan locations are included in the Figure 2-5 below. These figures show the FAO-SIFSIA analysed remote sensed and rain-gauge data. The figures show the critical months of an agricultural season, which is at the beginning of the season and halfway in the growing season.The graph in Figure 6 shows the development of vegetation at a location in Warrap State during the 2009 agricultural season. The figure shows that the current season lagged behind the normal development. The figure also shows a clear delay in the rainy season in May and June when compared to average.

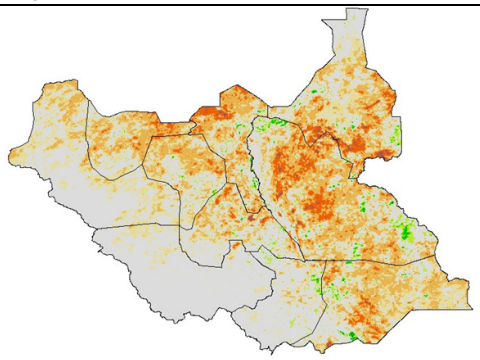
Southern Sudan - Rainfall distribution and Vegetation Indices in different states – 2009

Figure 2. Cumulative Rainfall (% of Average) as of 20 June 2009



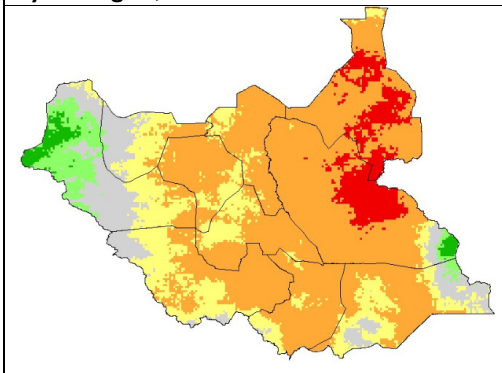
Source: FAO SIFSIA

Figure 3. NDVI (Difference from average) 21 - 30 June, 2009



Source: FAO SIFSIA

Figure 4. Cumulative Rainfall (% of Average) by 10 August, 2009



Source: FAO SIFSIA

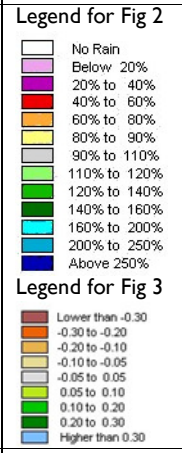
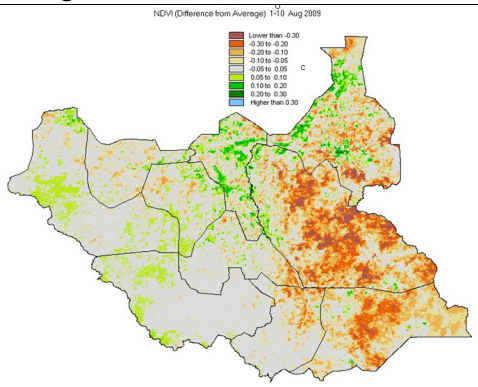
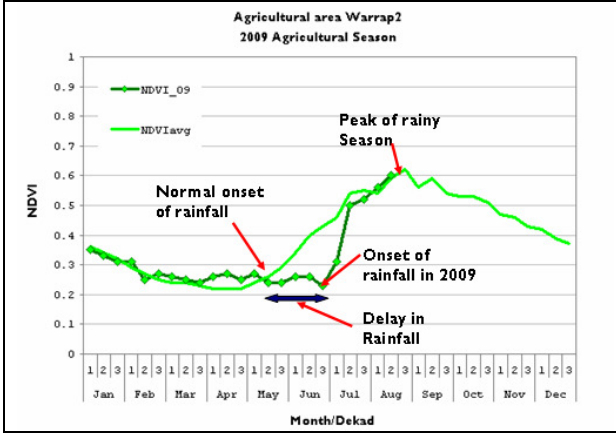


Figure 5. NDVI (Difference from average) 1 – 10 August, 2009



Source: FAO SIFSIA

Figure 6. Analysis of on-set of rainfall using NDVI in Warrap State



The general effects of rain in 2009 may be summarized as follows:

- A poor start of rainfall in both bi-modal and uni-modal rainfall regimes slowed performance of the early planted maize and short-cycle sorghums in most areas except Western Equatoria.
- There was widespread replanting including *gap filling* to overcome patchiness in germination from dry-spell affected states except for western Equatoria.
- Significant improvement in crop development occurred during the beginning of August when substantial rains were recived in most parts of Southern Sudan.
- Extended planting of short-cycle sorghums varieties for harvesting towards the end of the year was practised due to the delay in rainfall.
- Generally, a below average performance in crop production, was noted in all localities, due to poor onset of the rainy season.

3.2.3 Inputs - Traditional sector

Farm sizes for the majority of households of the traditional farmers is very limited ranging from 1-5 feddans (fedan is about 0.42 ha). This makes the traditional farming system depend predominantly on family and hand labour. The farmers use the flat-bladed long-handled hoe, the *maloda,* or the local short–handled, bent, digging hoe, the *turiya* and the east African hoe or *jembe.*

Regarding seed supply, Mission teams have always reported a firm reliance of all settled farmers on local landraces, either farm produced and carried over from one year to the next, supplied by kinship connections or purchased in local markets and 2009 is no exception[2]. However, in order to restore and maintain household food security for vulnerable population and host communities, FAO in collaboration with partners provided 1,300 MT of variety of assorted seeds and 323,600 pieces of *maloda*, hoes, machetes and sickles to 107,300 households. In addition to the above inputs and in order to promote and strengthen livelihoods coping mechanism to enhance resilience of vulnerable households, promote sustainable natural resource management and prevent natural resource-based disputes and disease outbreaks, FAO supported vegetable production, fishing, animal attraction, agro-forestry and school gardening to priority areas but with funding from previous years. Limited funds were secured for these activities in 2009. However, a total of 9,000 beneficiary households accessed 1.2 MT of assorted vegetable seeds, 400 units of treadle pumps, 520 pieces of ox-plough, 4,400 boxes of hooks and 33,000 pieces of twins[3].

Regarding the application of fertilisers, no use of chemicals is noted, however, farmyard manure use is well-regarded in farms in North Bahr el Ghazal, where previous Missions observed a) goat-dung being differentially distributed to combat the effects of striga, and b) farmers soliciting herders with offers of food and drink to graze stubble on their farms; and through the planting of valuable crops in cattle camps, a

[2] Crop and Food Supply Assessment Mission Reports, 2006-2008.
[3] 2010 HUMANITARIAN WORK PLAN. Food Security and Livelihoods Sector Response Plan. FAO, 2009.

procedure also noted from Jonglei to Kajo-Keji to Lakes. Elsewhere, the low-level of occupancy and the newly re-acquired freedom of movement allows widespread shifting that is only challenged by tribal territorial clashes near county boundaries, pastoralist and farmer conflicts and the pillaging of the LRA in southern border areas.

3.2.4 Pest, diseases and weeds

Pests and diseases were reported in most states in the traditional sector. Most notable was the insect attack on sorghum and sesame in Warrap state where most the crops were seriously affected. In the mechanised sector, there were no reports of pests and and diseases because at the time of the assessment, not much crop was in the field due to delay in the onset of the rainfall. Common non-migratory pests reported include: local birds, grasshoppers, termites, stem-borer and dura-bugs and sorghum black beetles.

Regarding weeds, the mission noted the local grasses that invaded the fields continuously and were not really kept under control. However, the famers reported weeding their fields once, twice and even three times. Striga was noted to be the most notorius weed in many locations and in Warrap, it affected crops by up to 50% of the field. This will definitely affect the crop yields.

Regarding plant diseases, the major problems remain the same as in previous seasons. The diseases being rosette virus and leaf spot of groundnuts, mosaic virus of cassava and sorghum smut[4].

3.3 Agricultural Production in 2009

3.3.1 Cereal production

A. Traditional sector

Cereal production estimates from the traditional sector in 2008 were derived from area estimates. The harvest was estimated to be 1.25 million tonnes from 1.00 million hectares[5], which was 43 percent greater than the 2007 estimates from an area 20 percent greater due mainly to:

- The estimated 5 percent increase in households farming.
- The increase by 12.6 percent in average farm size to 0.8 ha.
- No large harvested area reductions due to flood or other hazards.

The average cereal production in Southern Sudan since signing of the Comprehensive Peace Agreement has been around 800 000MT. Taking into account the various growing stages at which the crops were, it makes it challenging to estimate accurately the expected yields. However, taking into account

- the observed crop conditions,
- weed infestation,
- The reduction in the area planted,
- insect pests infestation,
- the rainfall performance in the next 2-3 months

The agricultural production was estimated qualitatively. The agricultural production for 2009 will be reduced creating challenges on availability of cereals in southern Sudan. The reduction is discussed in terms of Yield per feddan.

As a baseline:

In a Good Year: 1 feddan will produce = 5-8 bags (90kg bags) Sorghum
In an Average Year: 1 feddan will produce = 3-5 Bags
In a Bad Year : 1 feddan will produce = 0-2 bags

The actual quantitative production figures will be produced during the extensive CFSAM in November 2009 taking into consideration the number of feddans cultivated in 2009. In terms of the magnitude of reduction, 3 scenarios are presented. Based on the reports compiled by the 5 teams on convergence of evidence, the reduction in feddans planted due delayed onset, reduced area cultivated ranging between 20-30%, the following scenarios are likely: In 2009, overall cereal production reduction may be 30-40% under the current conditions, however, should floods occur which are a common phenomena, the cereal reduction may be up to 40-50% of the average production. This may create serious cereal deficits in Southern Sudan.

[4] Crop and Food Supply Assessment Mission Reports, 2006-2008
[5] Crop and Food supply Assessment Mission Report, 2009.

The actual quantitative production figures will be produced during the extensive CFSAM in November 2009 taking into consideration the number of feddans cultivated in 2009. The estimated production is also contingent on the rains continuing over the next couple of months to support the growth of immature sorghum especially in Upper Nile, Lakes and parts of Jonglei including the growth and development of rattoon crops in Jonglei.

B. Mechanized sector

A Mission team visited the mechanized farming zones of Renk, Bentiu and Malakal in 2009. At the time of the assessment, crops in Renk especially sorghum crops were mainly at germination stage. Cultivation at Mohammed el Jack scheme which was deserted in 2006 due to insecurity leading to loss of more than 139,000 feddans (this used to be the main food basket for Malakal and its environs) is still the same with no crop in the field making a bad situation potentially worse for all the crops. However, in mechanized areas of Renk and Manyo households cultivated at least five feddans. Expected harvested area has increased in mechanized areas of the state compared to last year (other factors remaining constant e.g. Rainfall and security). This indicates that the yield is likely to increase by the same amount this year.

C. Time series of cereal production

Time series of estimates of cereal production for the traditional sub-sector,for the past five years are provided in Table 2[6]. Although it is difficult to interpret at sub-national level as county/state combinations vary from year to year, it is clear that all zones exhibited area increases due to *no flood deductions* and the inclusion of 2007/early 2008 *returnees farming*. Upper Nile Region shows a return to production levels estimated in 2005 and 2006. Bahr el Ghazal regional production estimates were higher due to area increases and by better yield estimates from Western Equatoria, Lakes and Warrap States. Production throughout Equatoria region was boosted by area increases due to returnees and by rainfall patterns conducive to production and more realistic estimates in all States due the improved road access to the two Mission teams enabling Mission field work in nearly all counties (CFSAM Report, 2009).

Table 2: Southern Sudan - Time series 2004-2008, cereal production in traditional sector

Zones	2004		2005		2006		2007		2008	
	Area 000 ha	Prod. 000 t	Area 000 ha	Prod. 000 t	Area 000 ha	Prod. 000 t	Area 000 ha	Prod. 000 t	Area 000 ha	Prod. 000 t
Upper Nile	**138**	**82**	**204**	**167**	**226**	**189**	**142**	**123**	**197**	**196**
Upper Nile	89	48	59	48	67	61	40	35	58	49
Unity	31	22	41	35	48	39	30	27	47	46
Jonglei	18	12	104	84	111	89	72	61	92	101
B el Ghazal	**451**	**306**	**432**	**374**	**438**	**359**	**450**	**422**	**487**	**561**
North	295	195	95	56	104	72	94	70	111	83
West	37	26	41	38	45	41	41	50	44	68
Lakes	119	85	111	103	111	95	104	107	113	136
Warrap	0	0	185	177	178	151	211	195	219	274
Equatoria	**218**	**199**	**233**	**259**	**242**	**258**	**257**	**314**	**314**	**491**
Central	79	66	75	77	71	78	70	74	86	132
East	32	20	37	26	45	29	61	51	79	87
West	107	113	121	156	126	151	126	189	149	272
TOTAL	**807**	**587**	**869**	**800**	**906**	**806**	**849**	**859**	**998**	**1248**

The mechanized sector produces a significant amount of cereals, therefore, looking at a times series provides good information to understand progress. Table 3 provides a five year time series for the mechanized farming sector. The Mission team visited the main sites and indications are that there may be good yield and production despite the poor onset of the rains. However, this may be dependent of the performance of the rains as well as stability in terms of security.

[6] Crop and Food Supply Assessment Mission Report, 2009

Table 3: Southern Sudan - Time series 2004-2008, cereal production in mechanized sector

Region	2004		2005		2006		2007		2008	
	Area 000 ha	Prod. 000 t	Area 000 ha	Prod. 000 t	Area 000 ha	Prod. 000 t	Area 000 ha	Prod. 000 t	Area 000 ha	Prod. 000 t
Renk r.	108	94	263	226	149	80	232	156	138	162
Renk ir	11	22	1	1	na	na	na	na	na	na
Wadakona.	60	54	80	68	68	40	na	na	na	na
Melut r.	8	8	-	-	2	1	na	na	na	na
Malakal	4	4	2	1	0	0	2	1	na	na
Bentiu	0	0	0	0	0	0	3	2	4	3
Total	**191**	**182**	**346**	**296**	**219**	**121**	**237**	**159**	**142**	**165**

Na= not available; r=rainfed; ir=irrigated

3.3.2 Other crops

The agricultural potential of Southern Sudan is very high. A wide range of field crops other than cereals, including vegetables, especially pumpkins and okra, and tree crops are grown successfully in all states. Presently, small quantities of oil seeds, tobacco and, less regularly, cotton, are grown in the traditional sector for household consumption and for occasional sales of small surpluses in local markets. Two other crops, groundnuts and cassava, are grown in quantity, the former throughout the states and the latter in all states except North Bahr el Ghazal, Warrap (some small quantities along field boundaries), Unity, Upper Nile and Jonglei.

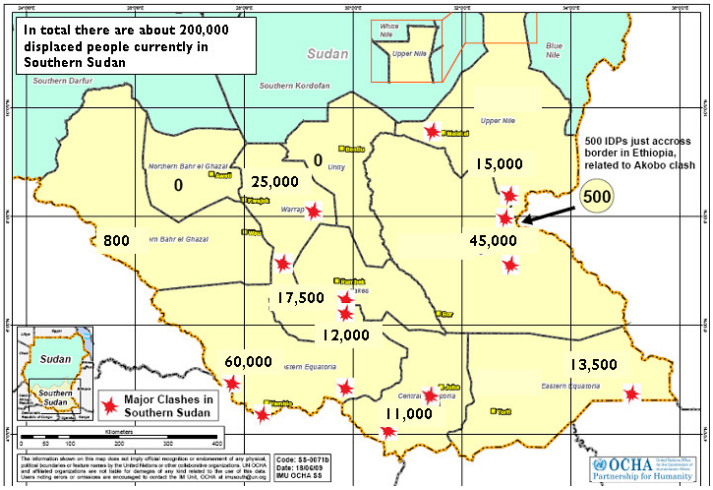
In 2009, most of these crops were affected by the delayed onset of the rainfall as well as prolonged dry spells in June and July. At the time of the assessment, observations and reports indicated that there were no maize crops that were mature. The maize provides the much needed food during August, a period typically considered as the hunger period.

3.3.3 Livestock

With 8 million head of cattle and 8 million head of small ruminants estimated to be kept in Southern Sudan, the contribution of animals to household food economies is considerable. However, the animals are not distributed evenly, holdings range from 100's of head per individual to zero. Nevertheless, in all places, except Western Equatoria, more than 75 percent of the families reportedly have their own livestock and extended family relationships (kinship) afford the opportunity to share resources in most societies[7].

At the time of the Mission, the physical state of the animals was above average with a lot of pastures and water available. However, cases of cattle raiding was reported along with intra and inter-ethnic conflicts especially in Jongle and Warrap states. Several animal diseases were also reported including Contagious Povine Pleuropneumonia (CBPP), contagious caprine pleuropneumonia (CCPP), Foot and Mouth Disease (FMD) and Black Quarter.

Figure 7. Locations of major Clashes in 2009



Source: OCHA, 2009

3.4 Security

The insecurity situation affected agricultural production significantly in 2009. There were a number of incidences of clashes as indicated in figure 7 resulting in a lot of displacement of people. The hit and run tactics of the LRA in the southern border areas (Western Equatoria), terrorising villages, disrupted farming activities in Western Equatoria continued. Cattle raiding in the

[7] Crop and Food Supply Assessment Mission Reports, 2006-2009

major cattle rearing areas and clashes between settled farmers and pastoralists in cross-over zones were noted as the major security concerns. There were also a number of intra and inter-ethnic conflicts. In Upper Nile, generally the insecurity has compounded the situation further, for instance in Panyikang most households cultivated an average of two (2) feddans and in Makal shiluk some households cultivated less than a quarter of a feddan due to fear of going to the far away fields that are normally the main sustenance of their household's food requirements.

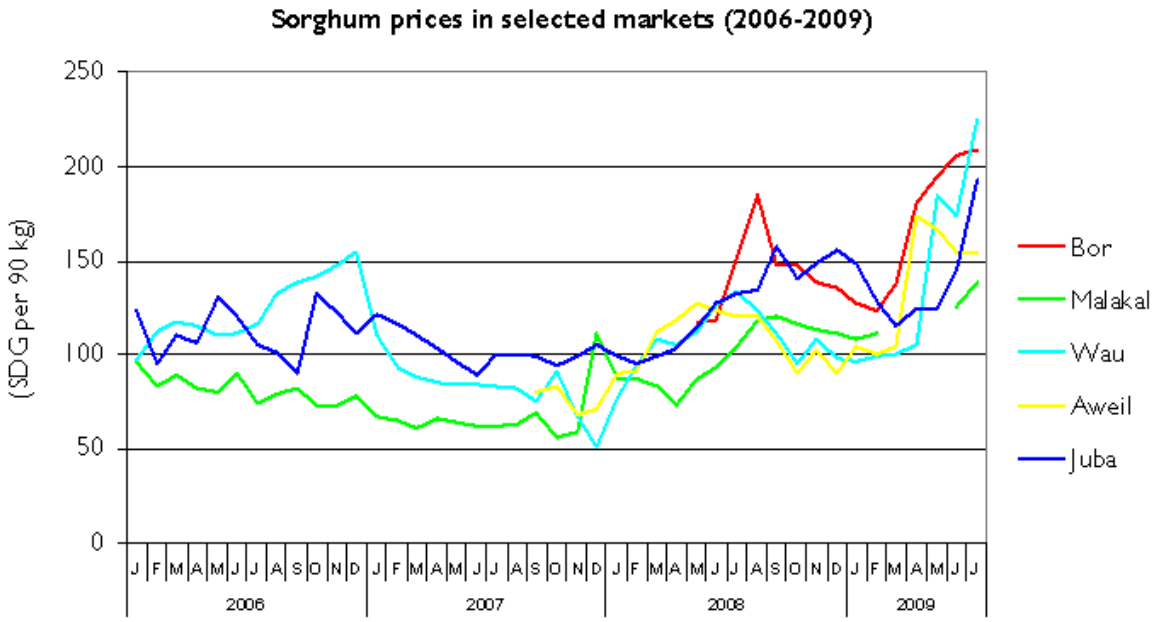
4.2 Cereal and livestock prices

Cereal and animal prices were collected by the Mission during visits and a comprehensive database of prices for 2007 and 2009 was provided to the Mission by WFP VAM Unit. Using two indicators from the WFP data, sorghum and Cattle prices, the Mission prepared graphs for monthly prices from late 2007 for three states; West Bahr el Ghazal (Wau), Upper Nile (Malakal), Northen Bahr El Ghazal (Aweil), Western Bahr El Ghazal (Wau) and Central Equatoria (Juba). The resulting charts and trends are shown in the below Figures.

4.2.1 Sorghum Prices

Sorghum is one of the main staple food crops in Southern Sudan. Among all the cereal grown in southern Sudan, sorghum contributes about 70-80%. The below graph (figure 8) shows the prices for a 90 kg bag of sorghum, which have been tracked since 2006 in five main urban markets (Bor, Malakal, Wau, Aweil, and Juba).

Figure 8



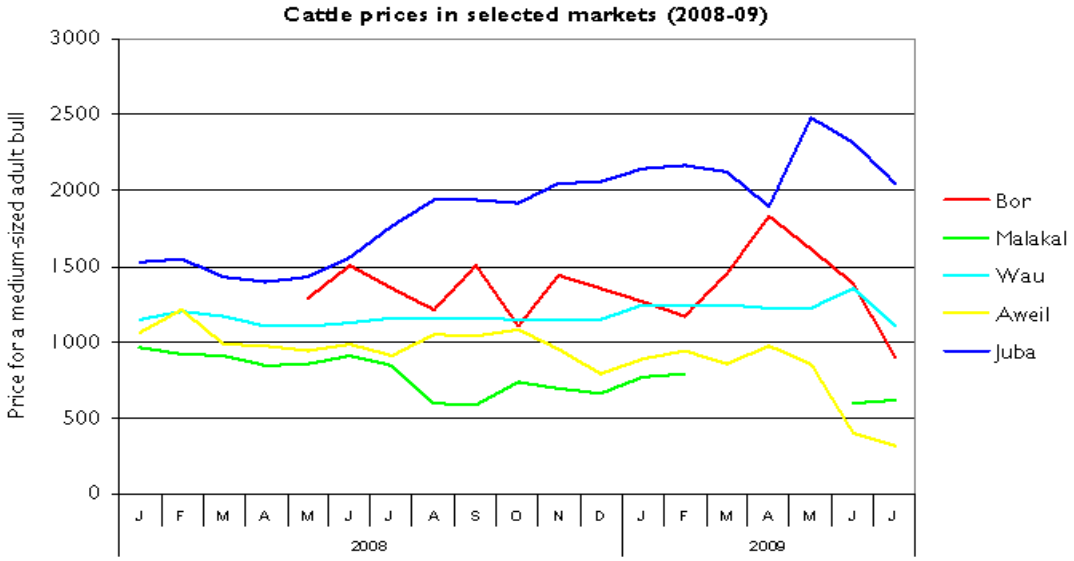
Source: WFP, Juba. 2009

It is evident that there was an upward trend throughout 2008, and then in 2009, during April to July prices soared. As a result, the current sorghum prices are now the highest on recorded in our data. This has created access challenges are most households are not able to afford the grain.

4.2.2 Livestock Prices

Southern Sudan communities own a lot of livestock and these are part of the livelihoods. Livestock based livelihoods depend on the sale of animals to be able to purchase grain. The amount of grain purchased is dependent on how much they sale their animals. It was noted that at the same time sorghum prices are high, livestock prices are very low. In all the visited locations our teams report an abnormal amount of distress sale of livestock. This creates an over-supply of cattle in the market, resulting in depressed livestock prices. It should be noted that there is an inherent relationship between sorghum and livestock prices, as discussed below. Figure 9 shows more or less stable prices of livestock in 2008 except for Bor, however, in 2009, the prices of livestock started falling in April. The trend has continued putting livestock farmers at a disadvantage.

Figure 9

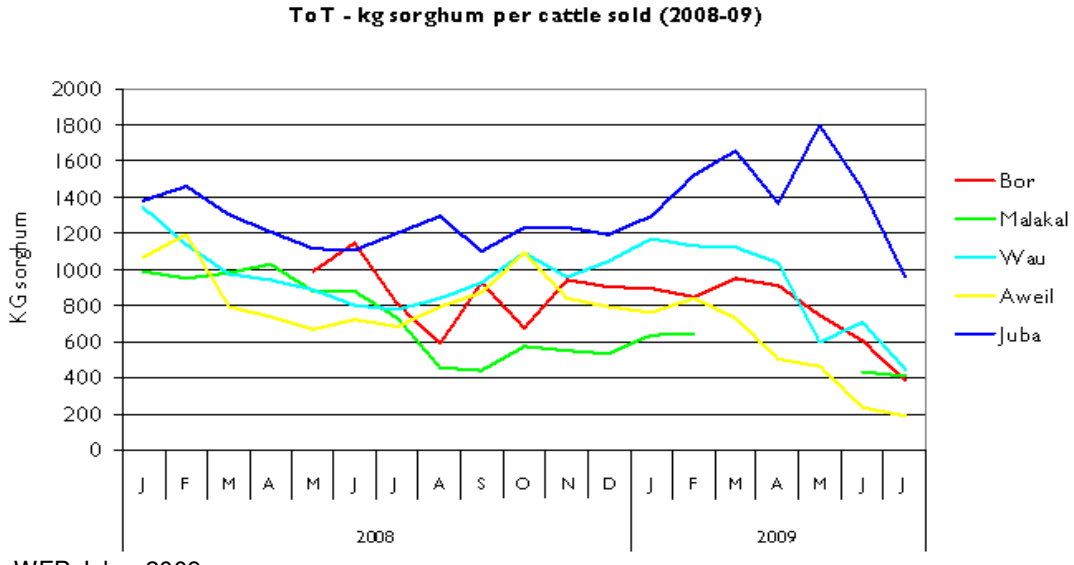


Source: WFP, Juba. 2009

4.2.3 Terms of Trade (Cereal and Livestock)

The Terms of trade (ToT) measures how much sorghum a household can buy in the market by selling an adult bull. The sale of livestock for the purchase of sorghum is a key coping mechanism for agro-pastoralist households in times of abnormal stress. This is a key indicator for agro-pastoralist households, as such a behaviour is a key coping mechanism during the hunger season and in times of abnormal stress. The below graph (figure 10) indicates the amount of sorghum a household can buy in the market for the cost of an adult bull. During January 2009, a family in Wau could buy 1,200 kg of sorghum by selling an adult bull. Six months later, the same adult bull can only buy 400 kg of sorghum (figure 10). .

Figure 10



Source: WFP Juba, 2009

It can be seen that there is a consistent decrease during the former half of 2009. Since this is such an important coping measure, the above graph is one of the strongest pieces of evidence that households are currently facing abnormal stress.

Annex 1

Agriculture situation by zone (region)

A. Upper Nile State

Upper Nile State is located in the North Eastern tip of Southern Sudan, bordered by White Nile to the North, Sennar, Blue Nile and Ethiopia to the East, Jonglei to the South and South Kordofan to the West. Administratively, it is divided into twelve (12) counties namely:- Maban, Manyo, Melut, Fashoda, Renk, Maiwut, Longuchok, Ulang, Nasir, Balic, Malakal and Panyikang with head quarters in Malakal.

Crop production and growing conditions:
Climate variability has played a major role in the state that is heavily dependent on rain fed agricultural system. Ninety nine (99%) of the households delayed cultivation by nearly a month or more, deferring harvests by almost the same period of time assuming rainfall continue consistently. Floods in 2008 destroyed a substantial amount of harvest and prolonged spell this year (2009) in several other parts of the state have caused increased uncertainty in agriculture as well as food security. General insecurity has compounded the situation further, for instance in Panyikang most households cultivated an average of two (2) feddans and in Makal shiluk some households cultivated less than a quarter of a feddan due to fear of going to the far away fields that are normally the main sustenance of their household's food requirements.

While a number of people living in abject poverty (vulnerable-described as living on less than a dollar or two pounds a day-ANLA 2008) fell significantly last year, the subsistence nature of the agricultural sector in most parts of the state with an exception of Renk (mainly mechanized agricultural system) and parts of Malakal counties means many do not have cash incomes to buy food when their own production is below normal. Many of those with cash income have simply been priced out of the food market.

Data collected from a random check in the markets (Malakal) showed that inflation has hit double digits and is likely to increase as roads are already closed due to rains that have just resumed. About sixty (60%) percent of the households are relying on unsustainable coping methods such as collecting wild foods in Makal Shiluk due to delay of the normal harvests in August which in most cases acts as a breaking point of the hunger season. However, most young men migrate to Malakal town in search of manual labour and others are employed by the government and other agencies in the town. Although rains have resumed, it is still less than normal in most areas visited such as Panyikang, Makal Shiluk. However, in Renk the data shows that it is more than last year (above 300mm by 19/8/2009) and projected to be above the state average of five hundred (500mm).

Agricultural Inputs and Supplies
Although some farmers used farm inputs, they are unlikely to have enough produce due to late start of rains in Panyikang and makal Shiluk, but, in Renk and Manyo the situation is likely to be different given the large scale mechanized farming activities. Most households received tools and seeds from FAO and other agencies in Panyikang and Makal Shiluk, while in Renk and Manyo the main seed supply is market purchase and own seeds reserves. Hired labour was reported in Renk and Manyo counties. However, machinery, fuel, spare parts and credit were reported in Renk and Manyo which are about 90% mechanized and spot checks with some of the farmers showed that almost all farms rely on farm machinery, with an exception of weeding and harvesting which are mostly manual with few farmers reported to be using herbicides.

Agricultural Activity by Crop
The main crops in the State are sorghum, Sesame and maize. The later is basically consumed green in most households during the month of August. Sorghum is the main lifeline of nearly all the households in Upper Nile state accounting for over 90% of the harvests. It is worth noting that most of the harvests from the mechanized farms in Renk and Manyo are taken to the North, this is because of availability of financial support, readily available market, good road networks and storage facilities. However, this is not exclusive as some of the produce are paid to the local Agricultural bank in exchange to servicing the loan.

Some procedures laid down by the Central bank of Sudan has led to reduction in number of farmers (this year only 35 farmers compared to between 150 to 200 farmers expected per season such as the base lending rates (70% of the required amount), minimum requirements such as collaterals. The need for farmers to have personal identification codes has also deterred defaulters from accessing the services.

Agricultural Activities by Crop.
In Panyikang and Makal the farmers received seeds from agencies to supplement their own seeds, where as in the two counties of Renk and Manyo the farmers bought seeds from the market (80%). In Panyikang and Makal ploughing took place in June and sowing in July, although in a normal year ploughing should take place in May and sowing in June. While in Renk ploughing and sowing (take place at the same time) in a normal year take place in June but, this year it was in July due to delayed rains.

Replanting took place almost immediately after noticing failure in germination of the crops which is a general practise in all the areas visited. Although, in Renk most of the farmers were forced to replant about 30% of their fields due to grasshoppers destruction of germinating sorghum seedlings. About all the households weed twice apart from some farmers who reported multiple weeding in a few areas and on specific crops (sesame). Harvesting takes place in August (maize), October to November (sesame) and December to January (Sorghum), but, is likely to start late this year by one month given the delay in planting.

Crop condition and phonological stages and area cultivated
Most of the crops in Panyikang, Makal Shiluk and Manyo were normal in the areas visited and were in vegetative stages. While in Renk sorghum crops are mainly in germination stage. Planted area have generally reduced in most subsistence farming household due to fear of attack and destruction of crops, for instance Makal Shiluk has less than a quarter feddan in most of the households visited as compared to last year and Mohammed el Jack scheme which was deserted in 2006 due to insecurity leading to loss of more than 139,000 feddans (this used to be the main food basket for Malakal and its environment) making a bad situation potentially worse for all the crops. However, in mechanized areas of Renk and Manyo households cultivated at least five feddans. Expected harvested area has increased in mechanized areas of the state compared to last year (other factors remaining constant e.g. Rainfall and security). This indicates that the yield is likely to increase by the same amount this year.

Pests and crop Diseases
In Renk the department of crop protection unit does aerial sprays to contain pests out breaks. But, it appears this year the exercise has delayed giving rise to grasshopper infestation in most of the sorghum farms. This might have a negative impact in the overall production.

Household livestock
Generally, the numbers reduced this year compared to the previous year due to rustling and diseases. The animal condition is stable (4) and a significant number are breeding (females), this is as a result of enough water and pasture conditions available in the community at the moment and is expected to remain the same up to the end of the season assuming other factors such as rainfall and security remain constant.

Labour market conditions
Among the areas visited, only mechanized farms use hired labour such as Renk and Manyo. Labour dynamics have been varing in the recent past with males accounting for about 80% during sowing and weeding, although the number of females also increases relatively during harvesting. The average wage varies between 7 to 8 SDG per feddan. This is not fixed as most of the work is done on the farmer/labourer agreement depending on the size of the area.

Public and commercial stocks of cereals:
Storage facilities are available, but there are no stocks with an exception a few from the ministry of agriculture.

B. Lakes and Unity States
The false start of rains and prolonged dry spell in May and June this year has delayed agricultural activities since the start of the season. The mission covered selected areas due to their contribution to cereal production in Southern Sudan such as Rumbek East, Rumbek Center and Cueibet counties in Lakes State and Bentiu, Leer, Koch and Rubkoani counties in Unity State.

The mission undertook spot–check market surveys, estimated quantities of grain in stores in local and government stores and also the Mission conducted ground verification by collecting area, expected yield and production data and field inspection cross – check against information obtained directly from the State Ministry of Agriculture staff, farmers, traders, herders', staff of NGOs and International agencies. Information was obtained from secondary sources, rapid case studies and key informants interviews; in addition we conducted aerial observation noting far fields, crop conditions for the duration of flight.

Mission High lights:-

- Below normal rains in May and mid June affected cereal production in all areas visited especially the first cropping season from April/July/August including potential areas for cereal production (Sorghum ,Maize ,Sesame ,G/nuts) in both Lakes and Liech States.
- Poor rainfall and poor rains distribution from May through mid-June also signaled possible planting delays of early and medium Sorghum and maize crops in many areas which affected – June/September/November second cropping season in most areas of cereal production and expected yield for sorghum will be (2 - 4) sacks 90kgs per feddan.
- As hunger season approaches peak and inter-ethnic/intra- ethnic conflicts escalate, there could be potential increase of food insecure populations by the coming next three months.
- General Food security situation will continue to worsen in the next three months due to insecurity, poor rain fall and delay of States salaries for longer period.

Lakes State:-

The Mission met with relevant State authorities, UN agencies and NGOs and conducted field visits to three counties Rumbek East, Rumbek Centre and Cueibet and nearby areas and markets. For the first day of the visit, the team meet the State authority especially ministry of Agriculture, Animal Resource and Fisheries and SSRRC. The team leader Director General of Agriculture production of the MAF/GOSS briefed the State officials about mission and stated the important of the exercise and the team was scheduled to visited nearby areas including; Rumbek East, Center and Cueibet Counties to inspect fields and market places .

The mission met with County commissioners Mr. Kongngor Deng Kongngor of Cuiebet and Mr. Mayen Mabior Mayen of Rumbek East; the Commissioners informed the mission that almost all their Counties have been experiencing hunger since March, 2009 due to insecurity, cattle raiding cause displacement of many people in their homestead during cultivation period plus poor rain fall and influx of returnees from Khartoum (Northern Sudan) and neighbouring countries of Kenya and Uganda .The Food security situation is expected to worsen for the coming months in most areas of Lakes States, following poor rain fall, insecurity and displacement of population from production areas which affected agricultural activities in the first cropping season.

Market prices

Lakes State is extremely dependent on external markets, mainly Uganda and northern Sudan. Apart from the prevalent insecurity in the state, lack of infrastructure in terms of road has a huge effect on market price. During the rainy season for instance, roads were closed because of poor road condition, which was quickly evident in increasing market prices and reduced commodity stocks. Insecurity also in the state has contributed in accelerating the grain market price. Currently Cereals, Livestock and Fish Prices were reported to be higher than last year prices at this time in all local markets.

Liech (Unity) State

The population of Liech State's livelihood is a mixture of agro-pastoralists, fishing and petty traders and the main crops grown are sorghum in southern and northern parts and maize in central and northern parts of the State. The opening of oil fields all over the nine counties has opened up opportunities of income for labourers who are working in the oil fields. Due to unfavourable rainfall conditions, and influx of returnees going and coming back from Khartoum and opening up of trade and oil fields opportunities, it is estimated **that 96,000 residents, IDPS and returnees** would required support to recover their livelihood in the areas affected by drought as well as support to development activities such as schools, water and sanitation, Health, Education and training.

Agricultural activities

Generally there is increase in areas cultivated this year due to availability of Agricultural inputs including (38) tractors with their implements which were hired to farmers and were used during the cultivation season in selected areas which had high potential and the main crops grown were Maize, sorghum, some vegetables & fruit trees and seeds were from own seed and some from kinship.

Rainfall started early this year in May,2009 with a long breaks of three weeks to June/ July and the amount of rainfall is below to normal in Central part areas namely Counties of Guit and Robkoani, which we expect

to have good harvest of maize this season if the rains continue up to September ; but in northern part of the State the rainfall trend from May/ July was below normal including Mayom, Alor and Ruweng counties; rainfall started to intensify in August and crops were already stressed and affected by long drought ; but in the southern areas of Leer , Koch , Mayendit and Payinjiar Counties ; the rains started late in May and stopped for a period of three weeks then resumed in July up to date this late rains affect early, medium sorghum and Maize. Maize crop are the most affected crops by dry spell in all fields.

The first planting date was third week of May and replanting was done several times in June and July, 2009. Koch County was the most affected area by dry spell and crop conditions were much stressed. The maize crop which was planted in May was eaten green in some fields which were planted early. Civil Insecurity, population displacement due to inter-ethnic conflicts and cattle raiding between in Liech (Unity), Warrap and Lakes States disrupted agricultural activities.

- In Guit and Rubkona Counties, it was estimated that the expected yield for maize this season would be (5 – 8) sacks 90kgs/feddan ,
- In Leer, Mayendit, Panyinjair and Ruweng Counties expected yield for sorghum will be (2- 4) sacks 90kgs /feddan in Leer, Ruweng and Mayendit Counties.
- Mayom, Alor and Koch will be most affected counties by dry spelt.

Market prices

Unity State main markets including Bentiu, Leer, Rier, Robkoani, Mayom, Parieng, Guit and Koch and Unity State is extremely dependent on external markets, mainly northern Sudan. Market access has been improved significantly due to opening of new roads and free movement of goods and traders which in turn improved trade and income options, trade and income generating activities such as petty trade and labour to the oil fields to purchase food has become increasingly important. Food commodities are available in local markets but their Prices are considered very high especially sorghum which have been reported to be higher during the last three months and higher than it was last year. Currently one sack of 90kgs of sorghum sell at (170 SDG) and last year was (80 SDG), a bag of 50kgs of maize sell at (150 SDG) and last year (50 SDG), one bag of 50kgs of Wheat sell at (200 SDG) and last year was (150 SDG).

The livestock body condition is good because of decreased in Livestock diseases and abundant pasture and water and cattle movement is limited due to good water and pasture this year and their movement is restrict by fear of cattle raiders . Cattle prices is high milking cow is (1,500 SDG), oxen (1,000 SDG), goats (150), Sheep (180 SDG). Fishery is in plenty in all counties sold either dry or fresh in the local and external markets and their prices ranged from (5 – 15) SDG.

C. Eastern Equatoria State and Central Equatoria

Just like any other normal year, the rains started normally between March and April in most parts of the State and Kajo-Keji County. This was shortly followed by erratic rainfall and consequent prolonged dry spells that extended from late April to July. The prolonged dry spell and erratic rainfall in some areas of Magwi, Ikotos, Greater Kapoeta, Budi, Torit and parts of Lafon negatively impacted on first season crop performance. Little harvest is expected in areas of Magwi, stretching through Obbo, Palotaka to Lobone, areas of Isohe in Ikotos and the highlands of Budi, areas of Lafon and Kajo-Keji while the rest of the areas had insignificant or no harvest at all from the first season. Most farmers in the Greater Kapoeta, Ikotos and Budi have lost hopes even in the second season crop. Crops are much stressed, stunted and others have completely dried due to the prolonged dry spell. Areas affected most include Lomohindang South, Losite, and parts of Imatong and Lomohindang North in Ikotos.

In Magwi County, the Madi corridor and the areas of Owing kibul and Agoro are the most affected. In Budi the payams of Homiri, Lotukei, Kimatong, Lauro and Laudo, the Greater Kapoeta areas have all suffered the shock of the prolonged dry spell. The over all rainfall is below average and lower than the previous years except in Bur Boma in Torit County where it is said to be the same. The poor crop performance and first season harvest is attributed to the prolonged dry spell and the erratic rainfall that commenced earlier than expected. This left most crops extremely stressed, some with retarded growth and others stunting/ burnt completely. Lack of improved seeds and tools were other underlying factors for the poor harvest in the first season. The major crops affected include sorghum both short and long variety, bulrush millet, sesame and groundnuts. There is chance for long variety sorghum harvest in parts of Magwi, Torit, Lafon and areas of Isohe in Ikotos should the rain continue to improve.

It is however noted that there is still problem of crop diversification in most parts of Eastern Equatoria. Crop diversification attempt is noted in Magwi and Kajo-keji areas especially among the returnees community. This has not taken much effect due to lack of other crop varieties. The lack of crop diversification has impacted negatively in this scenario as the only crop grown experienced water stress attributed to the erratic rains and prolonged dry spell. Inter-cropping is also a common practice in the state especially in Ikotos, Budi and Magwi and Kajo-Keji. Sesame is planted along side short variety sorghum and sometimes maize.

The general crop condition in Greater Kapoeta, Ikotos parts of Budi, Torit, Lafon and Magwi is described as "very stressed". Areas of Isohe in Ikotos, Magwi stretching through Obbo, Palotaka to Lobone, Pacidi areas in Lafon and the highland areas of Budi is good. Kajo-Keji County is relatively better in terms of first harvest and crop performance compared to locations visited in Easter Equatoria, however in comparison to the previous years crop performance, the first season's harvest is extremely below. The adverse effect of the unexpected prolonged dry spell retarded crop growth. Long term sorghum is at vegetative stage in Ikotos, Torit and Kajo-Keji. Short term sorghum at maturity stage is observed in Isohe and Magwi central payam.

Crop production and growing conditions
The main type of crop production is rain-fed, no irrigation and supplementary irrigation was noted in all the places visited. Land preparation started as usual between March and April, first season crops planted between April and May; nevertheless this was hit hard by the erratic rainfall, consequently by the prolonged dry spell. The erratic rainfall started in May and eventual prolonged dry spell extended up to July. The rainfall amount is below average compared to the previous year. This has impacted negatively on crops, retarded growth, stressed others and burnt down some.

Agricultural Inputs Supply
Generally there is insignificant mechanized agriculture practice in all the four Counties visited. The common agricultural tool is the hand hoes; ox-plough practice was noted in Kajo-Keji. Agricultural tools and seeds supply for this year has been above normal due to support from Ministry of Agriculture, FAO in Greater Kapoeta, Ikotos and parts of Magwi, LWF and AVSI in Ikotos, Danish Refugees Council (DRC) in Kajo-Keji. The over all Labour supply in the locations visited was normal except a few households who were able to hire casual labor, received new arrivals in the household.

Agricultural Activities
Agricultural activities started normally in March, but the prolonged dry spell commenced much earlier than expected in a normal year. Land preparation in areas of Greater Kapoeta, Budi, and Ikotos started as early as late February. Planting of the first season crop commenced in March and extended up to April. Both long and short term sorghum crops are the common crops in all the four counties visited. In Kajo-Keji the common first season crops included cassava, maize, sorghum, groundnuts, beans, cow peas and potatoes. Crop diversification is common in Kajo-Keji and on small scale in Magwi. Most of the crops were at vegetative stage when the dry spell hit, that led to failure of first season crops and growth retardation in others.

In Greater Kapoeta, Ikotos and Torit, most farmers did not replant due to the extended dry spell. Replanting effort in Magwi was further frustrated by the extended dry spell between May and June. Another factor that contributed was lack of seeds for replanting. Most farmers have weeded their Sorghum, maize and groundnuts once.

The first season harvest has failed in Greater Kapoeta, parts of Ikotos, Torit and Magwi. Little short term sorghum harvest will be realized in August in areas of Isohe-Ikotos County. In Magwi County, the areas of Magwi central stretching through Obbo, Palotaka to Lobone and parts of Panyikwara are harvesting maize and Ground nuts and there is also hope for second harvest in November. In Lafon, areas of Pacidi and Imehejek will realize some small harvest in November. In Kajo-Keji at least every household had a little harvest from the first season crops. Groundnut and maize are the few crops that have been harvested though much lower than expected

The general livestock condition has greatly deteriorated and most pastoralists have stayed longer in the dry season grazing areas, this has reduced chances of alternative subsistence on livestock products especially among the agro-pastoral communities of greater Kapoeta, Budi, Ikotos, Lafon and parts of Torit

Crop condition and phenological stage
Generally, the crops are stressed in all the locations visited. Crop growth retardation was noted in all the five counties where rainfall has been erratic. In areas of Greater Kapoeta, Southern and northern parts of Budi

and Ikotos the crops are very stressed. Most of the crops are at vegetative stage except in Isohe, Magwi and some parts of Kajo-Keji where first season crops are at maturity stage and second season at vegetative stage.

Area, Yield and production
The area under cultivation this year is above the previous years' especially in Ikotos and Magwi Counties. This is partially attributed to the extra tools and seeds provided by Ministry of Agriculture, FAO, LWF, AVSI and DRC. The high return areas also attributed this to the reduction in the competing Labour needs among the returnees. In greater Kapoeta, Ikotos and parts of Torit and Magwi Counties, there has been little or no harvest from the first season crops and most households have insufficient food to sustain the families. Kajo-Keji had little first season harvest which may not sufficiently meet the household's monthly food needs

Pests and Crop diseases
Pests and diseases are reported in all the locations visited. Common crop pests included sorghum bug, grasshoppers, birds, striga weeds. Bleeding of the ear, blindness and diarrhea were reported in Kapoeta County.

Household livestock, pasture and water condition
The livestock condition is worse than the previous years'. This is mainly attributed to the poor rainfall. The poor rainfall affected pasture growth and water supply for the animals. This forced the pastoral communities farther and delayed their return. In a normal year cattle are expected back from the dry season grazing areas between May and June and this has not been the case this year as all the cattle are still in the dry season grazing areas of Ethiopian boarder, Jie and Kuron areas and the Kidepo valleys.

D. Jonglei State

Background Information
The assessment in Jonglei State, which took place from 17-19 August 2009 was carried out in one County of the State: Bor, Baidit and Makuac Payams. Due to the prevailing insecurity in most Counties, a number of areas were not easily accessible. During the discussion with most local authorities, the issue of ongoing insecurity caused by ethnic clashes featured prominently as one of the major factors affecting agricultural production this year resulting in displacement of 41,744. The insecurity exacerbated by the poor rainfall performance in Jonglei Sate in the months of May and June 2009 has disrupted normal agricultural production activities.

Agricultural Production

Locations
The location visited during the assessment comprised of Bor, Baidit and Makuac payams. In all the locations visited, the assessment team met a number of stakeholders (see details in annex 1) and discussed the status of agricultural production in the season and factors affecting crop performance in the localities.

Type of Crop Production
The main types of crops grown are maize, sorghum, and groundnuts. The state almost exclusively relies on agricultural production and livestock rearing constitute the basic livelihood and income.

Growing Conditions
Jonglei State falls within the Savannah agro-ecological zone. The type of farming system practiced in the area is rain fed subsistence farming. The entire State has only a single cropping season with the first season starting in between April to May. The crops and pasture conditions are generally good in many parts of the State. Rainfall have been reported to be generally below average throughout the State of which most counties have experienced prolonged dry spells. Many of the household carry out two weeding practices per season and crops are generally free of weeds but infected with some diseases e.g. local bird and quelea quelea birds, grasshoppers and army worms. There was no control measures for most infections except scaring device are being used for birds' control.

Agricultural inputs supply
Access to land for cultivation and settlement in general are not a limiting factor to farming. Many of the farmers use their own local varieties of seeds. The main source is either from own stock or purchase from local markets. FAO has been supplying seeds and tools through agencies such as Norwegian People's Aid (NPA), Adventist Development and Relief Agency (ADRA) and County Department of Agriculture (CDA).

However, no complaint of late deliveries and poor qualities were raised by respondents and the local authorities

Agriculture activities by Crop
Many households in the relatively peaceful parts of the State have not harvested their crops of the season such as Sorghum, maize and groundnuts. Most households visited have planted sorghum and maize crops.
In most locations visited, land preparation and sowing dates varies between April and May. Cultivation methods are being carried out manually. Replanting of crops was applicable to few farms. However most of farm harvest shall be expected in early October.

Crop Conditions
The sorghum crop which have been under stress during reported periods of dry spells have improved and are in milking stage (harvesting expected in October). The groundnut crops from third (late) planting have improved slightly but the majority of first and second planting have either failed totally or their yields will diminished greatly. Many of the maize crops have been totally subjected to severe stress with the exception of those planted along river banks. Whereas the maize crops that have survived the dry spells, plants are generally stunted and very stressed.

Crop Phenological Stages
For maize crops, most of the plants are at the flowering stage. Equally sorghum plants are still at flowering stage except groundnuts plants which are varying between vegetative, flowering and maturity stages.

Area, Yield and production
In addition to visual observation during transect walks and drive on nearby farms, a few households were interviewed at random in order to come up with some estimate of area under cultivation, type of crops in the fields, yield estimate per unit area and production (see samples on annex 2). The average area under cultivation is 0.57 ha, with majority of the fields planted with sorghum. The average yield is 0.54 tons/ha and average production is 0.31 ton/ha.

The rainfall condition in the state was below average followed by long dry spells between May/June. Insecurity in most parts of the State are still rampant mainly due to ethnic clashes. Therefore the area planted was very small per households which may reflect low yields in the next harvest season. These expected yields may not be sufficient for most households in term of food security and may likely affect Jonglei state as a whole. Even though the rainfall was below average, the prevailing crop condition and pasture performance in many parts of the States is good during this agricultural season. The main causes of insecurity are inter-tribal conflicts and reprisal attacks, child abduction and cattle rustling are the major security issues. This has forced a total population of 41,744 individuals escape their homes for safety. The returnees population is 33, 791 who have been reintegrated in Bor and Twic East counties. In addition, refugees population of 32,223 mostly Anuak ethnic group from Ethiopia have settled in Pochalla County and are encamped in Otallo and Pochalla (Source: WFP database from Jan-August 2009).

Pests and Crop Diseases
The crops are generally pest and disease free. The major pests causing damage to crops are quelea quelea birds on maize and sorghum, army worms are also observed to cause losses on crop like sorghum.

Household livestock
The main livestock owned by households visited are cattle, goats, sheep, and poultry. The number of animals range from 0-50 for goats or sheep, 0-30 for cattle and 0-10 for poultry. The major problems affecting livestock conditions are East Coast Fever (ECF), diarrhea and CBPP HS, HCF 1B, Cough and abundant cattle raided by Murle in the area.

Pasture and water for livestock
Access to pastures and water sources in the area are good during rain seasons whereas dry season affect seasonal streams and pastures. Large herds of livestock movements occurs mostly during dry season between December and March in search of pastures and water along the Nile valleys, Pibor and Sobat rivers.

Labour Market Conditions
Access to labour market from local sources, IDPs and migrant workers are non existent in the state.

Public and commercial stocks of cereals
Similar to the Western Equatoria State, the State Ministry of Finance and Economic Planning in Jonglei, together with State Ministry of Commerce and Supply organized for strategic food reserve for price stabilization so as to stimulate local production. The team could not talk to the responsible officials nor had any access to the Stores since 18th August 09 was declared a public holiday. However, one of the team members was able to visit the Stores the next day and established the total quantities of food stock in record which amount to 7,511 MT of maize. It was reported that the source of maize was both local produce and imported varieties. However, the exact quantities of stock procured locally or imported could not be established as there were no proper records of stock input and off-take. The management of warehouse facilities was reported to be poor, with stores infested with pests like rodents, weevils as well as exposure to rainfall and moisture conditions. Neither fumigation nor stacking of stocks was practiced.

Market Conditions and Prices
The main market of Bor was visited. Many of the basic staple food crops were available in the market. However, many of the supplies are from outside the County (Beans from Uganda and groundnuts and rice from Northern Sudan). The price of both brown and white sorghum from 7SDG per 3.5 Kg container or 160 SDG per bag of 50kg capacity. Maize from the strategic reserve is sold at 40 SDG per bag 50kg capacity or100 SDG per sack of 90kg capacity. The price of beans is 120 SDG per bag of 50kg capacity and lentiles sold at 100 SDG per bag of 50kg capacity and groundnuts sold at 150 SDG per bag of 50kg capacity.

Conclusions
The rainfalls started earlier than usual its performance was generally poor below average, which resulted in 2-3 replanting following a prolong periods of dry spells in May and June. The State was also faced with a number of ethnic clashes resulting in the displacement of 41,744 people. The major limiting factors to agricultural production therefore are poor rainfall performance and insecurity. This will result in significant reduction in production in the year.

E. Warrap State

Warrap State is one of the ten states in South Sudan and lies in western flood plains. The State government located in Kuajok. It is administratively divided into six counties: Twic, Gogrial East, Gogrial West, Tonj East, Tonj North and Tonj South. Abyei borders it in the north, Western Bahr El Ghazal in the west, Western Equatoria in the south, Lakes and Unity to the east. The state has large herd of cattle and vast land, which is potential for agricultural production. The zone is prone to seasonal flooding, which usually has more positive consequences than negative, thus potential for livestock and fisheries production. The zones major rivers are the Lol (which runs through Wunrok) and the Jur (further south, in Greater Gogrial Counties), both depending on rainfall as far away as the Central African Republic (CAR) as well as local rainfall. Flooding is a normal and important feature of these river systems, supporting fish and livestock production. Dry season grazing for cattle is mainly along these rivers.

Since March 2009, the security situation in Warrap State has been characterized by cases of localized inter-clan conflicts about pasture, land ownership and cattle rustling within the state as well as with Unity and Lakes States leading to lost of human lives, properties and resulting to internal displacement and disruption of farming activities. As a result, significant number of households had their normal livelihood pattern disrupted. These displacements affected some communities bordering in Twic, Tonj East, Tonj North and Tonj South. Localized inter-clan conflicts about pasture, land ownership and cattle rustling remain potential threat that continue to undermine food security and livelihoods in the area.

The climate in Warrap state is characterized by dry season from February to April, followed by heavy rains and flooding between mid-May and mid-October. Subsistence farming /agricultural production system remains predominant, basic local hand-made tools such as *maloda* are still being used by the majority of households.

The delay in the rainfall affected the agricultural season resulting in poor availability of pastures and delayed commencement of agricultural activities. Cultivation started on the onset of rain in June followed by dry spell. Sorghum is the main crop in the area. In addition, a variety of quick growing crops such as okra, sesame, pumpkins, and maize are grown in small plots near the homestead. Cultivated area and crop diversification remains low with farmers using low quality seeds. Pests, weeds and prolonged dry spell reported by all the six counties in the State. The expected harvest is likely to be below normal as compared to previous years confirming the fact that food security may not improve in the short run.

Although the area has a high potential for agriculture, livestock remain a significant source of livelihoods. Livestock condition is normal due to improved availability water and pasture.

Crop production and growing condition
Several crops are grown in Warrap including maize, sorghum, sesame, cassava and vegetables. The State is prone to floods and in 2008, floods affect crop production. Floods in 2008 destroyed a substantial amount of harvest and prolonged spell this year (2009) in several other parts of the state have caused increased uncertainty in agriculture as well as food security. The State also experiences intra and interethnic conflicts which agricultural production.

Data collected from a random check in the markets (Kuajok) indicated that prices of commodities were actually quite high when compare to the previous year. This situation will bring challenges in terms of access of food by households.

Agricultural Inputs and Supplies
Most households received tools and seeds from FAO and other agencies such World Vision. However, they also used their own seed which they had reserved for this purpose. Cultivation was done both by hand using the traditional tools as well as by government tractors which were provided for hire.

Agricultural Activities by Crop.

Similar to the situation experienced in many parts of Southern Sudan, the onset of the rainy season was delayed by as much as a month. After the rainy season had stabilised, the dry spells set in and it created soil moisture challenges for crops. Most crops were actually stressed except those that were grown in low lying areas. Replanting took place almost immediately after noticing failure in germination of the crops which is a general practise in all the areas visited. Most of the households indicated that they weed twice apart from some farmers who reported multiple weeding in a few areas and on specific crops. Harvesting which normally takes place in August (maize), October to November (sesame) and December to January (Sorghum), is likely to be delayed this year.

Pests and crop Diseases
Several observations were made of crops affected by pests and in some cases these pests had actually affected the formation of the sorghum seeds. Sesame was observed to have been affected by a disease that affected its reproductive capacity.

F. Northern Bahr El Ghazal

Northern Bahr el Ghazal comprises of five counties namely, Aweil South, Aweil North, Aweil Centre, Aweil West and, Aweil East. It borders Western Bahr el Ghazal to the west and south, Warrap to the east, South Darfur to the north-west and Western Kordofan to the north-east. The state has over the last two decades experienced severe erosion of its livelihood systems. The decline in the people's livelihoods was mainly due to the civil war which displaced, maimed and killed many of the people.

The state was disproportionately affected owing its position in the frontline. Besides the conflict, erratic rains and poor soils have combined to create a recurrent food security crisis in most parts of the state and a situation of structural poverty prevails. Since the signing of the peace agreement in January 2005, relative peace and stability has prevailed and the people have been able to concentrate on recovery and development activities. The economic recovery efforts are seen in reconstruction of markets, rehabilitation of trunk roads and expansion of agriculture especially to areas that were previously suspected to have been mined. Although some progress has been made towards economic recovery, the progress has been slow due to general poverty and lack of adequate assets and poor infrastructure.

Erratic rainfall almost every year manifested it self, in recent years had been consistently between near normal to below normal. This has led to persistent crop failures and general erosion of livelihoods. Soils are free draining sandy loams with very poor water retention capacity. This has not been conducive for the major crop sorghum (long season sorghum). Consequently below expectation yield rates are a common feature of agricultural production in Northern Bahr el Ghazal.

Livestock production contributes significantly towards food and income among the majority of the agro-pastoral households. Livestock production was however severely disrupted during the protracted civil war in

Southern Sudan and many households are restocking. Major constraints particularly diseases and lack of modern management practices limit herd productivity.

Trade and marketing has increased due to improved security. Manufactured goods and food products come in from the northern states and from western, Central Equatoria and Western Bahr el Ghazal. Most livestock are sold to the Northern traders. Livestock prices have significantly improved due to increased restocking and opening of trade routes. Rehabilitation of trunk roads linking Northern Bahr el Ghazal with other states has also improved transportation for goods within and between the states.

G. Western Equatoria

Background Information

The assessment in Western Equatoria, which took place in three Counties of the State: Yambio, Nzara and Ibba Counties. Due to the prevailing insecurity in most Counties, a number of areas were not easily accessible. During the discussion with key informants, the issue of ongoing insecurity featured prominently as one of the major factors affecting agricultural production this year. In addition a total of **76,983** internal displacement persons (IDPs) from nine Counties of Western Equatoria, and over 2,000 Congolese refugees were also evicted from their ancestral homes due to insecurity, particularly from areas bordering Gangura County and settled in Makundu camp on Yambio-Ibba road. The displacements are from the most productive parts of the State.

Agricultural Production

Locations

The location visited during the assessment comprised of Yambio, Nzara and Ibba Counties. In all these locations, the assessment team met a number of stakeholders (see details in annex 1) and discussed the status of agricultural production in the season and factors affecting crop performance.

Type of Crop Production

The main type of crops grown are maize, sorghum, cassava, millet, sesame and groundnuts. Various type of fruits are also available such as citruses, bananas and pineapples. A variety of other crops also exist which include sweet potatoes, sugarcane, pulses, vegetables and tobacco. But traditionally and for the performance of this mission, sorghum, maize, groundnut, sesame and cassava are the most important staple food crops taken into account. Rice farming is also becoming popular. Households in the wetter Southwestern area of the State almost exclusively rely on agricultural production. But of late small ruminant animals are increasing in number.

Growing Conditions

Western Equatoria State falls within the Greenbelt agro-ecological zone. The type of farming system practiced in the area is rain fed subsistence farming. With the exception of Mvolo County which has only a single cropping season, all the Counties have two cropping seasons, with the first season starting in March/April to July/August and the second season started from July/August. The crops and pasture conditions are generally good in many parts of the State. Rainfall have been reported to be either average or mostly above average throughout the State, with exception of five payams in Mvolo Counties which have experience prolonged dry spells. Many of the household carry out two weeding per season and crops are generally free of weeds and diseases.

Agricultural inputs supply

Access to land for cultivation and settlement in general is not a limiting factor to farming. Many of the farmers use their local varieties of seeds. The main source is either from own stock or purchase from local markets. FAO has been supplying seeds and tools through agencies such as World Vision International (WVI), BRAC and Raha. But farmers complaint of late deliveries and poor qualities. BRAC is only targeting 183 vulnerable female farmers and 20 collective farmers. While WVI is targeting 7,000 individual mostly refugees and IDPs in Nzara, Ezo, Yambio and Nagero. The Ministry of Agriculture also supplied some improved variety of seeds as well as seven agriculture machinery (tractors). However there were only seven tractors supplied for the whole state and the distribution did not meet the need of some counties as many of them do not have the necessary implements. There is no access to credit and grant. BRAC distributed 143 Kg of Maize, 175 kg of sorghum and 162 hoes, 142 pangas and 144 pieces of sickles. WVI distributed 37MT of maize, 8 MT of sorghum, 6MT of rice and 52MT of groundnuts.

Agriculture activities by Crop

Many households in the relatively peaceful parts of the State have either harvested their first crops of the Season such as maize and groundnuts or are engaged in harvesting operations now. However maize crops are not yet harvested but the plants are already in full ripeness. The cassava from previous years are mature and being consumed. Conditions for cassava planted in the first season of the year are good.

In the second season, the maize crops are already in vegetative stage and growing conditions are good. Land preparation of second season of groundnuts is still ongoing. Whereas upland rice crops are mostly in shooting and tillering stages and the same applies to finger millets.

Crop Conditions
The crop conditions and performance of maize, sorghum, millet, cassava and groundnuts are generally good.

Crop Phenological Stages
Generally maize crops in the first cropping season have either been harvested or in full ripeness ready for harvesting. However the second cropping season, the plants are either in vegetative stages or flowering stages. The long variety Sorghum plants are also in vegetative stages. In the first cropping season crops such as groundnuts have either been harvested or are in full maturity stage. Land preparation for second cropping season such as groundnut is still ongoing. Other crops like finger millet and rice crops are still in vegetative stages (shooting and tillering stages). Whereas cassava plants from previous years are being consumed while those in the second cropping season are still in vegetative stage.

Area, Yield and production
During the field observations and interviews with sample farmers, the team made estimates for area under cultivation, yield per unit area per household and total seasonal production. The mean acreage per household is 2.2 ha, with an average of 1.76 ha dedicated to cereals and tuber crops being mainly cassava and maize. The main oil seeds are groundnuts, followed by sesame and palm oil. The average cereal and cassava tuber crop is 28.92 tons/ha with estimated production of 29.3 tons. It is worth mentioning that most of farming system is inter-cropping and the actual measurement of acreage per household is less than estimated average.

Despite the “above average” rainfall amount in this agricultural season in many parts of the state has been evident by good crop and pasture performance. Insecurity has been a major threat to the people of the State. The main cause of insecurity is the Lord Resistance Army (LRA) attacks after the failure of Juba peace talks between the Government of Uganda (GoU) and the rebel groups. With the start of joint military operations in December 2008 in Garamba forest in DR Congo. These LRA atrocities resulted in massive displacement of people from both side of Southern Sudan and DR Congo. The activities of the LRA includes brutal killings of unarmed civilians; abduction of teenage girls and boys; destruction of houses and properties; raping of young girls and women; and leaving most farms unattended by farmers etc. This has forced a total population of 76,983 individuals escape their homes for safely. The insecurity is not only limited to LRA disturbances but also the Ambororo cattle keepers (nomadic pastoralist tribes from Northern Sudan, Chad, Cameroun and Nigeria) who are armed and have created fear and environmental destruction in the State. The Counties of Mundri East and Mvolo are equally affected by ethnic clashes between the Mundari tribe of Terekeka; as well as Agok Dinka tribe from Gogrial Counties respectively.

Pests and Crop Diseases
The crops are generally pest and disease free. The major pests causing damage to crops are animal pests like monkeys and quelea quelea on maize, squirrels and rats on groundnuts.

Household livestock
The main livestock owned by households visited are goats, sheep, goats and poultry. The number animals range from 0-12 goats or sheep and 0-30 poultry. The major problems affecting livestock conditions are bloating, diarrhea .

Pasture and water for livestock
Access to pasture and water in the area is good during the visit.

Labour Market Conditions
Access to labour market is from local sources, IDPs and migrant workers from DR Congo and Uganda. The daily wage rate varies from individual farmer depending on the amount and heaviness of the work as well as

the negotiating skills of the labourer. Daily rate for land clearance (which include cutting of grass, shrubs and trees) is 30-200 SDG per day. While cultivation ranges from 8 SDG to 46 SDG per feddan

Public and commercial stocks of cereals

The State Ministry of Finance and Economic Planning together with State Ministry of Commerce and Supply organized for strategic food reserve for price stabilization so as to stimulate local production. The receipt date for local procurement was December 2008. Thereafter, the grain were all imported from Uganda due to scarcity of local stock in the state and coupled with the growing insecurity in most counties, accessibility to productive areas was hampered by increased LRA activities.

The quality of the locally procured stock was good while the quality of imported stock was already bad upon delivery (rotten and caked grains). The quantity of the locally procure stock stored in Yambio was 10MT while the imported stock stored in Nzara was 12MT. The number of warehouse facility in Nzara is one while in Yambio is five. The storage conditions was equally bad resulting into 50% of the stock as stores losses. This was made worse when the imported stock was mixed up with the locally procured stock which was in good quality resulting into infestations.

Poor warehouse management system and handling was observed during the assessment. These include dumpiness in the warehouse due to leaking rubb-hall, lack of fumigation, improper stacking of stocks, high level of infestation by rodents and weevils, poor aeration, unclean warehouse surrounding and no proper warehouse records kept to indicate stock movements and balances. On a positive note, the warehouses have adequate security provisions (fenced and guarded).

Market Conditions and Prices

The market of Yambio and Nzara were visited. Many of the basic staple food crops were available in the market. However most of the commodities supplied by traders outside the County (Beans are from Uganda while groundnuts and rice are from Western Bahar el Ghazal markets). However the prices of local commodities are lower compared to imported stocks. During the assessment prices are reported to have increased dramatically (15 kg of cassava cost 4 SDG in April to 10-15 SDG in August).

Conclusions

The State and County authorities (particularly the Commissioners and SSRRC) have pointed out that WFP have not provided adequate food assistance to the IDP population. The same question was raised for the problem of seeds and tools support from FAO and other humanitarian agencies. The rainfall performance is generally good as reflected in good crop growing conditions with exception of five payams in Mvolo County. The major limiting factor to agriculture is insecurity which have displaced a total of 76,983 people from their traditional farmlands. These result in significant reduction in production during the first cropping season. Production in the second cropping season is expected to be good. Meanwhile the continued threat from LRA, Ambororo movement, and ethnic clashes in eastern part of the state unless addressed will continue.