

Abyei Area Food Security Assessment



October 2009

World Food Programme Sudan

Table of Contents

Table of Contents.....	2
Executive Summary.....	5
1. Introduction.....	7
General Background and Context.....	7
1.2 Objectives of the survey	9
1.2.1 Overall objective of the survey:.....	9
1.2.2 Specific Objectives:.....	9
1.3 Assessment Methodology	9
1.4 Partnership.....	11
1.5 Limitations.....	11
2. Availability- Market Overview.....	12
2.1 Market Characteristics – Sorghum	12
2.2 Market Characteristics – Livestock	13
3. Household Results: Dinka Ngok Villages	14
3.1 Sample Demography	14
3.2 Household Asset Ownership.....	15
3.3 Household Livestock Ownership.....	16
3.4 Food Access.....	17
3.4.1 Main Income Sources and Livelihoods	17
3.4.2 Main Food Sources	18
3.4.3. Crop Production.....	18
3.4.4. Expenditure and Food Purchases.....	19
3.5 Food Utilization.....	21
3.5.1 Food Consumption and Dietary Diversity.....	21
3.5.2 Meal Patterns	22
3.6 Food Security.....	23
3.7 Household Coping Strategies	25
3.8 Food aid and Other Humanitarian Assistance	26
3.9 Health.....	27
3.10 Immediate and Long-term Priorities of Households	27
4. Households Results: Misseriya Villages	29
4.1 Sample Demography	29
4.2 Household Asset Ownership.....	30
4.3 Household Livestock Ownership.....	30
4.4 Food Access.....	31
4.4.1 Main Income Sources and Livelihoods	31
4.4.2 Main Food Sources	33
4.4.3 Crop Production.....	33
4.4.4 Expenditure and Food Purchases.....	34
4.5 Food Utilization.....	35
4.5.1 Food Consumption.....	35
4.5.2 Meal Patterns	36
4.5.3 Food Security.....	37
4.5.4 Household Coping Strategies	38
4.5.5 Food Aid and Other Humanitarian Assistance	38
4.5.6 Health.....	39
4.5.7 Immediate and Long-term Priorities of Misseriya Households.....	40
4.6 Conclusion and Recommendations.....	41
Annex (1).....	43

List of Figures

Figure 1: Dinka Ngok: Residence Status.....	14
Figure 2: Dinka Ngok: Locations of households Returning to Abyei Area.....	15
Figure 3: Dinka Ngok: Household Assets.....	15
Figure 4: Dinka Ngok: Household Livestock Ownership.....	16
Figure 5: Dinka Ngok: Main Reason of Livestock (Cattle) Loss.....	16
Figure 6: Dinka Agok: Main Economic Activity.....	17
Figure 7: Dinka Ngok: Main Constraints on Income Sources.....	17
Figure 8: Dinka Ngok: Main Source of Cereals Consumed by Households.....	18
Figure 9: Dinka Ngok: 2008/2009 Household Crop Production.....	18
Figure 10: Dinka Ngok: Main Reasons for not Cultivating Crops This Season.....	19
Figure 11: Dinka Ngok: Absolute Expenditure Per Capita Per Day.....	19
Figure 12: Dinka Ngok: Average Share of Food and Non-food Expenditure.....	20
Figure 13: Dinka Ngok: 30-day Absolute Expenditure on Various Food Items.....	20
Figure 14: Dinka Ngok: Household Food Consumption Classification.....	21
Figure 15: Dinka Ngok: Number of Meals Consumed by Adult Household Members.....	22
Figure 16: Dinka Ngok: Number of Meals Consumed by Children Under 5.....	22
Figure 17: Dinka Ngok: Food Access and Food Security Classification.....	23
Figure 18: Dinka Ngok: Household Food Access.....	24
Figure 19: Dinka Ngok: Household Food Security.....	24
Figure 20: Dinka Ngok: Household Coping Strategies during Previous 7 Days.....	25
Figure 21: Dinka Ngok: Food Aid Assistance.....	26
Figure 22: Dinka Ngok: Food Aid Utilization.....	26
Figure 23: Dinka Ngok: Immediate Household Priorities.....	28
Figure 24: Dinka Ngok: Long-term Priorities.....	28
Figure 25: Misseriya: Residence Status.....	29
Figure 26: Misseriya: Locations of Households Returning to Abyei.....	30
Figure 27: Misseriya: Ownership of Household Assets.....	30
Figure 28: Misseriya: Household Livestock Ownership.....	31
Figure 29: Misseriya: Main Reason of Livestock (Cattle) Loss.....	31
Figure 30: Misseriya: Mian Economic Activity of Household Heads.....	32
Figure 31: Misseriya: Main Constraints on Income Sources.....	32
Figure 32: Misseriya: Main Sources of Cereals Consumed by Households.....	33
Figure 33: Misseriya: Crop Cultivation of Households in 08/09 Agri. Season.....	33
Figure 34: Misseriya: Main Reasons for not Cultivating this Season.....	34
Figure 35: Misseriya: Absolute Expenditure Per Capita Per Day.....	34
Figure 36: Misseriya: Average Share of Food and Non-food Expenditure.....	35
Figure 37: Misseriya: 30-day Absolute Expenditure on Various Food Items.....	35
Figure 38: Misseriya: Household Food Consumption.....	35
Figure 39: Misseriya: Number of Meals Consumed by Adult Members.....	35
Figure 40: Misseriya: Number of Meals Consumed by Children Under-5 the Previous Day...37	37
Figure 41: Misseriya: Household Food Access.....	36
Figure 42: Misseriya: Household Food Security.....	37
Figure 43: Misseriya: Household Coping Strategies During Previous 7 Days.....	37
Figure 44: Misseriya: Immediate Household Priorities.....	39
Figure 40: Misseriya: Long-term Household Priorities.....	39

Executive Summary

A food security assessment was carried out in Abyei, the assessment had the following general objectives: (1) Assess current food security situation in the IDP population in Abyei; (2) Assess the current food security situation in Misseriya population in Abyei.

Using cluster sampling technique, 150 households were randomly selected across 10 Dinka-Ngok villages in Abyei, compared to 60 households randomly selected across 4 Misseriya villages.

The assessment (field work) was conducted in the period of 7 – 12 October 2009 with the participation of Sudan Relief and Rehabilitation Commission (SRRC); Secretariat of Agriculture and Animal Resources; Save the Children (SC); United Nations Mission in Sudan (UNMIS)/ Return, Recovery, and Reintegration (RRR); and World Food Programme (WFP).

The low level of agricultural production last season is mainly attributed to May 2008 conflict. However, the majority of Dinka Ngok population did not cultivate this season, and are highly dependent on food aid, whereas the majority of Messiriya has cultivated but are facing many difficulties.

Misseriya population has far more animals than Dinka Ngok, especially with regard to cattle, donkeys, and sheep. Results show that a great variety of crops, cereals and cash crops, are cultivated by both Dinka and Misseriya.

In terms of food consumption the majority of both Dinka Ngok and Misseriya populations appear to be generally good, with 66 percent and 68 percent for Dinka Ngok and Misseriya respectively had acceptable food consumption score.

Food security context in Abyei area is characterized by:

- Long years of war and May 2008 conflict have had significant impact on the area.
- Extremely poor economic development, in terms of infrastructure and weak social services; and markets not well developed.
- Presence of large number of returnees and the burden they place on the host population.
- Livestock breeding and agricultural activities generate most of the employment. Agriculture is subsistence with small area cultivated traditionally, and facing many obstacles. Livestock losses due to diseases are wide spread and pose a great risk on this activity.
- The existing markets are not properly functioning, especially with regard to sorghum and livestock.
- High dependency on food aid provided by the WFP.

Food security which is a composite indicator for food consumption score, income proxy, and the value of households' assets has showed that 28 percent of Dinka Ngok population was food secure, compared to 58 percent for the Messiriya. 40 percent and 14 percent of Dinka Ngok and Misseriya respectively were moderately food secure; 33 percent and 29 percent of the same groups were severely food insecure.

Introduction

General Background and Context

Abyei Administrative Area borders south Kordofan in the north, Twic County (Warap State) to the south, Upper Nile State to the east and Aweil East County (Northern Bahr-el-Gazal State) to the west. Abyei area is comprised of 4 localities, namely; Rumamer, Alal, Mijak, and Ameth-Agok. During the war and on-going conflicts, people from Mijak, Alal, and Ameth-Agok were displaced and moved to more secured areas immediately south of the river, others moved on to be accommodated with family in Twic county, Warrap state and other parts of Sudan.

The area is inhabited by the Dinka Ngok and Messiriya populations. Dinka Ngok communities have 9 sections that include: Alei, Manyour, Abior, Anyeil, Achak, Diel, Bongo, Acoung, and Mereng. The largest section is Diel, that occupies Rumamer followed by Abior and Manyour.

Abyei is a high tension area that experienced many years of fighting. The extension of this conflict has reached to the disagreement on the origin of its name, people from the south believe Abyei was named after a tree that was largely planted in the area, while Misseriyya population believe it's name came from a story of a young girl who was attacked by a wolf and called her father for help (Aby Yai).

The strategic location and oil resources in the region are the principle reasons behind conflicts occurring in the area. Abyei is situated within the Muglad Basin, a large rift basin which contains a number of hydrocarbon accumulations. Oil exploration was undertaken in Sudan in the 1970s and 1980s. A period of significant investment in Sudan's oil industry occurred in the 1990s and Abyei became a target for this investment. By 2003 Abyei contributed more than one quarter of Sudan's total crude oil output (Crisis Group, 2007). An important oil pipeline, the Greater Nile Oil Pipeline, travels through the Abyei area from the Heglig and Unity oil fields to Port Sudan on the Red Sea via Khartoum. The pipeline is vital to Sudan's oil exports which have boomed since the pipeline commenced operation in 1999.

Abyei is a county and former district of South Kordofan, Sudan, that is considered an historical bridge between northern and Southern Sudan. Since the eighteenth century Abyei was inhabited by the agro-pastoralist Ngok Dinka, kin to the Dinka of Southern Sudan. The Messiria, a nomadic people, grazed their cattle through Abyei in an annual cycle. The Messiria base is Muglad, where the Messiriya spend much of the year, though they are forced to move south to the Bahr river basin in Abyei during the dry season. Records from this time state that the Ngok Dinka and Messiria had amicable relations.

However, the two ethnic groups began to take separate paths with the onset of the First Sudanese Civil War (1956–1972), The Ngok Dinka took part in the southern armed movement (Anyanya), while the Messiria were favored by the Khartoum-based government and became firmly associated with the north.

The Ngok Dinka unit of Anyanya II formed one of the foundations of the rebel movement at the beginning of the Second Civil War in 1983. Many Ngok Dinka joined the rebels upon the outbreak of hostilities. Partially as a result of their early entry into the war, many Ngok Dinka rose to leadership positions in the Sudan People's Liberation Army (SPLA). In contrast, the Messiria joined the hostilities on the side of the government in the mid-1980s. They formed frontline units as well as Murahleen, mounted raiders that attacked southern villages.

This conflict was brought to an end after signing the Comprehensive Peace Agreement (CPA) in 2005. The CPA granted the disputed territory a special administrative status under the presidency and a 2011 referendum to decide whether to join what might then be an independent South. The Abyei Road Map agreement covers four areas, security arrangements, return of IDPs, interim arrangement for an Abyei administration, and arrangement for a final settlement. The security arrangements provide for the removal of all forces within the Abyei area and deployment of a new Joint Integrated Unit (JIU) to be evenly divided between the SAF and SPLA. Upon completion of the security arrangements, the return of IDPs will be facilitated through the Abyei administration.

In 2007, Abyei conflict started again and became more complicated by the involvement multiple parties. As tension and armed violence has erupted in the Abyei region during late 2007 and throughout 2008. Clashes occurred both between the SPLA and Messiria fighters and between the SPLA and government troops. The Messiria are not believed to be directly controlled by Khartoum, however analysts point out that local disputes over resources are readily manipulated by outside forces.

Messiriya leaders have stated their objection to demarcation provisions of the CPA which they claim have a negative impact upon Messiria access to grazing lands. This objection led to armed clashes in December 2007 and further violence in February and March 2008, resulting in numerous deaths and civilian displacement. These clashes were seen to be of serious threat to the peace process and trigger a resumption of civil war.

Following the violence of February and March, the Sudanese government deployed its army forces in Abyei town on 31 March 2008. Armed clashes between these troops and the SPLA occurred during May 2008 resulting in many deaths and the displacement of thousands of civilians. Much of Abyei town was destroyed and ruined.

1.2 Objectives of the survey

1.2.1 Overall objective of the survey:

- Assess current food security situation of the IDP population in Abyei and how it has changed since the crisis last year.

Assess the current food security situation in Misseriya population in Abyei.

1.2.2 Specific Objectives:

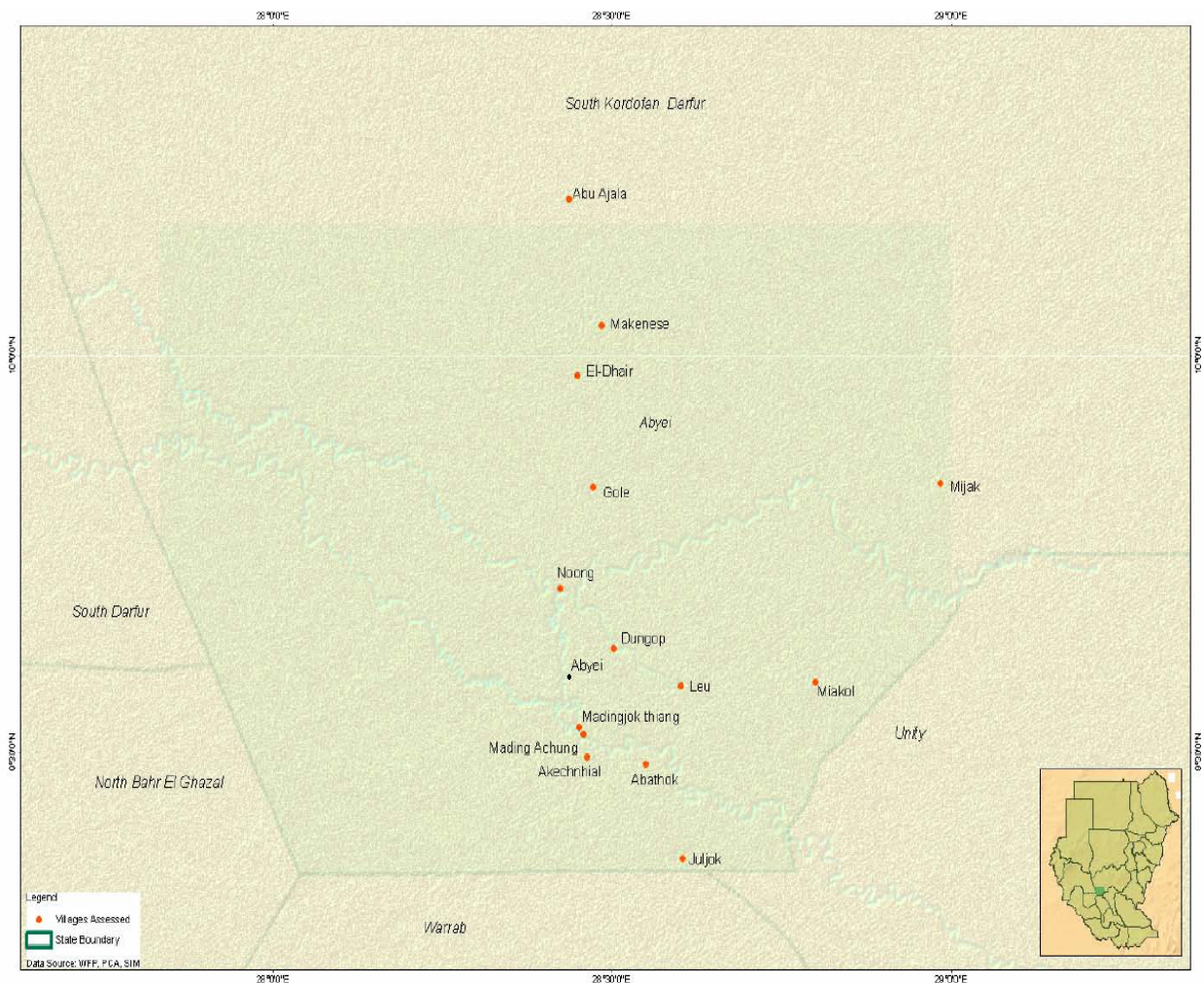
- To describe how factors related to the history of the conflict in Abyei do has affected the residency status of the population.
- To identify the prevalence and severity of food insecurity in the IDP and Misseriya populations and its impact on their livelihoods.
- To describe coping strategies utilized by the food-insecure households in the IDP and Misseriya population.
- Assess households' assets, land, and livestock ownership.
- Estimate food aid coverage and usage.

Assess existing markets' systems and trends in markets prices and flows.

1.3 Assessment Methodology

The assessment was designed to cover the whole population of Abyei area. Accordingly, a sampling universe was compiled from an updated population list that is consists of Ngok Dinka population living across 34 villages and Missiriya population living in 8 villages. These figures were compiled from data provided by WFP Office in Abyei.

2009/2010 Abyei food security assessment: samples assessed locations, October 2009



The assessment used a standard multi-stage cluster sampling technique that involves selection of sample villages in the first stage and selection of sample households in the final stage.

A sample size of 300 households was considered sufficient for the purpose of the assessment, divided equally between the Ngok Dinka and Messeriya populations. However, sampling for the two groups were undertaken separately, for the Ngok Dinka villages and during the first stage of sampling, 15 clusters (10 samples plus 5 replacement) were randomly chosen from a total of 34 villages using probability proportional to size (PPS) method. In the second stage, 15 households were randomly selected in each of the ten villages.

For Messeriya villages, the whole villages inhabited by Misseriya population were selected, and they formed 8 villages, following the same sampling method of selecting 15 households from each of the selected villages. However, teams managed to visit 4 villages only, a number that would require viewing Misseriya assessment related results with great caution and to consider their results as indicative.

Enumerators received three days of class-room and practical training prior to the field work. Data from completed questionnaires was entered using a custom-made database. Most of the data analysis was done using SPSS 15.0 for Windows software.

1.4 Partnership

The following institutions have participated in the assessment: Sudan Relief and Rehabilitation Commission (SRRC); Secretariat of Agriculture and Animal Resources; Save the Children (SC); United Nations Mission in Sudan (UNMIS)/ Return, Recovery, and Reintegration (RRR); and World Food Programme (WFP).

The list of people who participated in the assessment, their roles and the names of their respective institutions are shown in the Annex. The funding for the assessment was fully covered by WFP.

1.5 Limitations

The assessment began in October end of the rainy season that had formed a great challenge to reach the sampled villages. Moreover, though the initial plan was to cover the whole 8 villages inhabited by Misseriya populations in Abyei area, we managed to visit 4 villages only. As we found out while in Abyei that ElAZza and AlAgad villages are no more within Abyei area.

In addition, while driving to ElBeida and UmKheir SAF blocked the teams from passing through their check point.

2. Availability- Market Overview

Agok and Abyei markets, two main markets in Abyei area were visited as part of the assessment, focussing on livestock and sorghum, the main staple food in the state. The assessment revealed that there was no carry over stock of sorghum from previous seasons. Only small quantities of food aid sorghum were observed on markets and prices food aid sorghum was relatively high, as prices on both markets were (SDG 4- 5 per Malwa – SDG 120- 150 per 90 kg sack compared with SDG 75- 80 per 90 kg sack in the main markets of Darfur). Food aid sorghum in markets was from two sources, government employees (military and police) and WFP beneficiaries.

Livestock supply on markets was relatively low and the current prices are approximately 150 percent of same time last year prices. This is mainly because many households who failed to plant their lands after May conflicts were forced to sell more animals on local markets to meet their needs. Also insecurity during that period enhanced excessive selling of livestock.

Demand for both sorghum and livestock increases during the days of salary payment by the local government and/ or the international organizations that has an effect on markets. Most cereal traders are newcomers to markets and mainly from Darfur. Markets in the area face number of obstacles including insecurity, capital scarcity and poor infrastructure keep marketing operations small scale. Moreover, there is no collection of time series data from the main markets in the area

2.1 Market Characteristics – Sorghum

No specialized (wholesale) traders were observed in Agok or Abyei markets. A small number of retail traders (*farasha*) operate in each market (9 traders in Agok, and 6 traders in Abyei). In fact, both markets were found to heavily rely on a limited supply of food aid sorghum. However, sorghum may be brought from Kosti and El Obeid markets when the demand for cereal is high. This is especially true during the seasonal settlement of nomads around Abyei town. Usually settlement starts from the end of the rainy season.

During the current agricultural season, no assessments were conducted in Abyei area to estimate the area planted with sorghum. However, 10 000 and 3 000 Feddans are the rough estimates of the total area for the current and previous seasons, respectively.

Recently, an assessment to estimate the current sorghum production has been planned by the Secretary of Agriculture, animal resources and forestry.

No proper storage facility was found in any market and cereals are stored by retail traders in their shops. Scarcity of cash, low demand for cereal and insecurity were the major constraints facing grain traders in the region.

2.2 Market Characteristics – Livestock

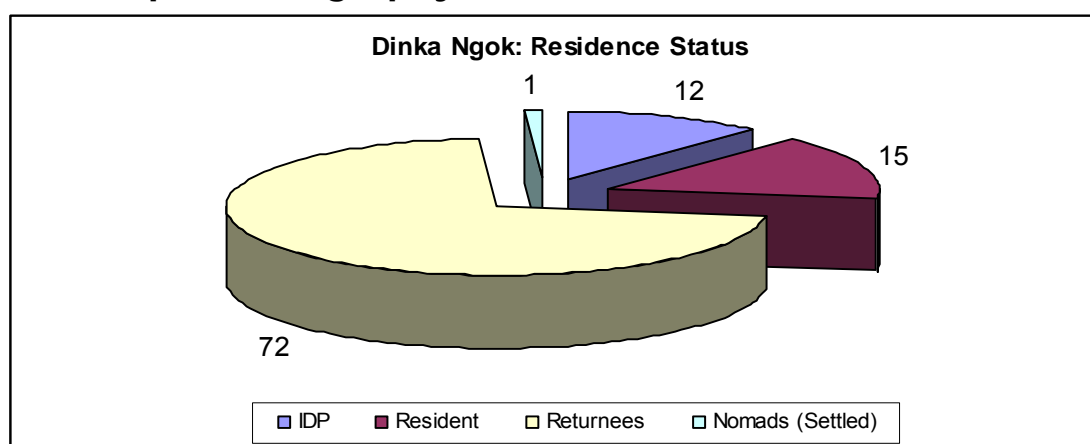
Agok is the main livestock market and operates 7 days a week. A cattle auction takes place in a fenced area around 3:00 PM while small animals, mainly goats are directly sold to consumers in an open area. A cattle auction was observed over a period of 2 hours. A total of 55 cows were supplied to that auction and only two medium size cows were sold during that auction (prices SDG 850 and 870; similar to prices in Aweil market) The goat supply on the same day was less than same time last year (around 30 goats) and no goats were sold on that day.

In Abyei market, both cattle and goats are sold in an open area. A total of 40 goats were observed on that market and 2 goats were sold (prices: SDG 112 and 115; almost similar to the prices of many markets in central Sudan). Increase in livestock supply could be expected when security conditions allow livestock herders to settle close to market areas during their seasonal migration.

Scarcity of cash, unwillingness of herd owners in the Southern Sudan to sell some of their animals and the high cost of transporting livestock from remote areas in the north are the major constraints facing traders in both markets.

3. Household Results: Dinka Ngok Villages

3.1 Sample Demography



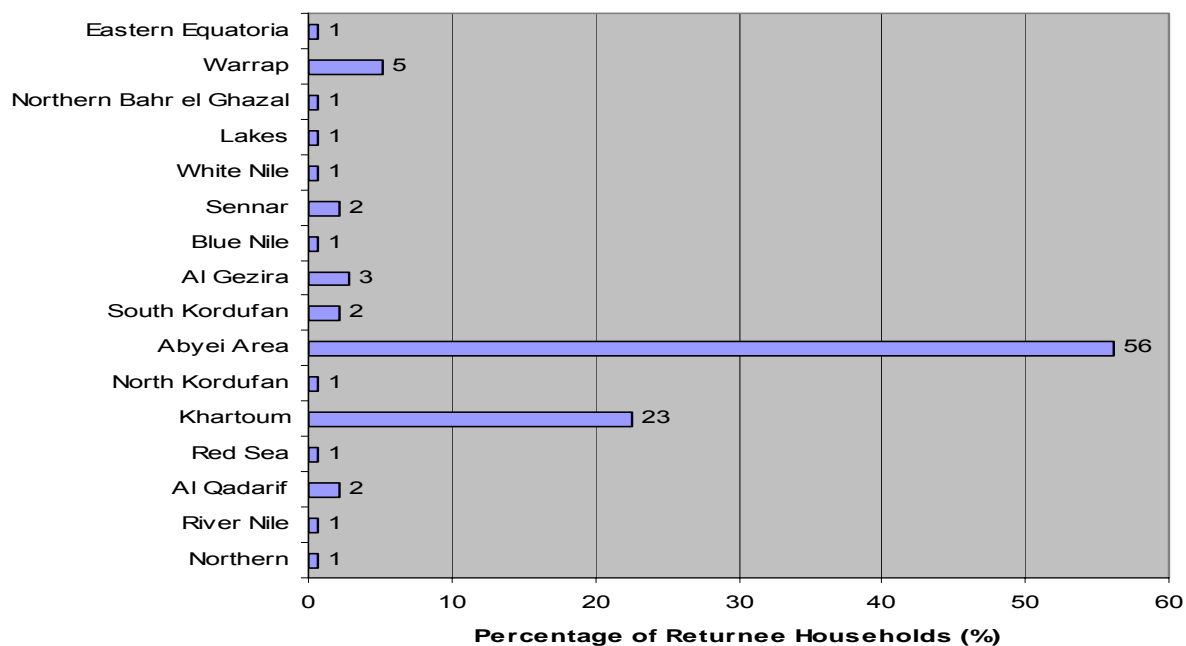
The majority of the sampled households were returnees with 72 percent, resident population is represented by 15 percent, IDPs 12 percent, and Dinka Ngok nomads are 1 percent only.

Table (1): Dinka Ngok: Basic Demographics

	Percentage (%)
Average Household Size	8.0
Proportions of Female Headed Households	53.0
Proportion of Households Heads that have Disability	11.0
Dependency Ratio	1.6

In Dinka Ngok areas, average household size was 8 persons, 11 percent of heads of households had functional disability (a physical/health condition that impairs a person's ability to perform physical and/ or economic tasks). For the average household, on average, one adult member supports 1.6 members. Female headed households represented 53 percent of all households, a very high percentage mainly due to the high number of deaths among men and displacement among Dinka Ngok population. In addition, repatriation program and voluntary returns are dominated by female headed households, as men are left behind in other towns and cities to work and send remittances.

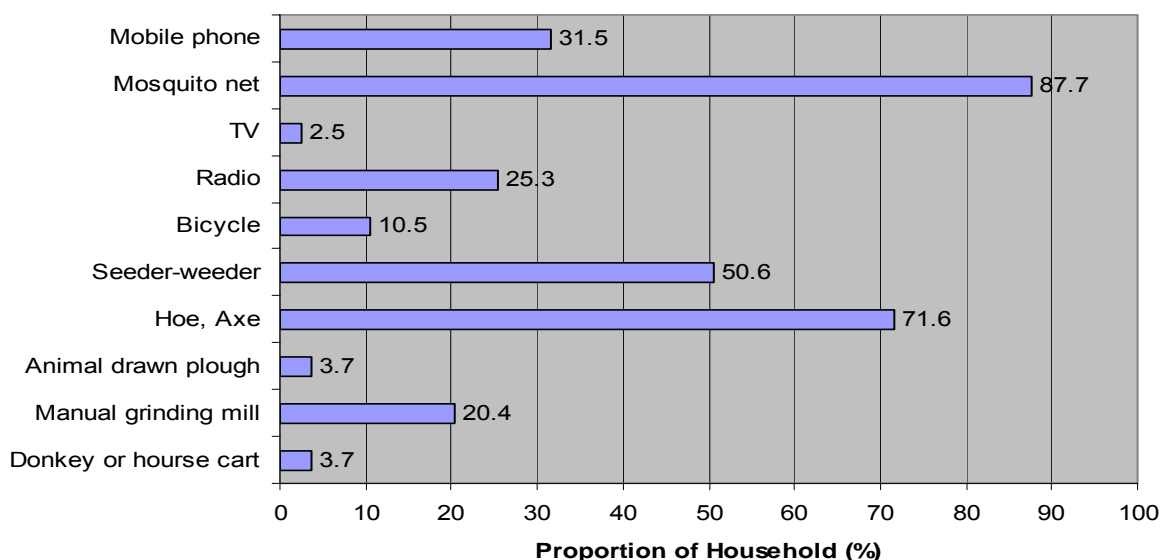
Dinka Ngok: Locations of households returning to Abyei Area



In terms of the timing of arrival to their current location, 53 percent of the Dinka Ngok population arrived before May 2008 conflict, 47 percent are new arrivals, or have moved to their current location from area of displacement following May clashes and Abyei Roadmap was agreed to in July 2008. Out of those who returned, 56 percent were displaced within Abyei since May 2008, followed by Khartoum with about 23 percent and 5 percent were in Warrap State.

3.2 Household Asset Ownership

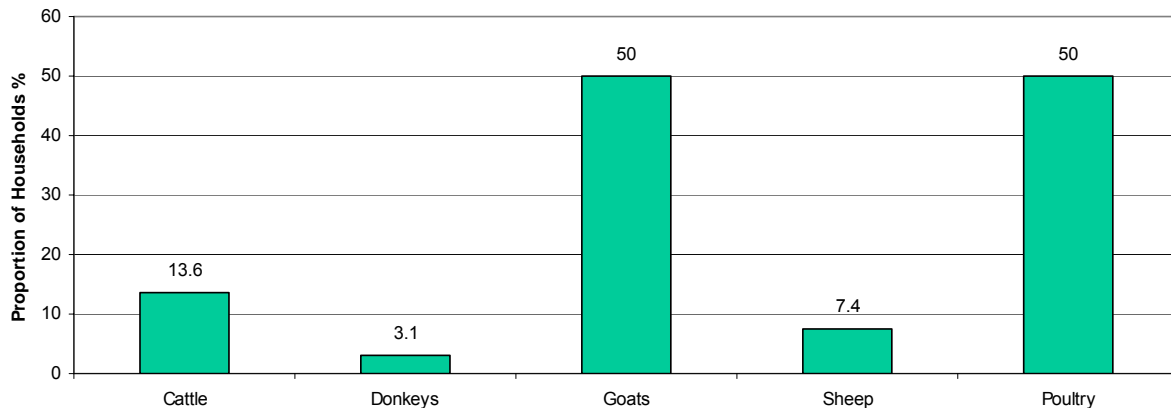
Ownership of Household Assets in Dinka Ngok Villages



Households' productive and non-productive asset ownership is assessed as a proxy indicator for wealth status of households.

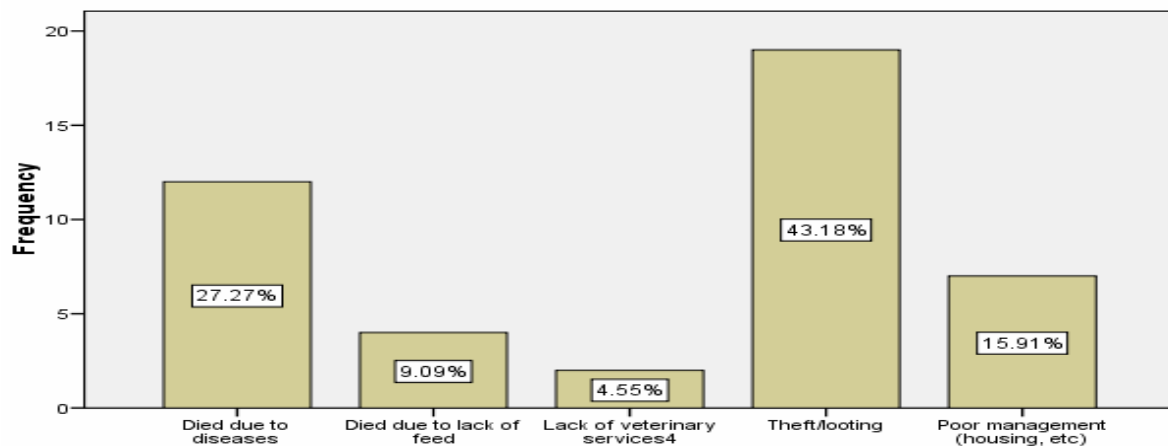
The majority of Dinka Ngok population owns at least one hoe/axe or a mosquito net, and about one third of the population owns a mobile phone, this is compared to about 22 percent in South Kordofan and 61 percent in the White Nile.

Household Livestock Ownership - Dinka Nagok Villages



3.3 Household Livestock Ownership

Main reason of Livestock (Cattle) loss – Ngok Dinka



Poultry and goats are the most common livestock types owned by Dinka Ngok population, as they are owned by half of the households, 14 percent had cattle, and about 7 percent only own sheep.

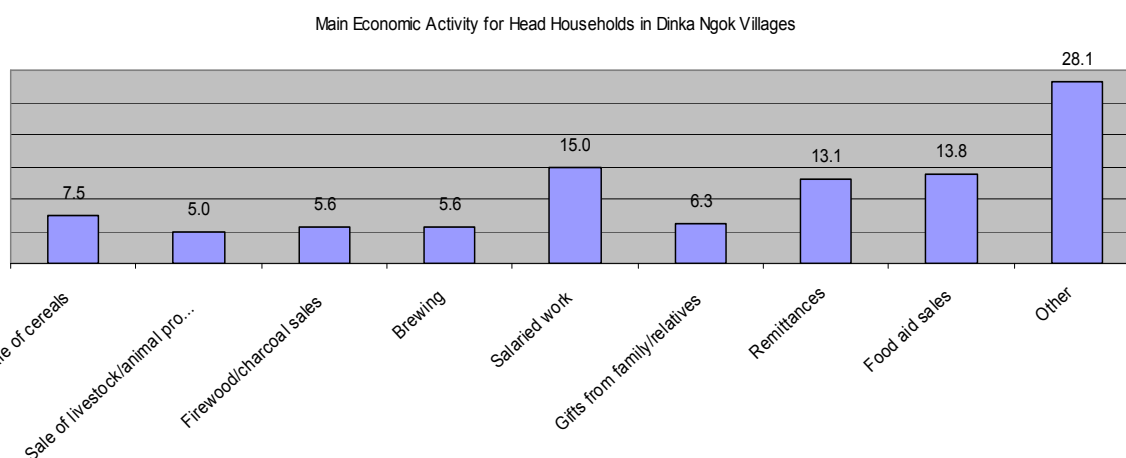
Theft or looting is the main cause of households losing their cattle with 43 percent and this could be mainly due to the insecurity resulted from 2008 conflict.

Insecurity is major factor that have marginalized the Dinka Ngok community, it has a significant impact on households' access to food. Moreover, Looting was stated by the majority of households as a principle cause of reduced access to home grown crops and it significantly undermines access to animal products.

The second most important of Cattle death was disease that was represented by 27 percent, followed by poor management with 16 percent.

3.4 Food Access

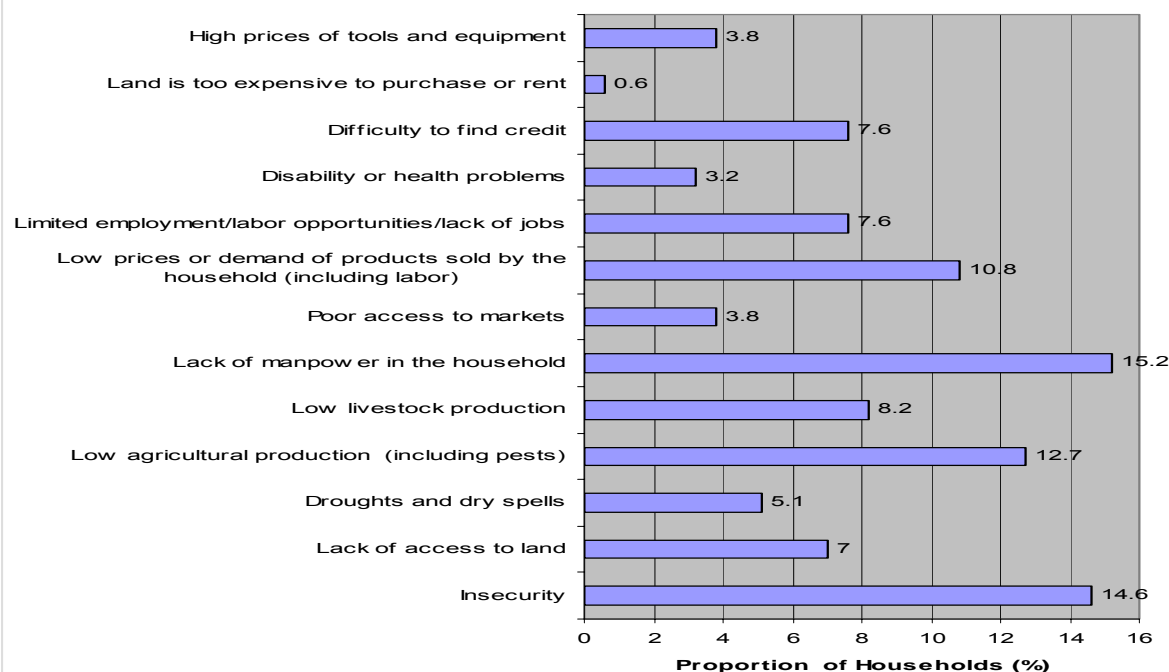
3.4.1 Main Income Sources and Livelihoods



The assessment found that only 1 percent of the Dinka Ngok households had no income source – mainly due to old age-, 38 percent for both one and two income sources, three and four sources were represented by 14 and 9 percent respectively.

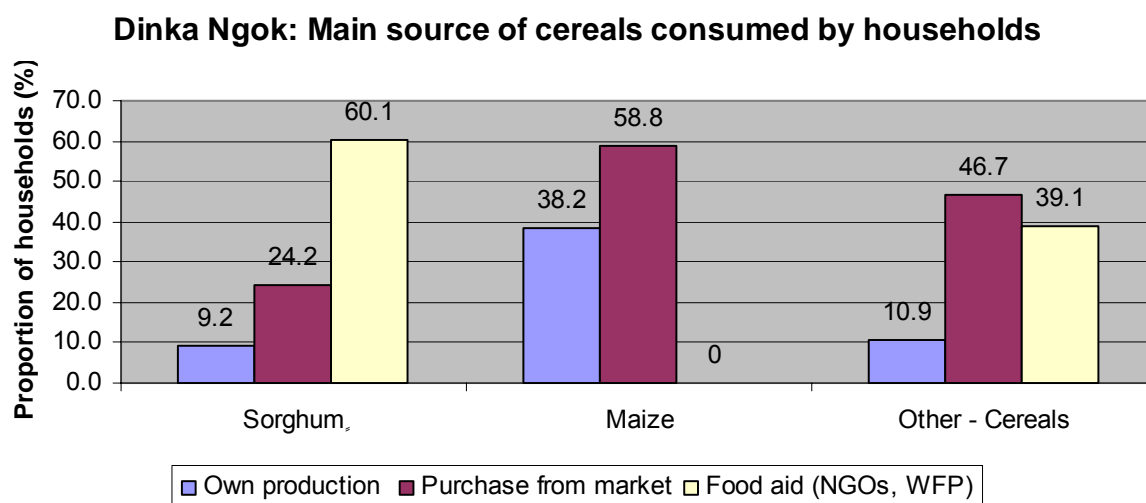
In Dinka Ngok villages, salaried work was the most important source of income, followed by food aid sales, remittances, and sale of cereals with 14 percent, 13 percent, and 8 percent respectively.

Main Constraints on Income Sources - Dinka Ngok



Lack of manpower, insecurity, low agricultural production, and low prices or demand of products sold by the household are the main income constraints experienced by Dinka Agok households.

3.4.2 Main Food Sources

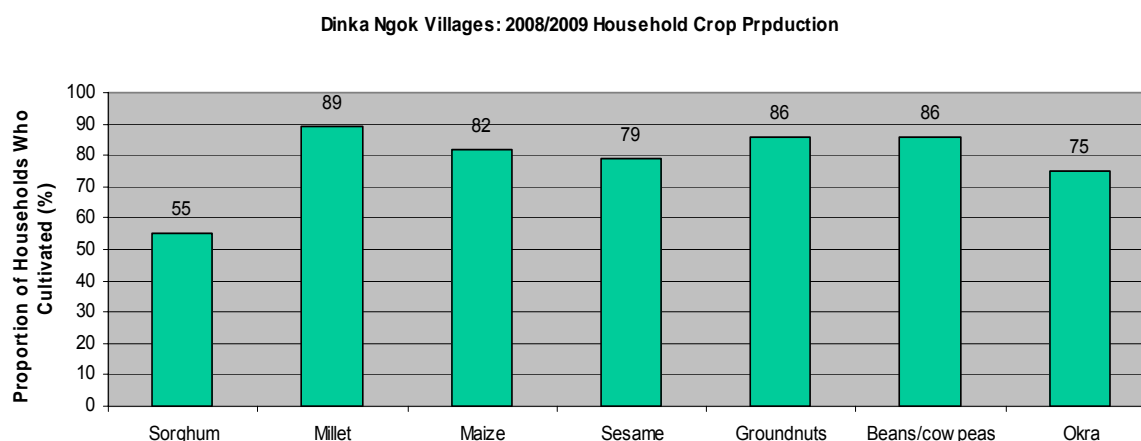


Food aid is a crucial source of food for Dinka Ngok population, in the week prior to assessment food aid provided 60 percent of their consumed sorghum and 39 percent of other cereals consumed by the households.

Consumption from Dinka's Ngok own production is minimal with respect to sorghum and other cereals but has a sizeable contribution with regard to maize reaching 38 percent. The market is however the most important source for maize and other cereals than sorghum.

3.4.3. Crop Production

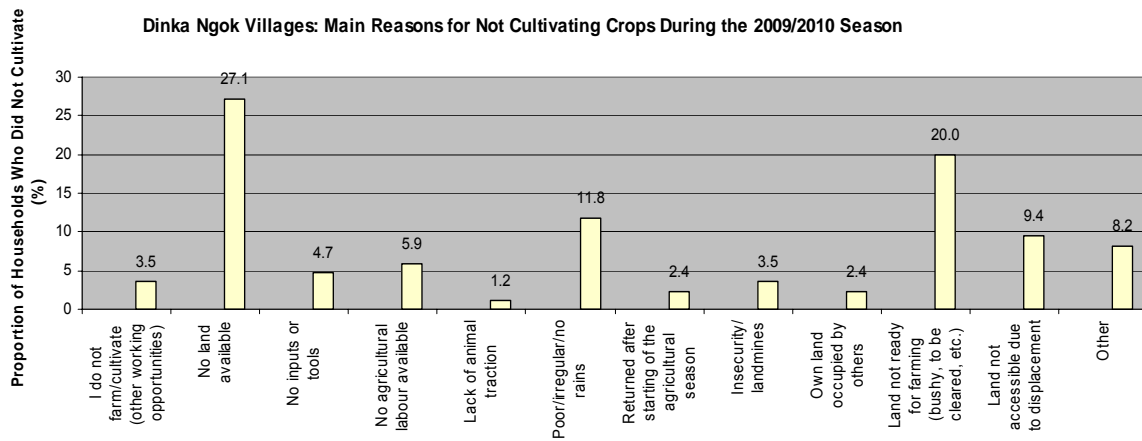
Most of the people in Abyei have missed last year's agricultural season (2008/2009), mainly due to the conflict that took place in May 2008. Most of the Dinka Ngok population fled their home villages towards the south of river Kiir/ Bahr El Arab.



The season of 2009/2010 agricultural production is expected to improve compared to 2008/2009 season.

This is realized from proportion of households who cultivated among Dinka Ngok, as it increased from 16 percent last season to 35 percent this season, from those who cultivated this season and 63 percent stated that they cultivated more area than last year.

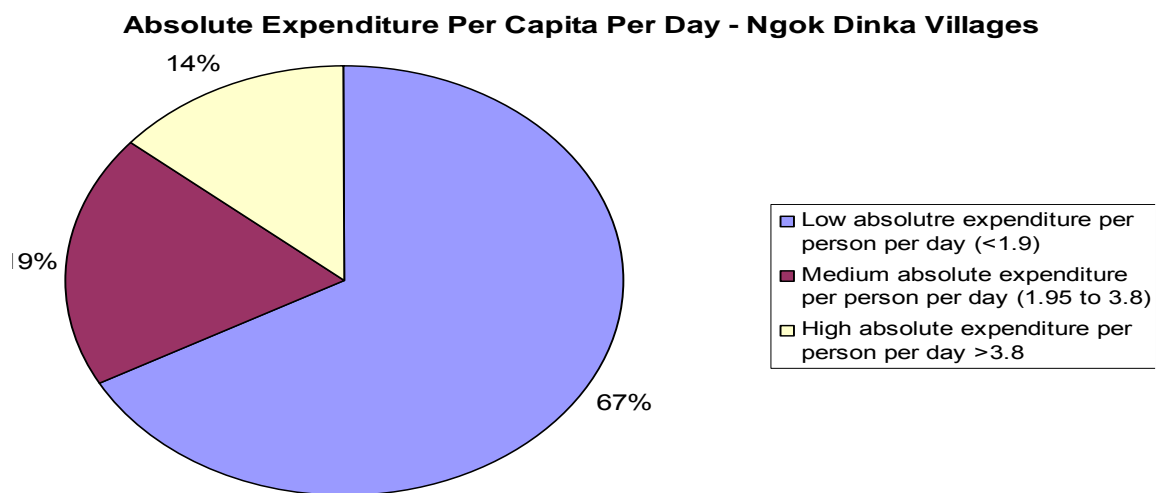
Out of those who cultivated last season, the majority of Dinka Ngok households cultivated millet, Beans or cow peas, groundnuts, maize, and sesame.



For those 65 percent of the households who did not farm this season, unavailability of land, land not ready for farming, poor rainfalls, and no access to land due to displacement were the main reasons that deterred them from cultivation.

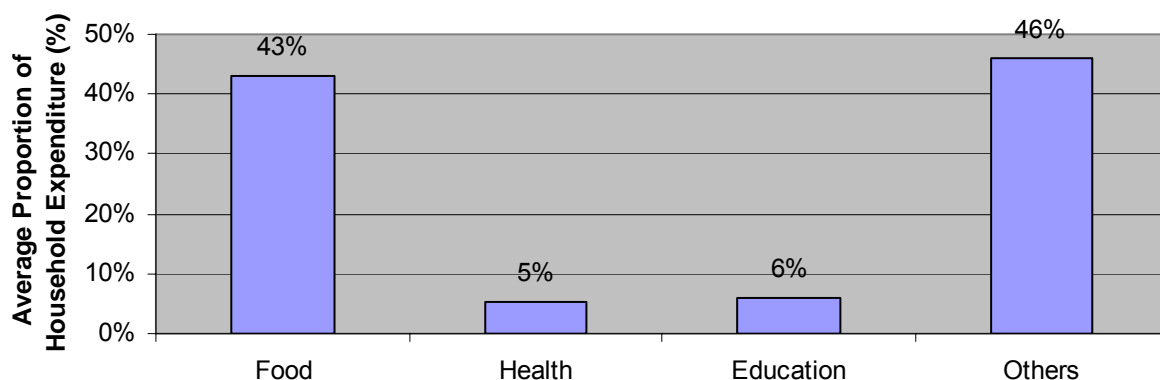
3.4.4. Expenditure and Food Purchases

The household survey included questions on the amount of money households spent on food and non-food items during the 30 days prior to the survey. The expenditure data thus obtained was



compared to the cost of minimum food basket. The majority of households can not afford the cost of their minimum food basket with 67 percent. Only 14 percent have high absolute expenditure per person.

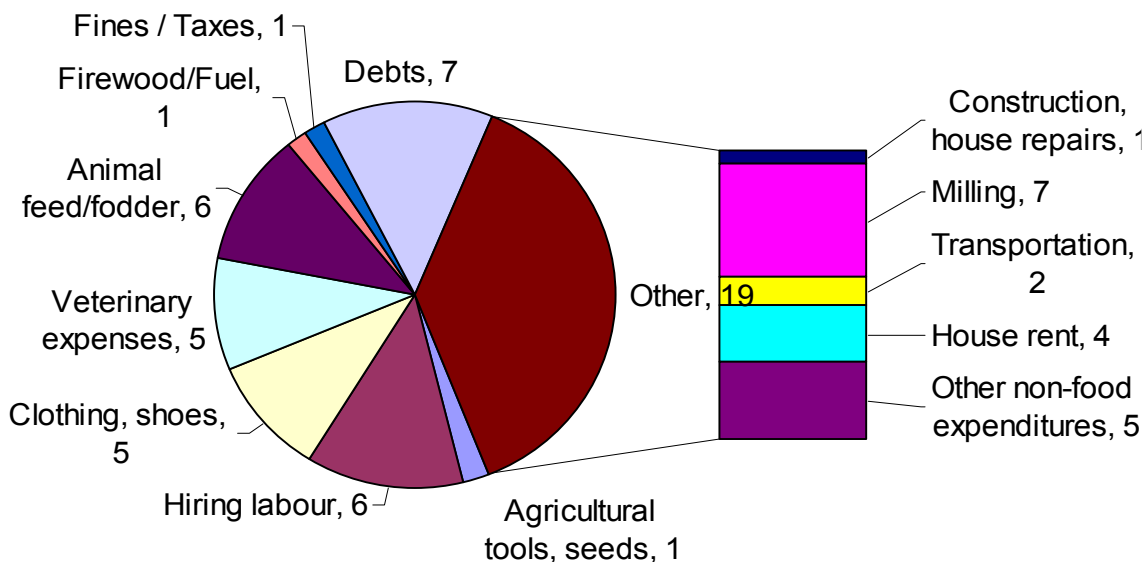
Dinka Ngok: Average share of food and non-food expenditure, Abyei, October 2009



Expenditure on food was 43 percent of total household expenditure, which is extremely low and masked by the fact that the majority receives food aid and thus do not need to spend money on purchasing the main products.

Education was represented by 6 percent, and health accounted for 5 percent. Households also spent 46 percent of their total expenditure on non-food items.

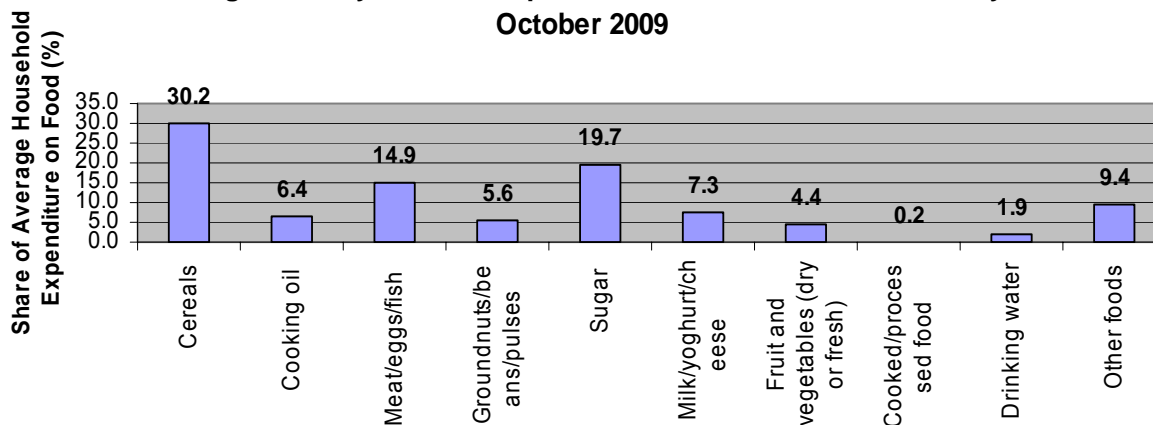
Dinka Ngok: Percentage of Other Expenditures by Items



The most important components of non-food items Dinka Ngok spend on are milling and debts repayment with 7 percent each from their total expenditure, animal feed / feeder 6 percent, clothing and shoes and veterinary services accounted for 5 percent each from Dinka Ngok Household total expenditure.

The average household expenditure on food during the 30-day period prior to the survey shows that cereals have the largest share with 30 percent. The next major food expenditure item was sugar about 20 percent, followed by meat/fish/egg with 15 percent.

Dinka Ngok: 30-day absolute expenditure on various food items, Abyei, October 2009



3.5 Food Utilization

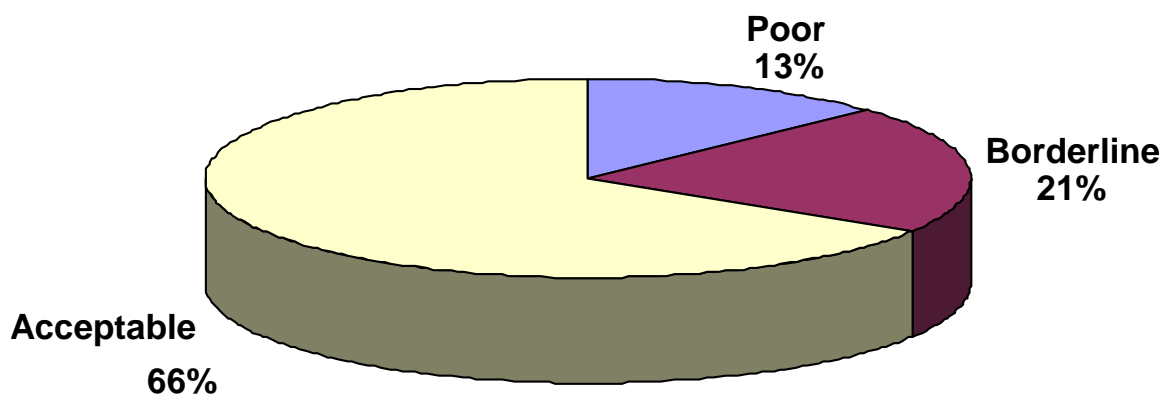
3.5.1 Food Consumption and Dietary Diversity

In the WFP standard framework for food security analysis, one key element is assessment of food consumption at household level. The starting point for this analysis is a seven-day recall of various food items (types) consumed by the household. The results are converted into a Food Consumption Score (FCS) with the following thresholds that are used to categorize and profile the food consumption of households:

FCS	Household Food Consumption Classification
<21	Poor food consumption
21.5 to 35	Borderline food consumption
>35	Acceptable food consumption

The food consumption data from Dinka Ngok villages was analyzed in a similar manner. Accordingly, 66 percent of Dinka Ngok households had acceptable food consumption at the time of the assessment, 21 percent had borderline food consumption, and only 13 percent of the households had poor food consumption.

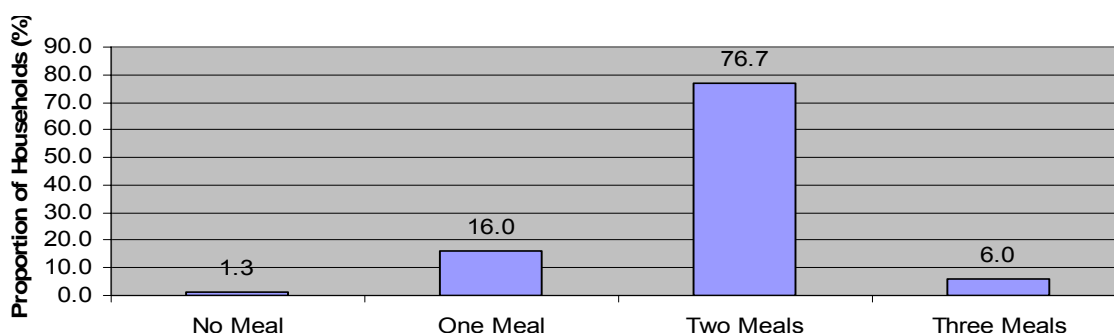
Dinka Ngok: Household food consumption classification, Abyei, October 2009



3.5.2 Meal Patterns

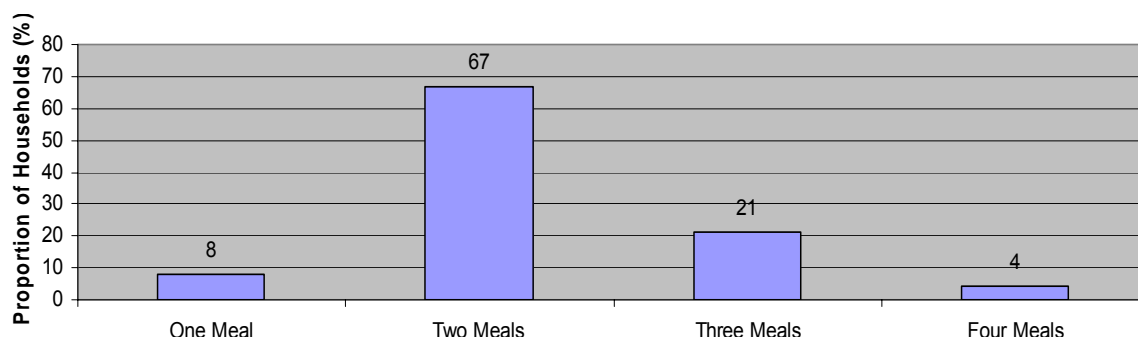
A 24-hour recall of number of meals consumed by household members was part of the household interview. The majority of Dinka Ngok adult household members consume two meals per day 77 percent, reflecting the common practice in Sudan of consuming two meals, the first around late morning and the second during the early evening hours. Household members consume one meal

Dinka Ngok: Number of Meals Consumed by Adult Household Members



Under- 5 child members of a majority of the households consumed two meals only during the day prior to the assessment. Child members in nearly 21 percent of the households consumed three meals during the day prior to the assessment, and only 4 percent consume four meals. This is a possible contributing factor to high malnutrition rates as two meals per day is not adequate for a small child to absorb nutrients.

Dinka Ngok Villages: Number of Meals Consumed By Children Under 5



3.6 Food Security

Food access classification		Income proxy (minus food aid)		
		<1.9	1.9-3.8	>3.8
Wealth	Low	Poor	Poor	Average
	Medium	Poor	Average	Good
	High	Average	Good	Good

Food security classification		Food consumption score		
		Poor	Borderline	Adequate
Food access	Low	Severely food insecure	Severely food insecure	Moderately food insecure
	Medium	Severely food insecure	Moderately food insecure	Food secure
	Good	Moderately food insecure	Food secure	Food secure

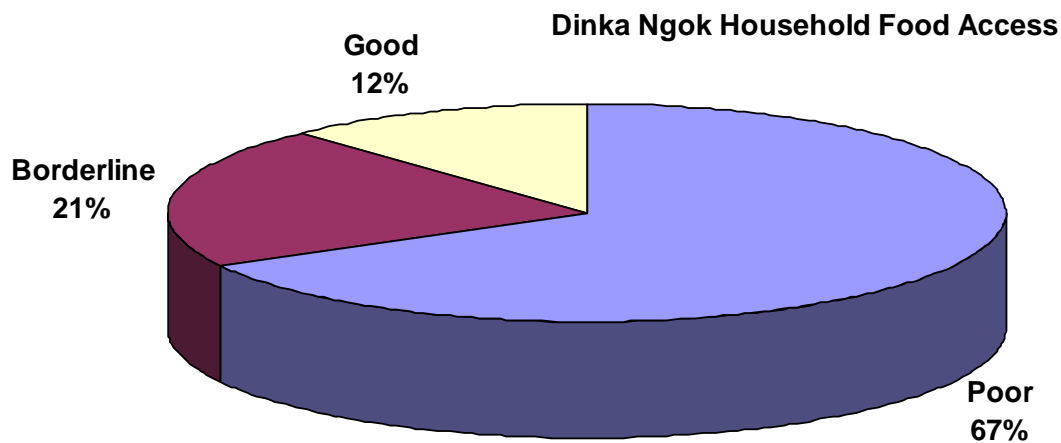
The standard WFP Emergency Food Security Assessment (EFSA) methodology conceptual framework was used in order to determine the current food security status of households. In this framework, a cross tabulation of household food consumption and household food access is used to determine household food security.

For Abyei assessment, food access was measured using a set of two indicators, income proxy and household wealth profile that included livestock value, asset value, and Crop production. The thresholds used for the various indicators are as follows:

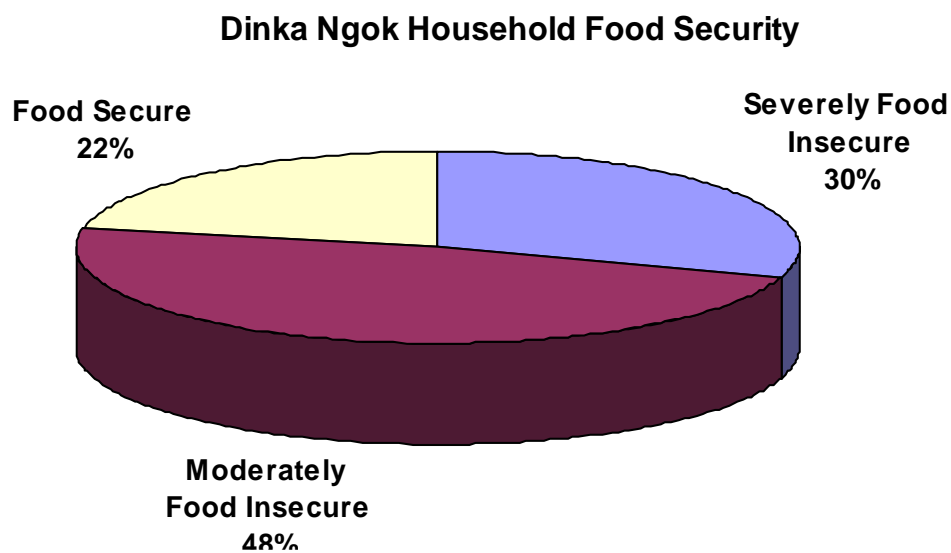
1- Food Consumption Score (7-day recall)-Poor (21 or less), Borderline (21.5-35), Acceptable (more than 35)

2- Income proxy (Total Absolute expenditure/day) - Absolute total expenditure per day: less than 100percent, 100-200percent and more than 200percent of the cost of the minimum food basket (i.e. 1.9 SDG). For households receiving food aid, the value of the ration was deducted from the income.

3- The value of household assets, crop production and livestock heard was calculated as a proxy for household wealth. Asset wealth quintile bottom (asset poor) 20percent, middle 21-80percent, and top (asset rich) 20percent.

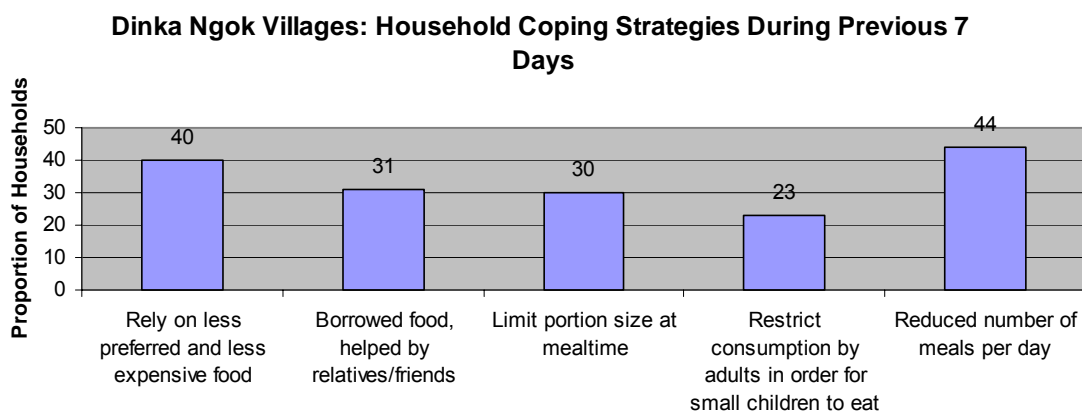


The resulting cross tabulation has shown that 70 percent of Dinka Ngok population has poor food access when food aid has been removed from the calculations, 20 percent have average food access, and only 10 percent have good food access. In order to calculate food security, a cross tabulation of food consumption with food access was conducted. Results indicated that 78 percent of Dinka Ngok households are food insecure (33 percent severely plus 39 percent moderately) and 28 percent food secure.



3.7 Household Coping Strategies

As part of the assessment, households were asked what coping strategies they take when experiencing food shortage. A seven-day recall was used for the more frequent coping strategies and one-year recall was used for the less frequent ones. About 57 percent of Dinka Ngok households reported that they experienced food shortage during the week prior to the assessment. 44 percent of Dinka Ngok households reduced number of meals per day and 40 percent rely on less preferred and less expensive food. Borrowed food or assisted by relatives/friend and limit portion size at mealtime came as the third and fourth most important coping strategy followed by households with 31 percent and 30 percent respectively.



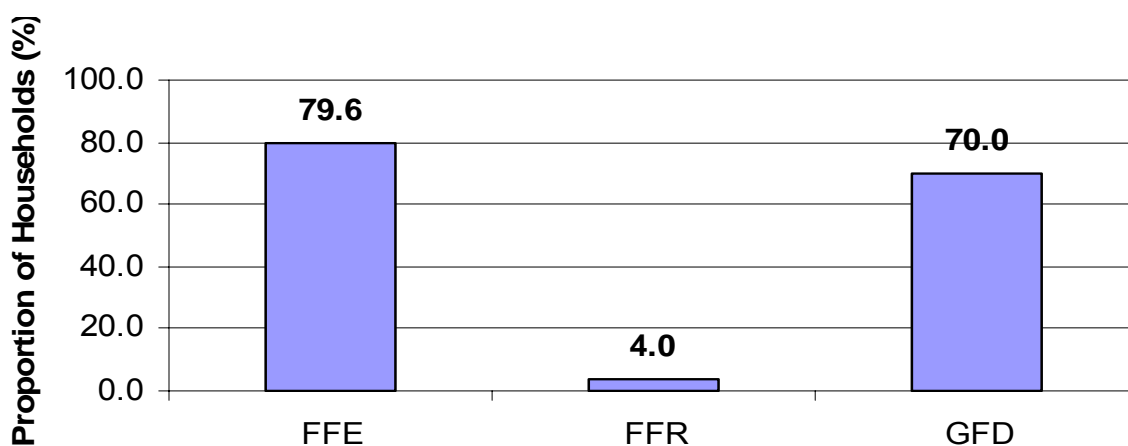
The Coping Strategy Index (CSI) for Dinka Ngok households was 6.6

3.8 Food aid and Other Humanitarian Assistance

The high reliance of Dinka Ngok households on food aid could be realized from the graph below, as 70 percent of the households get GFD (General Food Distribution), and about 80 percent of the children obtain food aid through FFE (Food for Education) programme.

However, the existence of FFR (Food for Recovery) is so low with 4 percent of the households only.

Dinka Ngok: Food Aid Assistance

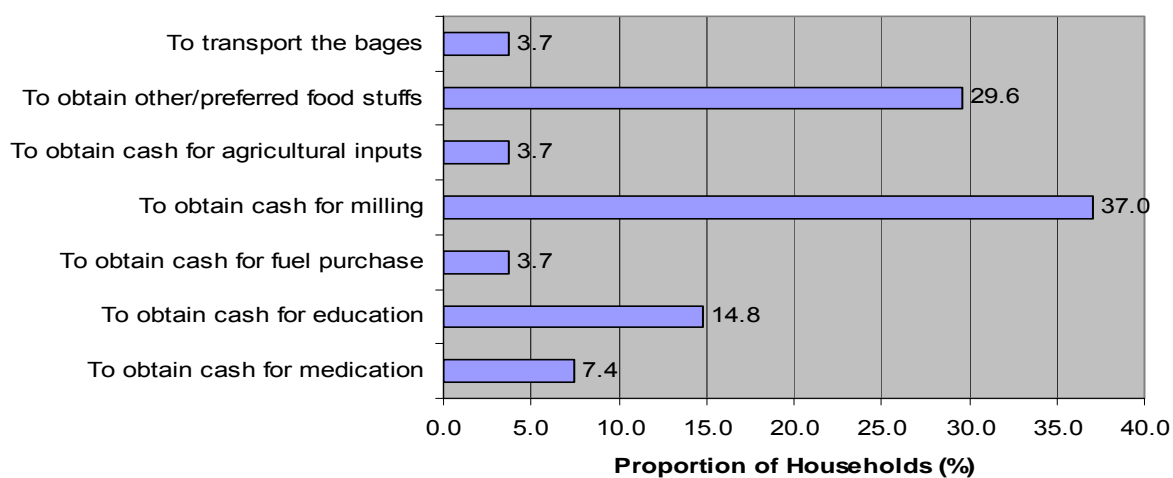


In terms of food utilization, number of Dinka Ngok households stated that they sold part of their food aid. 16 percent sold part of their cereals, about 3 percent for pulses, and 5 percent vegetable oil.

Out of those who sold part of their food, 37 percent sold it to obtain cash for milling, which is also the case, such as in Darfur where WFP has General Food distributions.

About 30 percent sell to obtain other preferred type of food and around 15 percent sold part of their food aid to obtain cash for their children's education.

Dinka Ngok: Food Aid Utilization



3.9 Health

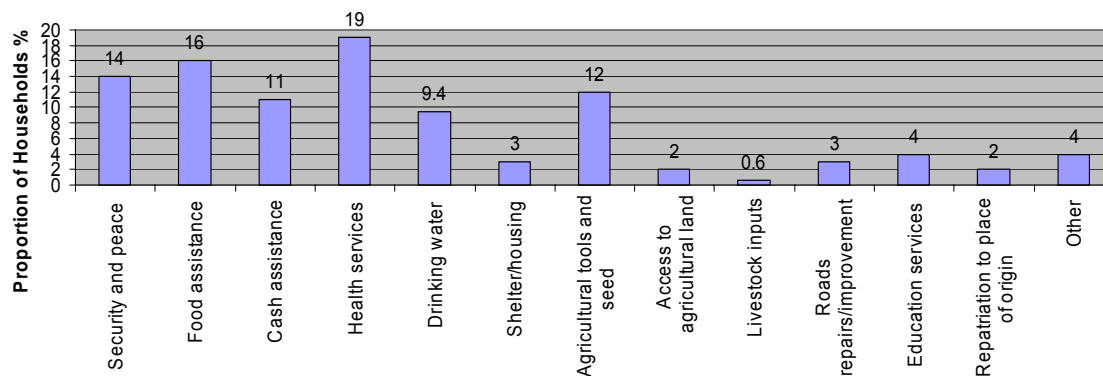
In a report by GOAL¹ covering Dinka Ngok villages, it was found that the current malnutrition prevalence rate is critical according to the international norms and Global_Acute Malnutrition was 24 percent. Moreover, the prevalence of global stunting is estimated at 46 percent compared to the findings of 2008 survey at 41 percent. The prevalence of severe stunting also has increased from 16 percent in 2008 to 17 percent this year. This level of stunting is classified as very high according to WHO definitions. This long term growth restriction is indicative of persistent food insecurity and poor environmental conditions and is not unusual when compared to the prevalence in similar regions of Sub-Saharan Africa.

In addition, the report found that the prevalence of morbidity, vaccination coverage, and mortality rates are all indicators of the quality of the public health and it has implication on the nutrition status of the community. As child morbidity levels in the population surveyed have shown a significant increase compared to results of 2008. Diarrhea represents the higher proportion at 21 percent of morbidity, and poor hygiene and poor environmental sanitation could be the reason behind this. The Crude Mortality Rate and the Under 5 Mortality Rate has increased compared to the thresholds defined and compared to the findings from 2008 survey.

The rate of vaccination coverage has increased for Tuberculosis (BCG vaccination), significant number of children were vaccinated principally because they were returnees where they got this vaccine in Khartoum. There is severe lack of reproductive health services include antenatal and postnatal checking, family planning and a delivery room in all clinics. Most of the Dinks Ngok households used protected source of water (hand pumps) with about 62 percent and 10 percent during the dry and wet seasons respectively. Those who were able to collect their water within 1- 2 hours are found high at (99 percent). Only 17 percent of the households were found to use a latrine for defecation, which is very low and even slightly reduced compared to findings for the survey in 2007 at 23 percent. Those who use undesignated open area for defecation is high at 76percent compared to 75 percent in 2007.

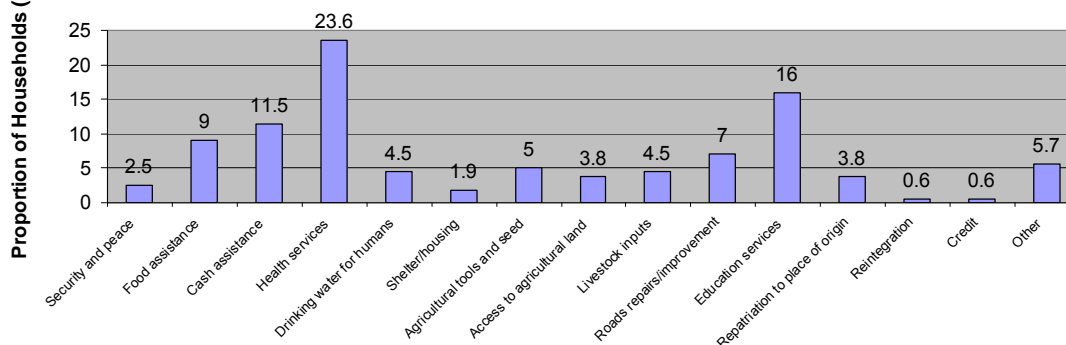
3.10 Immediate and Long-term Priorities of Households

Dinka Ngok Villages: Immediate Household Priorities -



Dinka Ngok households' first immediate priority was health services with 19 percent and 16 percent for food aid. The third immediate priority was security accounted by 14 percent of the households, followed by agricultural tools and seeds with 12 percent. Health services has also come as the first priority in the long-term presented with about 24 percent, followed by education services with 16 percent, cash assistance with around 12 percent, and 9 percent food assistance.

Long-term Household Priorities - Ngok Dinka Villages

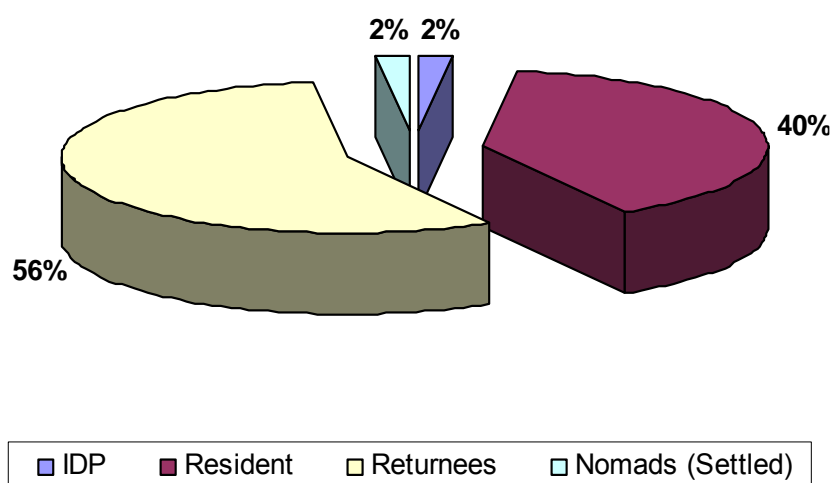


¹ Report of a Multi Indicator Cluster Survey in Abyei, GOAL Report, May 2009.

4. Households Results: Misseriya Villages

4.1 Sample Demography

Misseriya Population: Residence Status



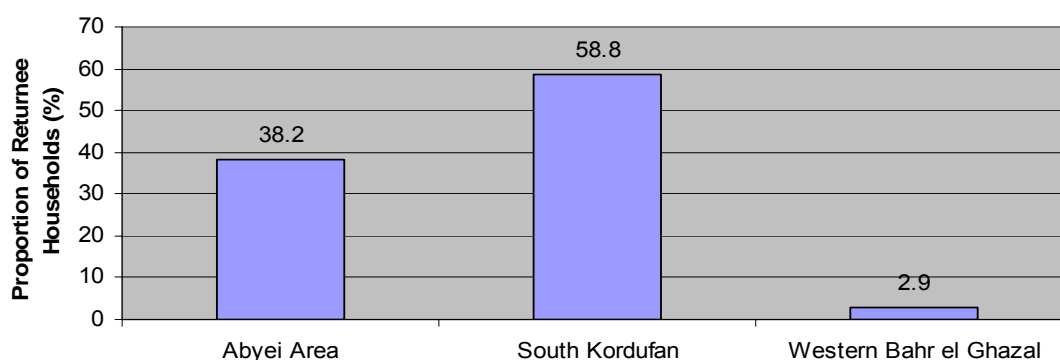
The majority of Misseriya population was returnees and residents with 56 percent and 40 percent respectively. Both IDPs and nomads are represented by 2 percent only. The higher percentage of Misseriya residents reflects the fact that the conflict in May 2008 did not affect all their villages. This is shown in the higher percentage of Dinka Ngok IDPs (12 percent), compared to the Misseriya (2 percent).

Table (2): Misseriya Population: Basic Demographics

	Percentage (%)
Average Household Size	7.7
Proportions of Female Headed Households	12
Proportion of Households Heads that have Disability	4
Dependency Ratio	1.3

In Misseriya villages it was found that the average household size was 7.7 persons, female headed households formed 12 percent of the sampled households. 4 percent of household heads were functional disable and the dependency burden ration was 1.3.

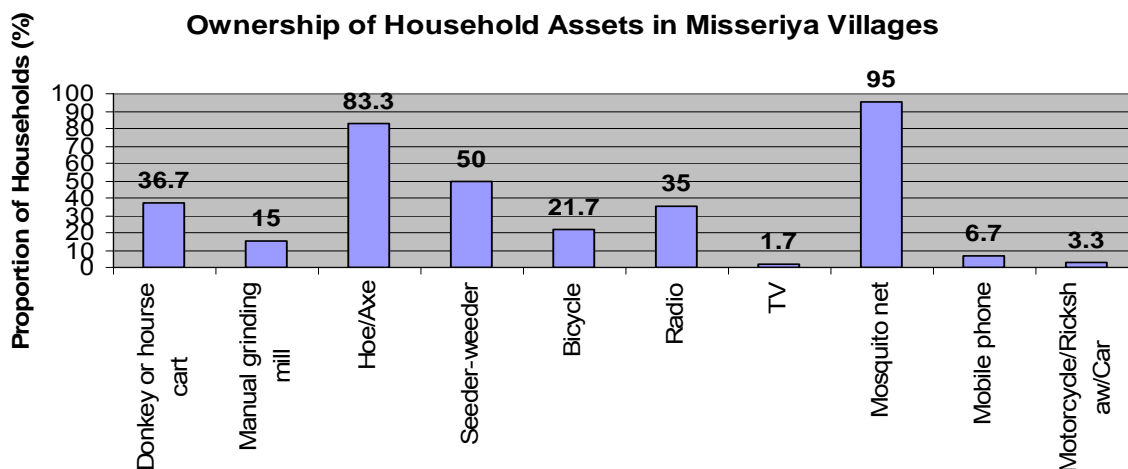
Misseriya: Locations of households returning to Abyei



For Misseriya population, 26 percent arrived to their current location before May 2008, and 74 percent arrived after May 2008. From those who returned, it was found that about 59 percent were displaced in South Kordofan, 38 percent were in Abyei area, and only about 3 percent were in Western Bahr el Ghazal State.

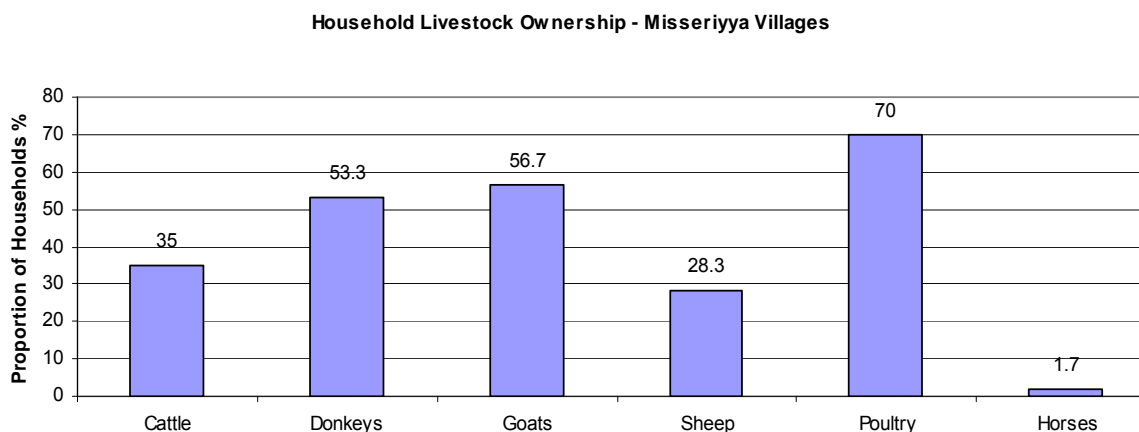
4.2 Household Asset Ownership

The majority of Misseriya population own at least one mosquito net or hoe/axe, about 37 percent own a donkey or horse cart and more than one third of the households own a radio, small number of households own a mobile phone mainly due to the nonexistence of mobile network in Misseriya areas, unlike the situation in Dinka Ngok areas.



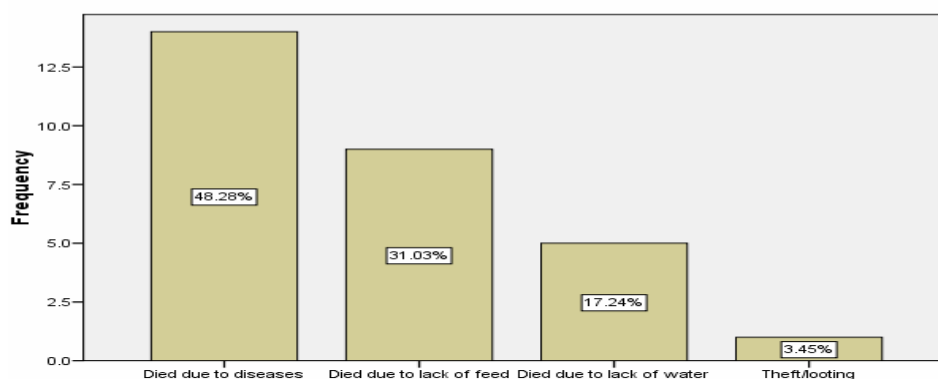
4.3 Household Livestock Ownership

Poultry is the most common type of animal owned by Misseriya households, more than half of the households own goats and donkey; households own cattle and sheep were 35 percent and 28 percent respectively.



Diseases were the most important reason that made Misseriya population losing their cattle, followed by lack of feed and inadequate water by 31 percent and 17 percent respectively. Incidents of theft or looting were so minor that pose no threat on Misseriya livestock.

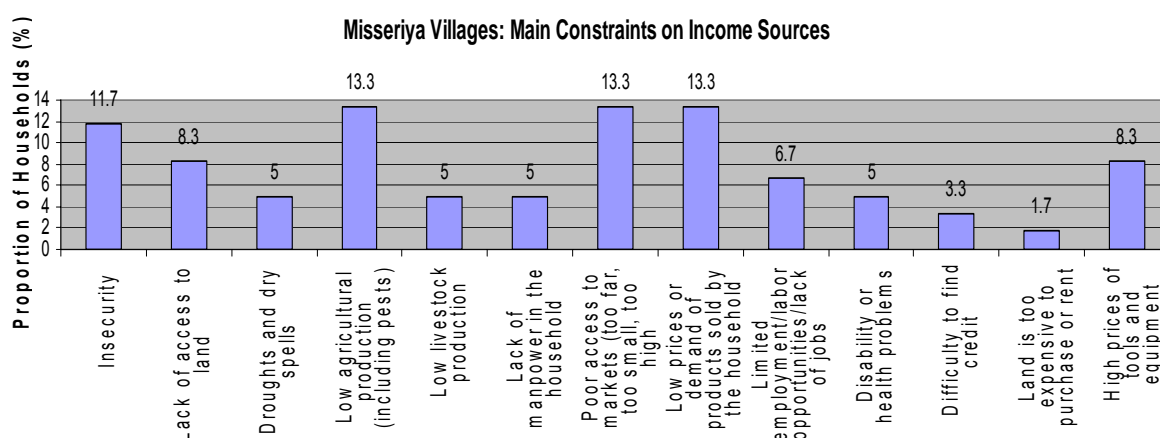
Misseriya Villages: Main reason of Livestock (Cattle) loss



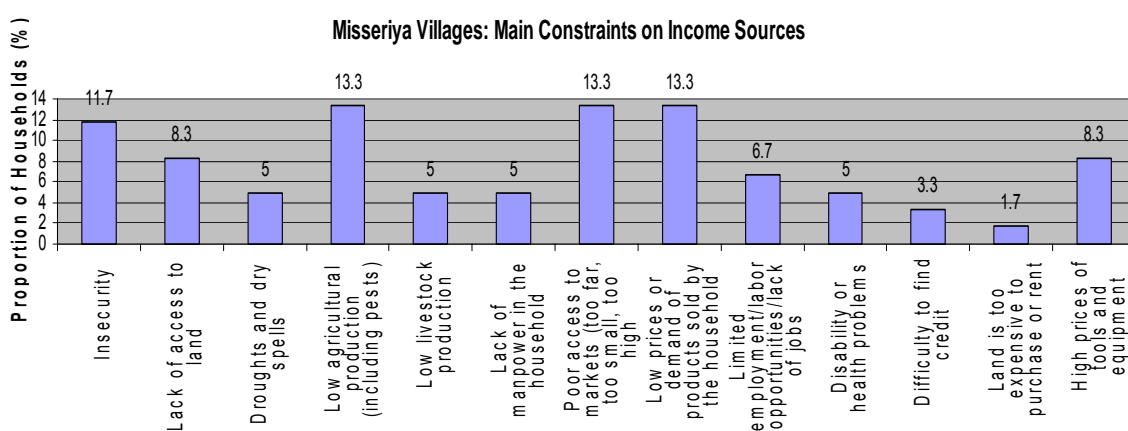
4.4 Food Access

4.4.1 Main Income Sources and Livelihoods

Out of the total Misseriya households 35 percent have one income source only, 40 percent have two income sources, 15 percent have three income sources, and four income sources was represented by 10 percent.

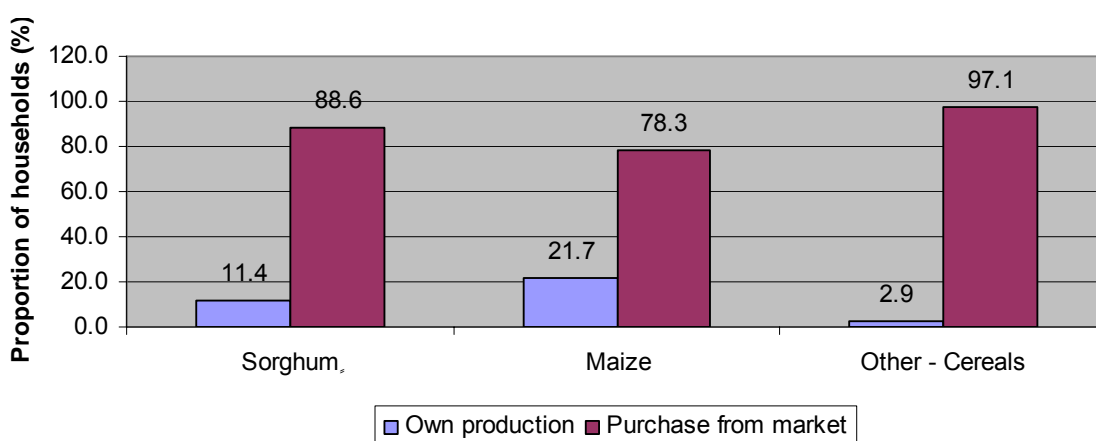


The most important income source for Misseriya population was firewood and charcoal sale that accounted for 27 percent, followed by sale of agricultural crops (other than cereals) and sale of livestock and animal products each was represented by 15 percent. Agricultural wage labor came fourth with 8 percent, since young people are the main participants of seasonal agricultural wage labor and it usually involves traveling for long periods; it was found out that most resident Misseriya population try to avoid migration due to their fear of land might be occupied by Dinka Ngok while they are away. The most income constraints stated by Misseriya population are low agricultural production, poor access to markets, low prices or demand for products sold by the household, and insecurity.



4.4.2 Main Food Sources

Misseriya: Main sources of cereals consumed by households

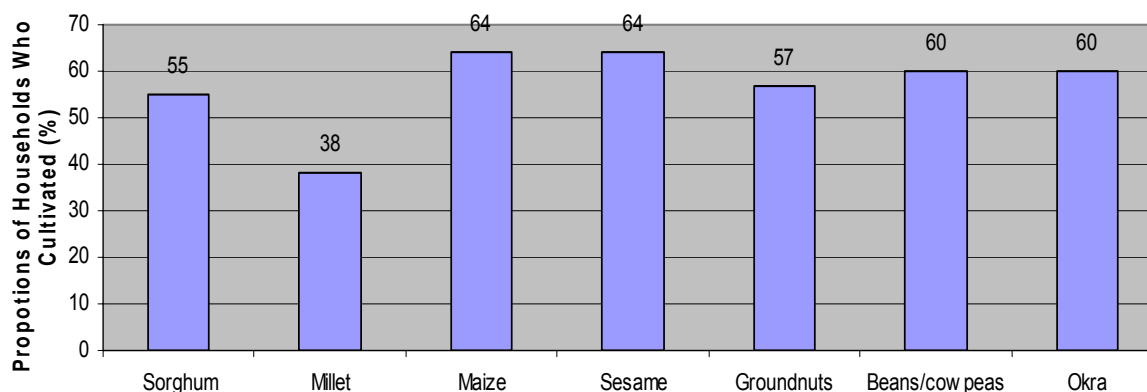


Missriya population is highly dependent on markets to obtain their consumed cereals, 89 percent of the households that consumed sorghum during the last week prior to the assessment, got it from the market. 78 percent for maize, and 97 percent for other cereals were obtained from the market. The Misseriya reliance on their own production is low as for most households in Sudan and for maize that was realized by 22 percent of the households.

4.4.3 Crop Production

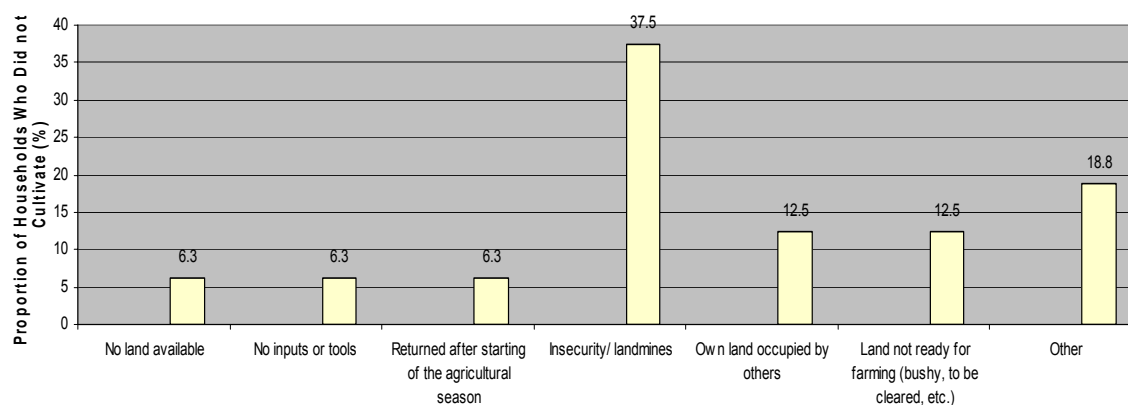
Similar to the situation in Dinka Ngok villages, substantial portion of Misseyiya households missed 2008/2009 agricultural season due to the conflict of May 2008. The main crops cultivated in 2008/2009 season are shown in the graph below.

Crop Cultivation of Households During the 2008/2009 Agricultural Season in Misseyiya Villages



The proportion of households cultivated in the 2008/2009 season was 48 percent and increased dramatically to 70 percent in 2009/2010 season, 51 percent of the households who cultivated this season stated that they farmed more areas than last season. The main crops cultivated by Misseyiya households were maize, sesame, beans or cow peas, and okra. Sesame and groundnuts are produced mainly as cash crops, but sold with low prices to whole sale traders. Poor road conditions, high transportation cost, and poor access to markets are the main obstacles that hinders Misseyiya farmers from taking their production to the nearest town or larger markets.

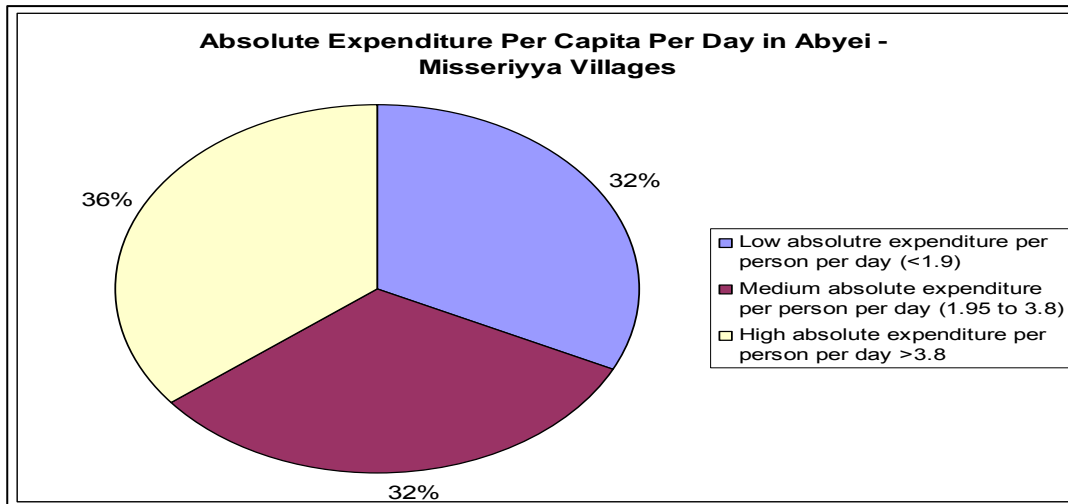
Main Reasons for Not Cultivating During the 2009/2010 Season - Misseyiya Villages



For the 30 percent who did not farm this season, insecurity/landmines was the main reason that deterred them from cultivating, followed by land being occupied by others and land not ready for farming with about 13 percent for each.

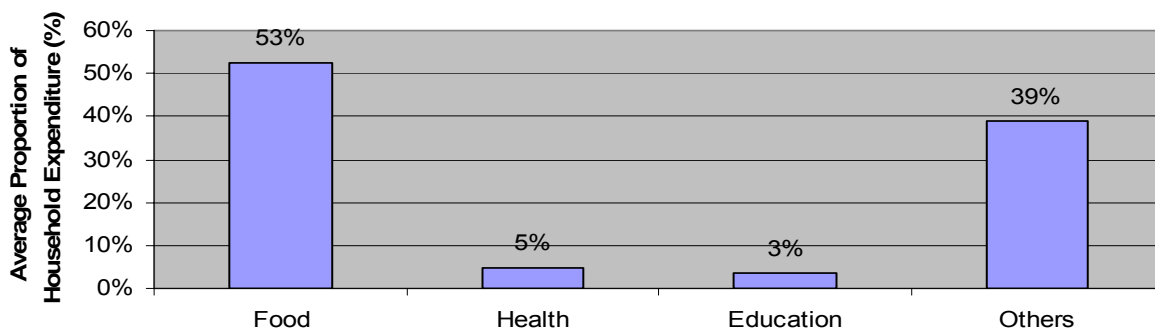
4.4.4 Expenditure and Food Purchases

32 percent of Misseyiya households can not afford to cover the cost of their minimum food basket, 32 percent can buy their minimum food basket. The proportion of households who have high absolute expenditure was 36 percent.

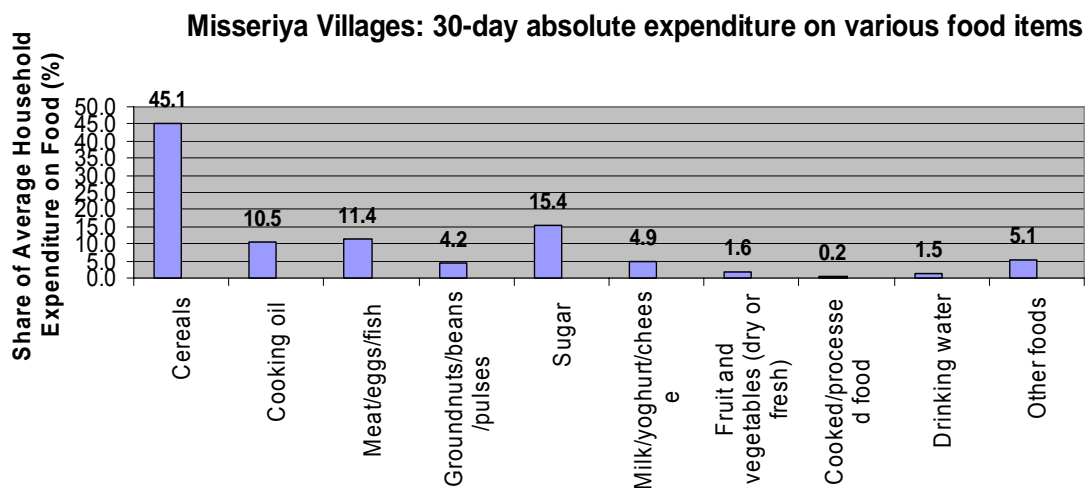


Expenditure on food accounted, on average, for 53 percent of total household expenditure which by the World Bank is regarded as low. The share of household expenditure on health and education were 5 percent and 3 percent, respectively. Households also spent 39 percent of their total expenditure on other non-food items.

Average share of food and non-food expenditure, Abyei, October 2009



In Misseriyya villages, the average household expenditure on cereals was 45 percent, higher than in Dinka Ngok population. This could be attributed to the fact that there is no food aid provided in Misseriyya areas. The second major food expenditure item was sugar 15 percent, followed meat/egg/fish with 11 percent, and cooking oil 10 percent.

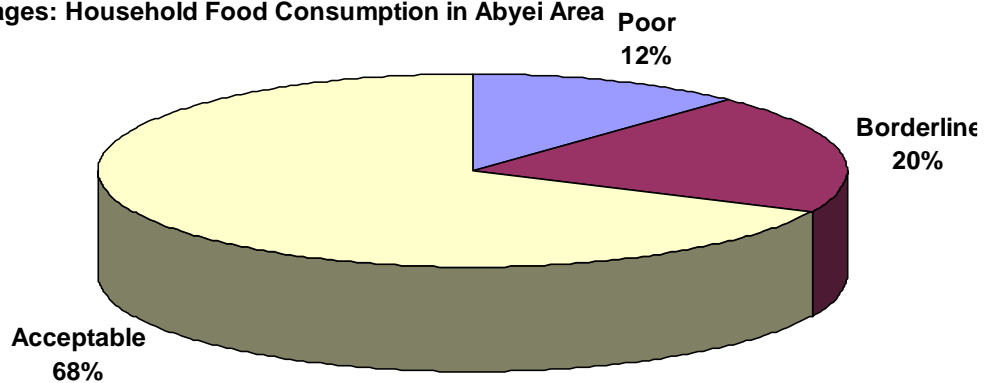


4.5 Food Utilization

4.5.1 Food Consumption

In order to get the Food Consumption score of Misseriya households, a seven-day recall of various food items consumed by households was asked, the same thresholds used for Dinka Ngok households is used to categorize and profile the food consumption of households. The majority of Messireya households had an acceptable food consumption with 68 percent, only 12 percent had poor food consumption.

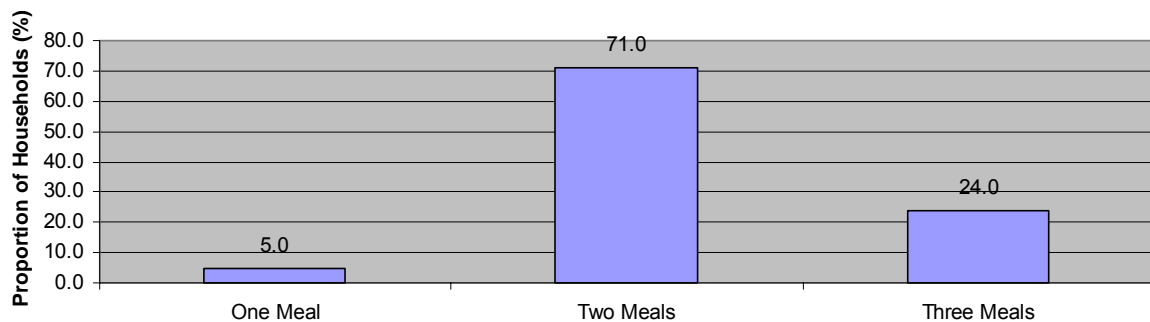
Misseriyya Villages: Household Food Consumption in Abyei Area



4.5.2 Meal Patterns

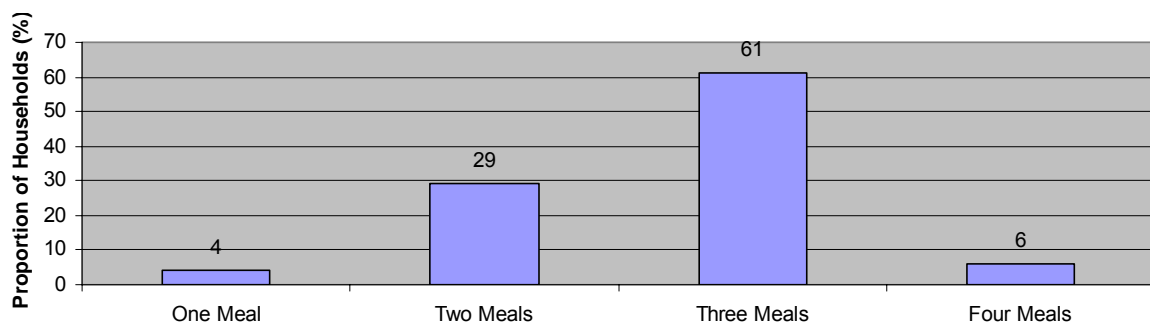
The majority (71 percent) of Misseriya adult household members consumed two meals in the day prior to the assessment, 24 percent three meals, and 5 percent consumed one meal only.

Misseriyya Villages: Number of Meals Consumed by Adult Members of the Household



The graph below shows that under- 5 members of a majority of Misseriya households consumed three meals on the day prior to the assessment. 29 percent consumed two meals, and 6 percent only consumed four meals.

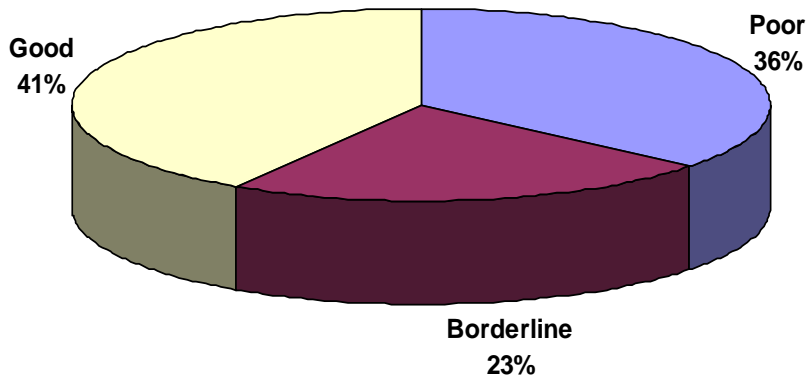
Misseriyya Villages: Number of Meals Consumed by Children Under 5 the Previous Day



4.5.3 Food Security

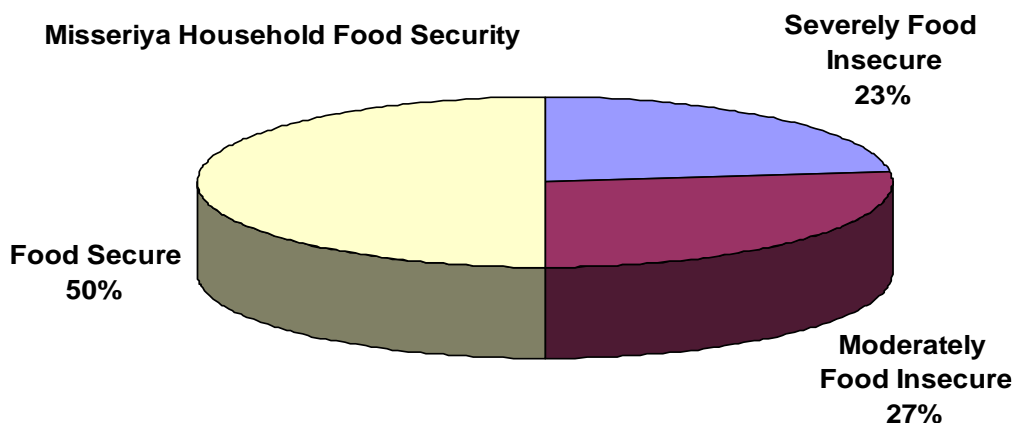
The same methodology used to assess food security for Dinka Ngok population is applied for the Misseriya. As a cross tabulation of household food consumption and household food access was used to determine food security. In terms of food access, it was found that food access categories in Misseriya areas is more equally divided than it was in Dinka Ngok villages. As 36 percent of the households had poor food access, 23 percent borderline, and 41 percent had good food access.

Misseriya Household Food Access



Cross tabulation of Misseriya households' food consumption score and food access was calculated to get the food security status in the areas. Results indicated that 50 percent of the households are food insecure, out of which 23 percent were severely food insecure. Those who were food secure comprised of 50 percent of the households.

Misseriya Household Food Security

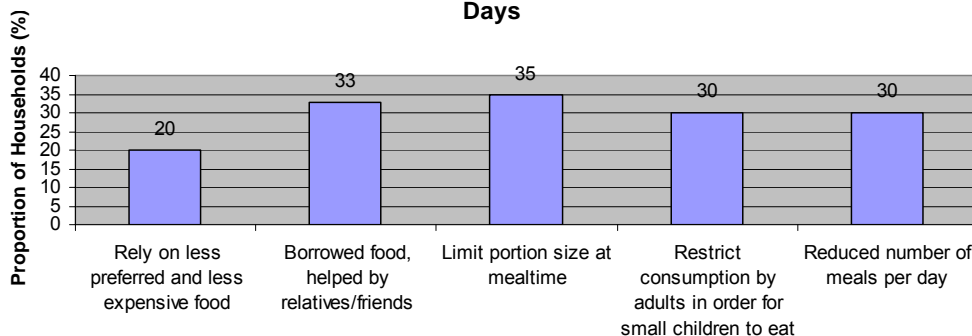


4.5.4

Household Coping Strategies

43 percent of households in Misseriya reported that they experienced food shortage during the week prior to the assessment. Coping strategies of Messireya households when experiencing food shortage are shown in the graph below. The share of the majority of coping strategies came relatively equal, as limit portion size at mealtime was represented by 35 percent, 30 percent for each of restrict consumption by adults in order for small children to eat and reducing number of meals per day. Rely on less preferred and less expensive food was the lowest with 20 percent.

Misseriya Villages: Household Coping Strategies During Previous 7 Days



4.5.5 Food Aid and Other Humanitarian Assistance

None received GFD, 19 percent of the households had children received FFE, and 7 percent had FFR.

The low food aid provided had made the probability to sell or exchange food aid items invisible among Misseriya households.

4.5.6 Health

In a report by Goal 2, it was stated that the GAM rate among Misseriya population was 11.6 percent and with about 1 percent only was severely malnourished. 82.7 percent of them use unsafe water in the rain season and 56.8 percent in the dry season; 91.2 percent of HH assessed use undesignated areas for defecation, 3.5 percent use latrines, 1.5 percent use designated areas and 1.2 percent use hole. In case of sicknesses, 37.4 percent of HH surveyed used to go the nearest health centre, 35.5percent are doing self-medication, 21.9 percent use traditional medicine. In terms of distance 51.6 percent of people walk for more than 2 hours to reach health centre, 40.6percent walk for 1 to 2 hours. 98 percent of women delivered at home by the help of untrained birth attendant and grand mothers, these results shown that Misseriya people have huge problem of health facilities accessibility in their areas.

In response to the fees paid for medical services, 46.9 percent of them said that they can never pay any money for medical treatment and 28.9 percent agreed to paid money some times. The majority of the population obtains medicines from weekly markets where it's kept under the sun and some times it can be expired.

In addition, it was found that animal milk is the principal complementary food given to children 23 percent of children received it from the survey sample (Camels, goat and cow milk), unlike the case of Dinka Ngok children where households have limited access to their livestock.

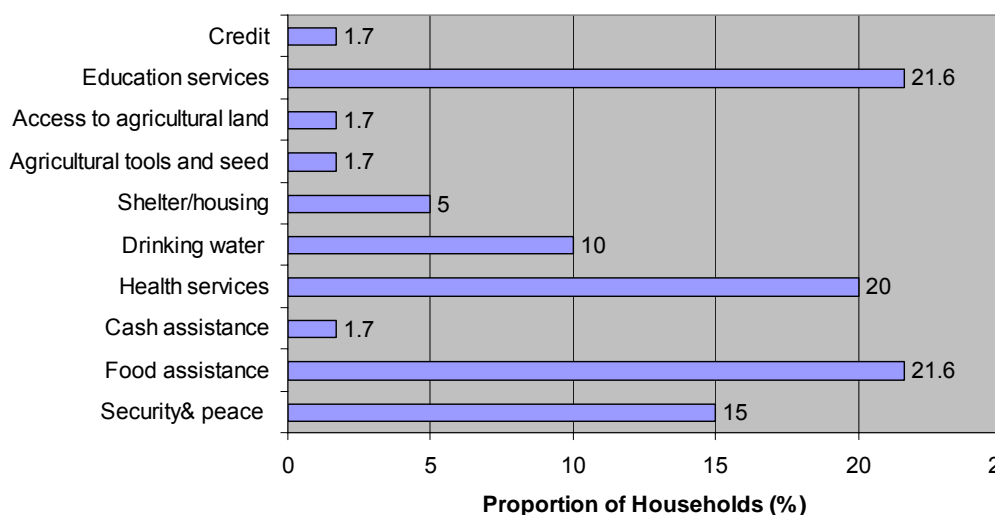
The current causes of morbidity found in Misseriya areas were malaria, ARI and diarrhea. The critical living conditions of Misseriya people and the lack of safe water can be attributed to be the major causes of high prevalence of these current diseases. The absence of health services continues to aggravate the increasing rate of sicknesses.

The Misseriya community appears to be in the poor immunization covered system and this can expose to illnesses and affect the health of most of the under 5 years, as the report found out that that most of Misseriya children are not vaccinated.

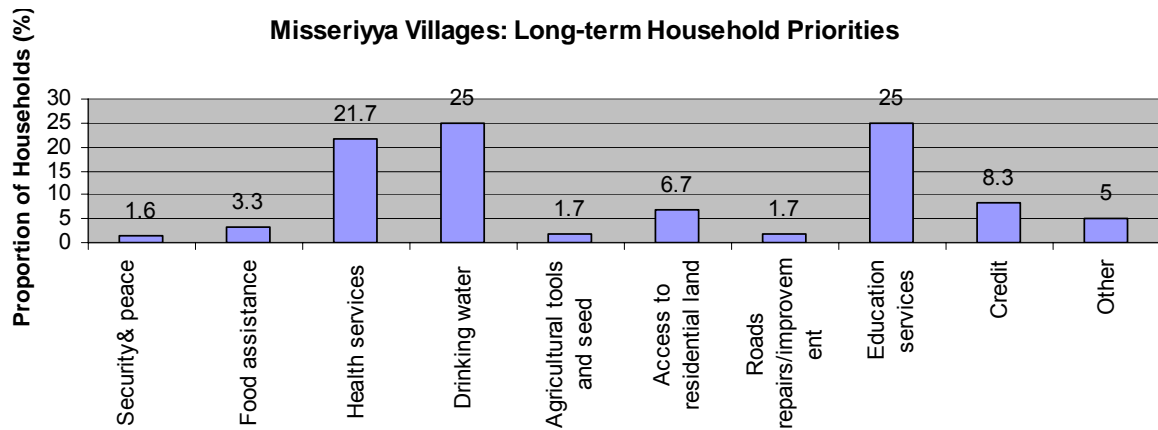
Moreover, the Misseriya people have a lot off risks of contagion during the rain season when 82.7percent of them get water from unsafe sources against 17.3 percent who use protected water sources. While in the dry season 56.8 percent continue to use the unprotected water against 43.2percent.

4.5.7 Immediate and Long-term Priorities of Misseriya Households

Misseriyya Villages: Immediate Household Priorities



Misseriya households' had two most immediate priorities, which are food aid and education services, each was represented by about 22 percent. However, households' priority of food aid is required in August and September only, as in these months Misseriya households lack and source of income. The third immediate priority was health services with 20 percent, security and peace came fourth by 15 percent.



In the long-term drinking water and education services were the most important long-term priorities, each was stated by 25 percent of Misseriya households. Health services came third represented by about 22 percent, followed by access to credit by 8 percent.

4.6 Conclusion and Recommendations

About 72 percent of Dinka Ngok households were returnees and 15 percent only were residents, compared to 56 percent and 40 percent respectively for Messireya population.

Timing of the assessment cover 'lean season' and results concerning the two population groups reflect this.

Evaluated in terms of a combination of their food consumption, their per capita daily expenditure, and their wealth profile, 72 percent of Dinka Ngok households were food insecure (33 percent severely plus 39 percent moderately) and 28 percent only were food secure. While in Messireya villages the food insecure were 50 percent of the households (23 percent severely plus 27 moderately), those who were food secured comprised of 50 percent of the households.

A combination of the current sense of insecurity, many years of conflict, extremely high and increasing numbers of returnees, lack of infrastructure, and high dependence on food aid, all have contributed to the high level of food insecurity among Dinka Ngok households.

In terms of food coverage about 80 percent of Dinka Ngok households have children enrolled in FFE programs in the last four months, 70 percent currently receive GFD, and 4 percent received FFR in the past four months. In Misseriya villages 19 percent of the households had children received FFE, 7 percent had FFR, and none received GFD. Messireya population main demand is to be supported by the WFP in the peak lean months of August and September.

Agriculture did not play an important role for income in the Abyei Area this year, this principally due to the failed agricultural last season because of the May 2008 conflict. However, with the Secretary of Agriculture efforts to support farmers and relative stability this year, agriculture contribution to income is expected to increase especially to Messiriya population. Agriculture as a livelihood activity is important to Messireya population, but this activity is facing many difficulties including, lack of agricultural tools, lack of seeds, and inadequate water.

Livestock is important to both population groups; however, Dinka Ngok and Messeriya households face similar obstacles that hinder the development of this activity, primarily lack of veterinary services and medicines.

The following recommendations are made based on the findings of the assessment:

First: Dinka Ngok Population:

- There is a need to revise GFD ration and improve targeting. Therefore, it is recommended to conduct village level assessment to re-profile beneficiary groups.
- It is important to introduce FFT programs in order to diversify households' income sources.
- Agriculture is an important livelihood activity; therefore, it is important to support this extension, in order to gradually reduce dependence on food aid. WFP need to work with Abyei's Secretary of Agriculture, FAO, and NGO partners to encourage this livelihood activity, such as agricultural protection, FFW/FFR modalities should be considered.
- It is important to work with FAO to provide better veterinary services that seen crucial by Dinka Ngok communities.

Second: Messireya Population:

- Since, about one fourth of the Misseriyya are severely food insecure, food aid to the most vulnerable is essential especially to disabled household heads.
- Establish FFW to construct Hafirs based on community priorities.
- Advocate with government and other UN agencies for establishing of health centers and schools.
- Extension the provision of agricultural tools and seeds that are seen the most important obstacles for farming.
- WFP to promote seed protection ration in August and September only.
- School feeding in established schools and for nomadic population.
- Advocate with UN, NGOs, and Abyei Area Authority for improved basic services to meet needs of nomadic and resident Misseriya population.

Annex (1)

Abyei Rapid Food Security Assessment: Sample Clusters / Villages

Ngok Dinka Sample Clusters / Villages			
Locality	Administrative Unit / Payam	Village	Total Population
Abyei	Mijak	Abathok	4000
Abyei	Alal	Aganytok	1300
Abyei	Rumammier	Awal	123
Abyei	Rumammier	Judjok	2500
Abyei	Rumammier	Mabok	1050
Abyei	Alal	Mading Achueng	1000
Abyei	Rumammier	Madingjok thiang	4500
Abyei	Rumammier	Marial Achak	500
Abyei	Rumammier	Myom	1000
Abyei	Rumammier	Rumammier	2000
Ngok Dinka Replacement Clusters / Villages			
Abyei	Alal	Akechnial	800
Abyei	Ameth Aguak	Dungop	850
Abyei	Ameth Aguak	Miakol	1000
Abyei	Alal	Noong	250
Abyei	Mjak	Tag-alei	525
Messeriya Villages			
	Difra	El Azza	3,500
Abyei	Mjak	Makenese	7,000
	Difra	El Agad	5,000
Abyei	Difra	Gole	2,500
Abyei	Difra	El-Dhair	7500
	Difra	Abu Ajala	7,000
Abyei	Difra	Um-Kheir	1,000
	Difra	El Beida	2,500