



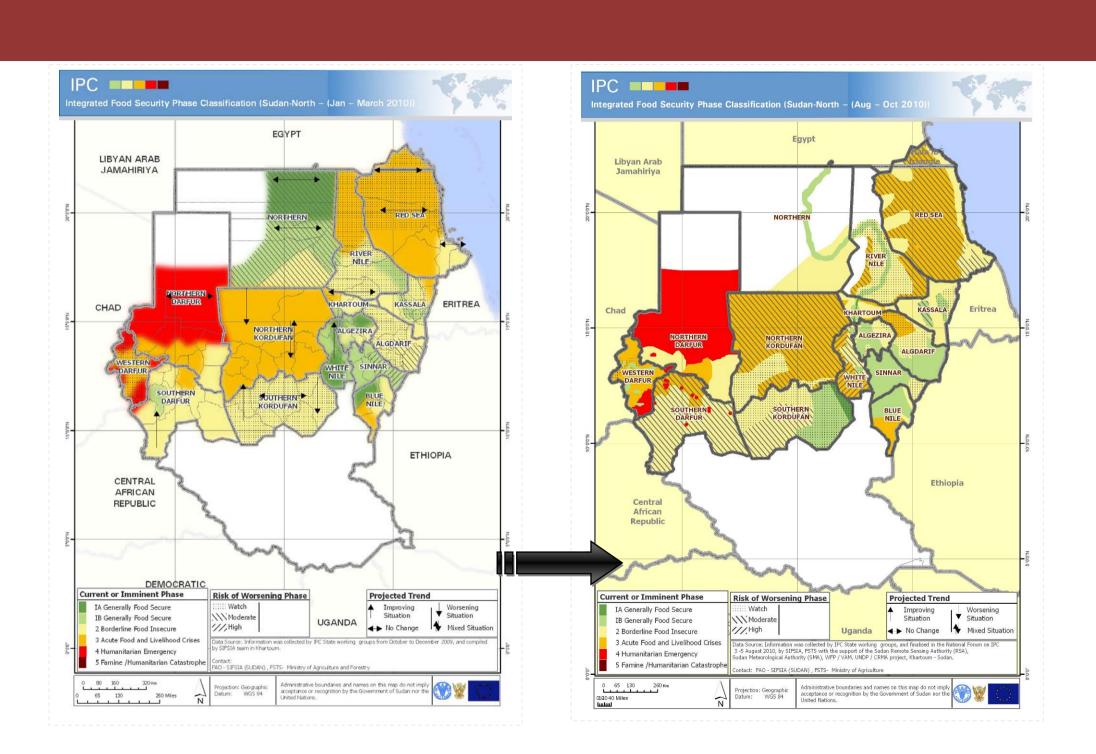


Sudan Integrated Food Security Information For Action (SIFSIA – N)

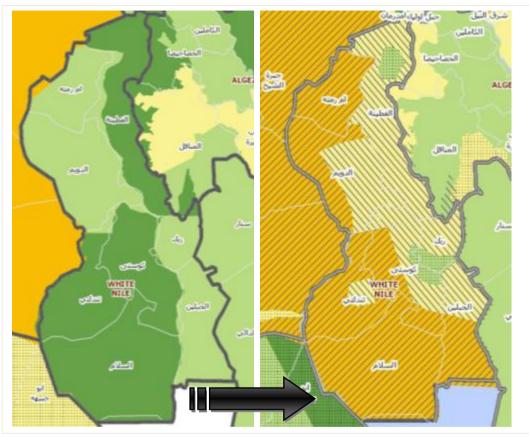
IPC STATE MAPS

Food Security Technical Secretariat (FSTS) – Ministry of Agriculture

FAO-SIFSIA 1/10/2010



1. WHITE NILE



Some general facts for White Nile:

According to the 2009 CBS data and analysis, the **Depth of Hunger in White Nile** is about 389 kcal which is higher than the national average, 344 kcal.

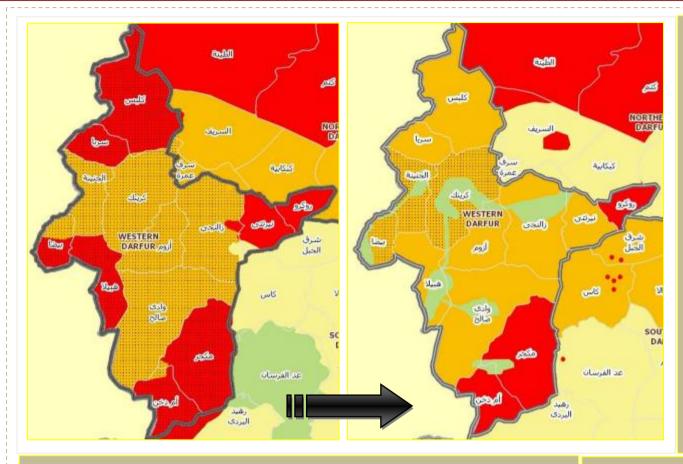
Depth of hunger is the amount of calories the deprived population has missed to reach the daily Minimum Dietary Energy Requirements per person level. The prevalence of undernourishment in White Nile is 41% as opposed to the national figure of 33%.

Dietary Energy Consumption (DEC) in White Nile is 2080 kcal as opposed to the national average of 2180 kcal. DEC refers to food consumption expressed in terms of kilocalories per person per day basis.

On the other hand, the food expenditure ratio (FR), also known as the 'Engel ratio', was 60 percent for White Nile. This means that on average a household spent on food items more than three fifths of their total expenditure. The national figure is 61.4%.

Locality / Livelihood Zone	Phase (Jan – Mar '10)	Risk of worsening phase	Phase (Aug – Oct '10) - New	Risk of worsening phase	Explanation for any phase change.
Kosti	1a	No risk	2	Watch	
Rabak	1b	No risk	2	Watch	
El-Dueim	1b	No risk	2	Moderate	moderate malnutrition fluctuation of rainfall
ElGiteina	1a	No risk	2	Moderate	
Eljabalain	2		2	Moderate	 high malnutrition lack of basic services high illiteracy high crops prices poor harvest poor investment

2. WESTERN DARFUR



Narrative summary of food security phases:

PHASE 1: Approximately 7% of West Darfur state in this phase

- 1- Mostly live in secure areas;
- 2- Most IDPs live within residents community (some similarities in Income Generation Activities (IGAs));
- 3- Stable purchase power. Income sources vary between petty trade and big scale trade, generally different income sources;
- 4- Involved in commercial activities –availability of income source;
- 5- Sufficient availability and accessibility of drinking water;
- 6- Availability and accessibility of free health services (more than 75% get their health services from humanitarian aid-Health insurance);
- 7- Expansion in areas cultivated due to improved security reasons (Good supply of cereals on markets).

Some general facts on West Darfur:

According to the 2009 CBS data and analysis, the **Depth of Hunger in White Nile** is about 255 kcal which is lower than the national average, 344 kcal. This may have to do with injection of food aid.

Depth of hunger is the amount of calories the deprived population has missed to reach the daily Minimum Dietary Energy Requirements per person level.

PHASE 3: Approximately 75% West Darfur state in this phase

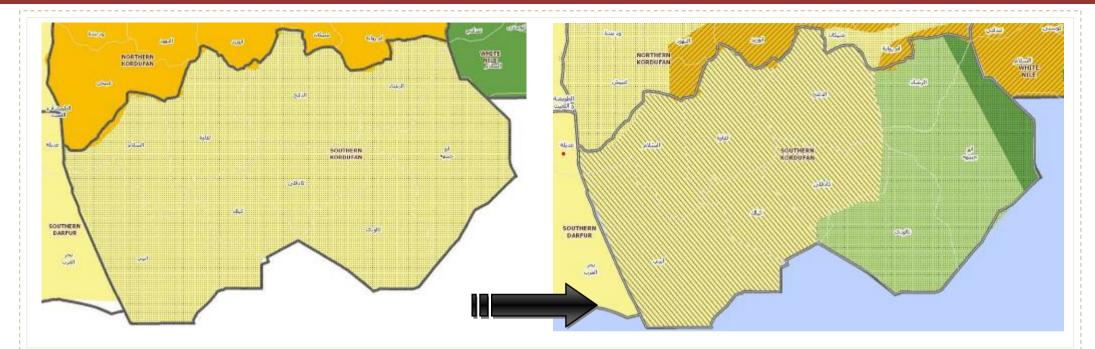
- 1- 70% of areas located in this phase are secure areas;
- 2- Bigger population of IDPs in camps; 60% depends on humanitarian aid;
- 3- Limited income sources and escalating cereal prices;
- 4- Agric-production is lower while food aid is high that IDPs received 50%-100% of food ration especially in the hunger period which takes place between June-November
- 5- Lower health services that no qualified medical personnel exist in the majority of the state;
- 6- Most of their IGAs coming from seasonal labor and not more than 10% depend on employment.

PHASE 4: Approximately 18% of West Darfur state in this phase

- 1- Conflict areas | Mostly IDPs and refugees | Very limited income sources;
- 2- No farming due to insecurity and ownership of farm lands as they are, IDPs high dependency on food aid, Rokerro (High land LZ) has no food aid services.
- 3- Lower health services that no qualified medical personnel in the majority of state and ongoing humanitarian intervention in some localized areas
- 4- Most of their Income Generation Activities coming from seasonal labor and not more than 10% depend on employment.

GENRAL conditions: High price of cereal during rainy season | Over cultivation around the camp lead to environmental degradation, decline of crop production | Limited access to land for IDPs | Low income during rainy season due to limited job opportunities | destruction of crops by floods, soil erosion > areas cultivated | Increase of conflicts (pastoralists and farmers) | Increase in outbreak of animal diseases during the rainy season -FAO, monitoring reports | High cost of production; floods and soil erosion leads to decreased land under cultivation and lower crop yield- this leads to increase vulnerability

3. SOUTHERN KORDOFAN



Narrative summary of food security phases:

PHASE 1: improvement in Rashad, Talodi and Abujibiha Localities due to:

- 1- Improved crop production situation,
- 2- Better rainfall and pasture,
- 3- Improved access to drinking water,
- 4- Stability of commodity prices.

PHASE 2: Three localities are categorized under this phase - Al Buram, Um Durein and AlQoz

- 1- Restriction of pastoralist movement to Warab and Unity States during dry season resulted in conflict over water and pasture,
- 2- Poor rainfall and pasture,
- 3- Limited access to drinking water,
- 4- Unstable commodity prices.

Some general facts for South Kordofan:

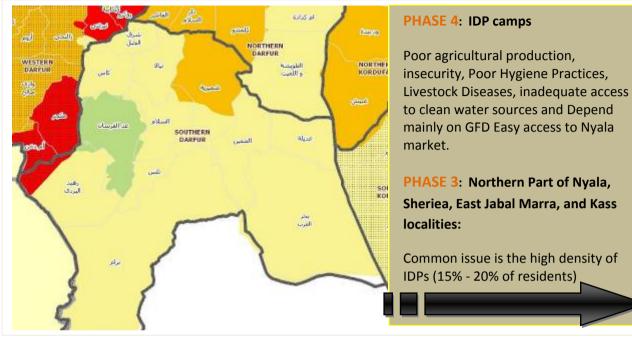
According to the 2009 CBS data and analysis, the **Depth of Hunger in Southern Kordofan** is about 252 kcal which is lower than the national average of 344 kcal. More humanitarian assistance may have covered some of the gaps in the State.

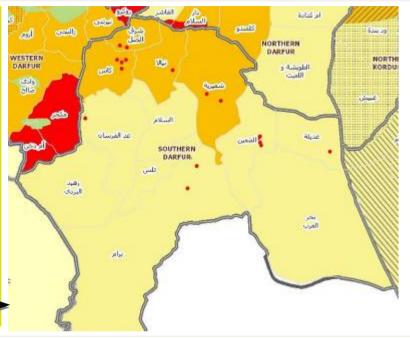
Depth of hunger is the amount of calories the deprived population has missed to reach the daily Minimum Dietary Energy Requirements per person level.

Dietary Energy Consumption (DEC) in South Kordofan is 2140 kcal which is very close to the national average of 2180 kcal. DEC refers to food consumption expressed in terms of kilocalories per person per day basis.

On the other hand, the food expenditure ratio (FR), also known as the 'Engel ratio', was 61 percent for South Kordofan. This means that on average a household spent on food items more than three fifths of their total expenditure. The national figure is 61.4 percent

4.SOUTHERN DARFUR





Narrative summary of food security phases:

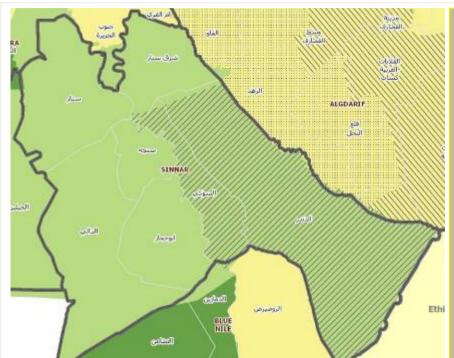
Edd Alfursan from PHASE 1 to PHASE 2 mainly due to the increase of IDP camps, due to the stability and food surplus.

General conditions in Southern Darfur:

- 1- Erratic rainfall and consequent of dry spills during critical period of growth period.
- 2- Unstable security situation due to tribal conflicts. Inaccessibility of remote area during the rainy season
- 3- Poor infrastructures, seasonal roads, markets. Poor access to clean water in terms of quantity and quality.
- 4- High prevalence of human and animal disease.
- 5- Environmental degradation due to concentration of IDPs camps around forests.
- 6- Continuous prices rising due to insecurity and limited quantity of commodities available at local markets levels.

	Popula	ation	Annual	Food	Phase	
Locality	Residents	IDPs%	Rainfall	Deficit	Classification	
Nyala	654,975	20%	353	-80,737	2 (NORTH 3)	
Sharia	327,488	13%	119	-43,622	3	
East Jabal Marra	289,552	10%	1310	-38,157	3	
Kass	286,552	15%	445	-26,766	3	
Edd Alfursan	614,039	7%	596	-22,297	2	
Alsalam	122,808	6%	173	-14,920	2	
Al Daein	491,230	10%	307	-29,652	2	
Adilla	204,680	6%	521	-21,828	2	
Tullus	204,680	0	438	39,665	2	
Rehead Aberdi	614,039	0	477	-9,074	2	
Buram	573,103	13%	551	-3,564	2	
Bahar Alarab	286,553	0%	303	NA	2	
Total	4,669,69	500,00			2	

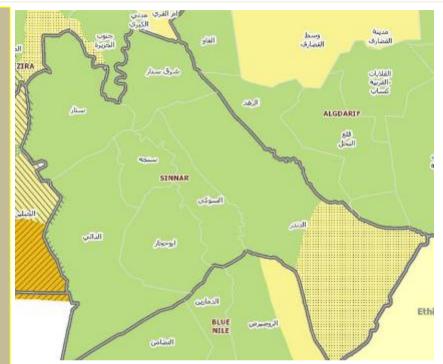
5.SINNAR



PHASE 1 to PHASE2

South-east El Dinder
Locality mainly due to
Poor food diversity
due to habits,
occasionally low
production due to
conflict between
pastoralists & farmers
| Livestock seasonal
movement & lack of
cattle routes and
distribution of water
source





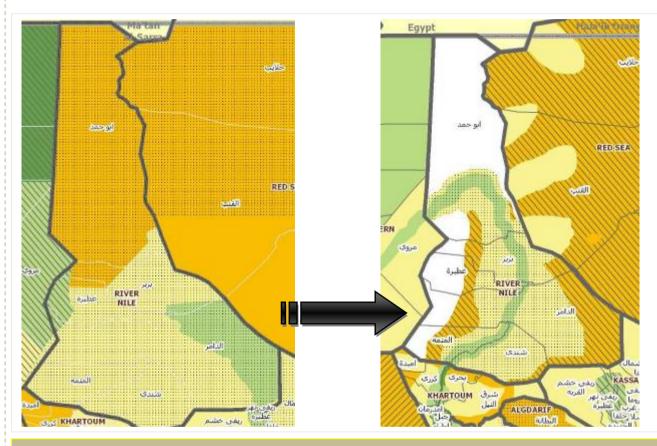
	Locality / Livelihood Zone	Phase	Risk of worsening	Phase (new)	Risk of worsening	State IPC group to provide explanation for any phase change. Can use Indirect (rain, crop		
			phase		phase	production, prices, etc.) and Direct Evidence for the new Phase Classification		
: [Sinja (Abu Hugar + Eldali)	1b	No risk	1B	watch	-Low rainfall in some pockets of the locality.		
i II						-water harvesting practices Herbicide usage		
: [El Dendir (plus alsoky)	1b	Moderate risk	1B	watch	-Low rainfall in some pockets of the locality.		
						-water harvesting practices Herbicide usage Animal prices increase		
	Sennar (plus East Sennar)	1b	No Risk	1B	watch	-water harvesting schemes		
il						- Herbicide usage Animal prices increase		
. lì	Generally moderate food secure							

Generally moderate food secure

According to the 2009 CBS data and analysis, the **Depth of Hunger in Sennar** is about 290 kcal which is lower than the national average of 344 kcal. Sennar is a traditional surplus producing area but pockets of food insecurity exist despite state level surplus. Depth of hunger is the amount of calories the deprived population has missed to reach the daily Minimum Dietary Energy Requirements per person level.

Dietary Energy Consumption (DEC) in South Kordofan is 2200 kcal which is a little higher than the national average of 2180 kcal. DEC refers to food consumption expressed in terms of kilocalories per person per day basis. On the other hand, the food expenditure ratio (FR), also known as the 'Engel ratio', was 61 percent for Sennar. This means that on average a household spent on food items more than three fifths of their total expenditure. The national figure is 61.4 percent.

6.RIVER NILE



Expectation of the three coming months:

- 1- High rate of flood:
 - Resident areas at lower terraces
 - o High rate of land slide which reduce fertile agricultural soil
 - o Deterioration of road conditions
 - Spread of diseases
 - More recession agriculture and increase in irrigation of vast areas which may increase food production.
- 2- Above average rain-fall:
 - o Improvement of pastures
 - o Dense vegetation cover that fix sand encroachment.

Narrative summary of food security phases:

Generally the state is border line food insecure, apart from the generally food secure strip along the Nile which is mainly agricultural zone. While livelihoods activities in southern parts of Atbara, Eddamar I, south & south eastern Shendi, Barbar, and Elmatama localities represent pastoral livelihood zone are in phase 3.

Change in the food security situation across different parts of the states is mainly due to the use of Livelihoods zones, in the recent map instead of the old locality boundaries.

PHASE 1

- 1- Availability of general important services;
- 2- Possible access to market;
- 3- Good infrastructures (road, transportation, communication etc.....
- 4- Sustainability of 5 capitals;

PHASE 2:

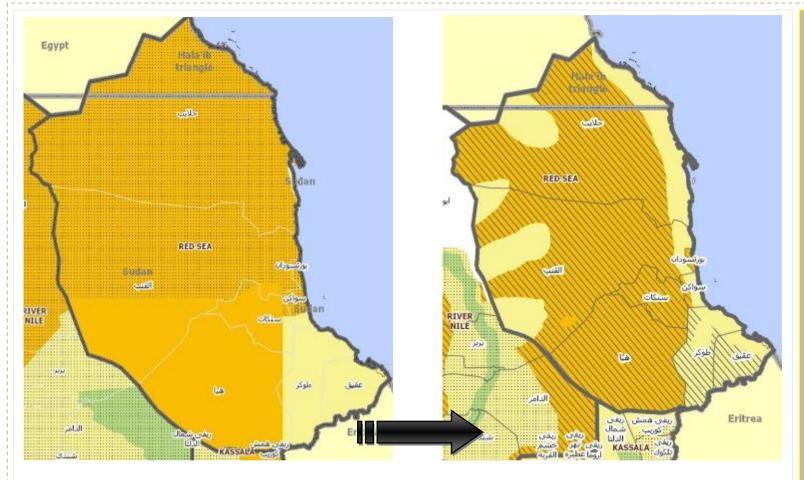
- 1- Poor service;
- 2- Poor infrastructure;
- 3- Difficult access to market:
- 4- Very limited access to natural resources.

PHASE 3:

- 1- Scarcity of food and availability and limited access;
- 2- Scarcity of water;
- 3- Scarcity of basic services;
- 4- No infrastructure;
- 5- More vulnerable to hazard due to the dependency on natural resources.

The hazards that the state faces include: Floods | Land slide | Desertification | Pastures degradation | Mesket | High & increased cost of agricultural inputs.

7.RED SEA



Locality / Livelihood Zone	Phase	Risk of worsening phase	Phase (new)	Risk of worsening phase	State IPC group de explanation for phase change.
Halaieb- Gabiet Almadin	3	Watch	3	Watch	 Limited diversified income sources, especially in the environmentally degraded areas High recurrence of drought and poor previous season production; long distances for accessing water sources
Port Sudan	3	Watch	3	Moderate	 Drinking water problems Poor environmental sanitation High food prices and hence weak purchasing powers
Sinkat	3	No risk	3	moderate	 High malnutrition rate Poor pasture conditions Lack of water for humans and livestock – reduced LS holdings

Narrative summary of food security phases:

The food security situation remains unchanged in most parts of the state, apart from improvements in the agro-pastoral zone in Eastern parts of the state.

Main factors influencing the overall food security situation:

- Scattered population;
- inaccessibility that affected provision of services;
- Low production;
- The state's undernourishment rate is 44% which is the highest compared to the other 14 States of the North and compared to the national figure of 33%

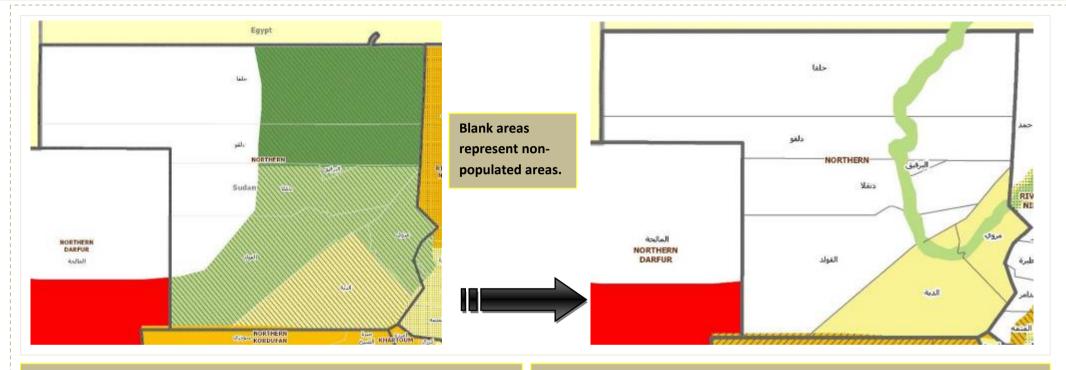
PHASE 2

Tokar & Agig Localities: remains in phase 2 unlike the rest of the pastoral livelihoods zone which remained at phase 3.

Although floods affected livelihoods (livestock, income sources, and accessibility to markets) the situation is generally:

- Increased productivity of crops (maize millet - Vegetables - Cotton) in the 2009-2010 season compared to 2008 - 2009 as a result of improved recession agriculture.
- The increase in the flood-irrigated areas has led to improved pasture and increase the cultivated area.

8. NORTHERN



Narrative summary of food security phases:

PHASE 1

In all localities (around river Nile) except Merewe and Aldeba

- Food availability and accessibility, dietary diversity;
- Soil fertility: moderate to high;
- Water: available and accessible;
- o Moderate risk and hazard;
- Good utilization of the 5 assets;

PHASE 2

Merewe and Aldeba (exept river nile strip on phase 1)

- Deficit in cereal production in 2009 /2010 (MOA 1) coupled with signs of poverty (FAO, & ARC : Poverty Mapping
- o No change in Phase classification for Aldebba locality.

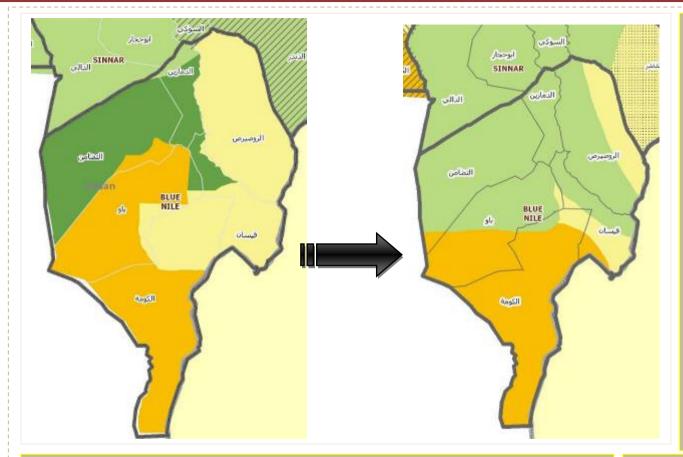
Some general facts for Northern State:

According to the 2009 CBS data and analysis, the **Depth of Hunger in Northern State** is about 272 kcal which is higher than the national average, 344 kcal. Depth of hunger is the amount of calories the deprived population has missed to reach the daily Minimum Dietary Energy Requirements per person level.

Dietary Energy Consumption (DEC) in Northern State is 2630 kcal as opposed to the national average of 2180 kcal. DEC refers to food consumption expressed in terms of kilocalories per person per day basis.

On the other hand, the food expenditure ratio (FR), also known as the 'Engel ratio', was 62 percent for White Nile. This means that on average a household spent on food items more than three fifths of their total expenditure. The national figure is 61.4%.

9.BLUE NILE



Some general facts for Blue Nile:

According to the 2009 CBS data and analysis, the **Depth of Hunger in Blue Nile** is about 287 kcal which is lower than the national average, 344 kcal.

Depth of hunger is the amount of calories the deprived population has missed to reach the daily Minimum Dietary Energy Requirements per person level. The prevalence of undernourishment in Blue Nile is 24% as opposed to the national figure of 33%.

Dietary Energy Consumption (DEC) in Blue Nile is 2300 kcal as opposed to the national average of 2180 kcal. DEC refers to food consumption expressed in terms of kilocalories per person per day basis.

On the other hand, the food expenditure ratio (FR), also known as the 'Engel ratio', was 62 percent for Blue Nile. This means that on average a household spent on food items more than three fifths of their total expenditure. The national figure is 61.4%.

Phase 1:

- Stable crop prices
- o rainfall is above normal in the state
- o good land preparation this season

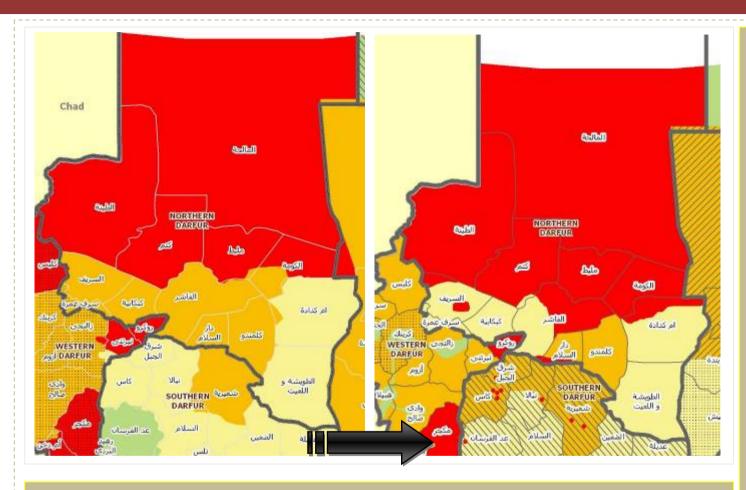
Phase 2:

- o Inadequate food access with recurrent below normal rainy season
- o Expected infestation of pests and diseases for animal and crops
- o Land tenure tension which may lead to conflict between farmers and pastoralists
- o Risk of losing their assets due to lake water level because of inadequate compensation

Phase 3:

- Problem of access to land; Agro/pastoralist disputes; inadequate food access
- o Check points restrictions; and social security problems
- Seasonal wild fires.
- Difficult Access due to poor roads conditions, especially during rainy seasons
- o Spread of animals diseases

10. NORTHERN



Some general facts for N. Darfur:

According to the 2009 CBS data and analysis, the Depth of Hunger in Northern Darfur is about 309 kcal which is lower than the national average, 344 kcal. Depth of hunger is the amount of calories the deprived population has missed to reach the daily Minimum Dietary Energy Requirements per person level. The prevalence of undernourishment in North Darfur is 41% as opposed to the national figure of 33%. Dietary Energy Consumption (DEC) in North Darfur is 1960 kcal as opposed to the national average of 2180 kcal. The food expenditure ratio (FR) – a household in N Darfur spends 62 percent of their income on food while the national average is 61.4%.

Narrative Summary

PHASE 4 represents 56.2% of the state

Include: Malha – Mallet- Kutom Koma – Fasher and Northern of Um Kedadda.

- 1- Malnutrition rates are high (SAM GAM rates are above the threshold).
- 2- Poor food availability mainly due to poor harvest of last season
- 3- Floods (Kotum & Fasher rural)
- 4- High prices of grain (270 300 SDG)
- 5- Livestock diseases and outbreak
- 6- Restriction of livestock movement
- 7- Poor access to market

PHASE 3 represents 18.7%

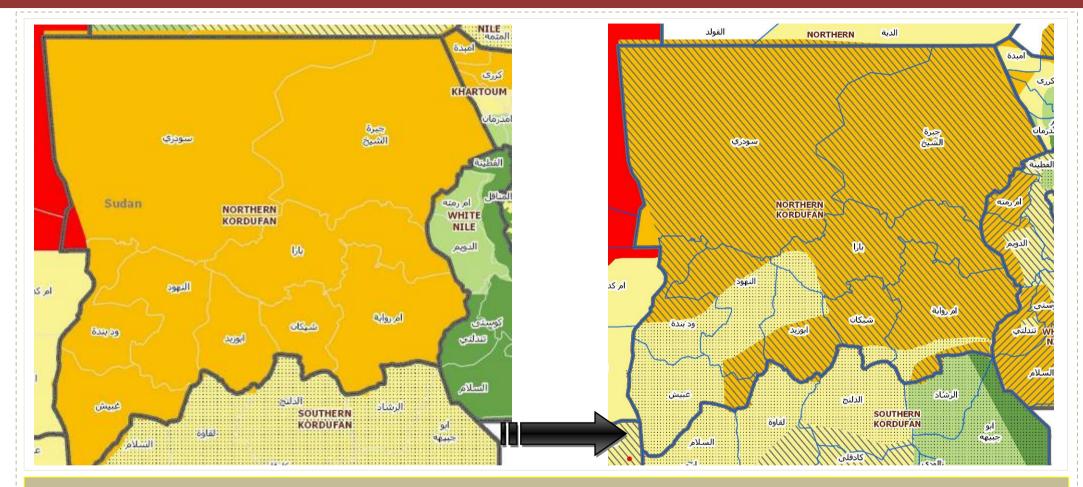
Include Um Kadadda- Darsalam and Kalemando.

- 1- Poor harvest of last year.
- 2- High prices of grain.
- 3- Limited natural resources (water and pasture).
- 4- Long dry season.

PHASE 2 represents 25%

- 1- Relatively stable nutrition status
- 2- Potentiality of cash crop production
- 3- Good access to market
- 4- Livelihood assets were less affected.

11.NORTHERN KORDOFAN



Narrative Summary

PHASE 3 is dominating the state with moderate risk level; however PHASE 2 areas should be at watch to avoid worsening situation. 75% of the Gum Arabic zone is PHASE 3 due to low price of gum compared to previous years (from 350 to 70 SDG/ 90 kg bag). Areas bordering Darfur are also facing serious security problem due to recurrent conflicts.

In general, the state is negatively affected by the environmental changes in production of both crop and animal as appeared in fluctuated rainfalls and dry spell in the past few years and for long term.

Increasing in cost of living because of uncontrollable market prices reflected in cost of production in animal and food projects, especially for small scale farmers who were greatly affected by increases of different kinds of taxes. Moreover, decrease in productivity coupled with a decrease in planted area continued to be another reason stated.

12.KHARTOUM



Narrative Summary

General food security situation is dominant

- PHASE 1: 1A (area around the Nile)
- o PHASE 1: 1B (uran area)
- o PHASE 2 (pastoral zone)
- o PHASE 3 Marginal area and displaced population

Livelihood zones:

- o Agriculture
- Pastures
- Trade activities
- o Urban Zone
- o Marginal zone

Population analysis:

The state is considered as over populated area (each locality the pop. Is over 700 thousands)

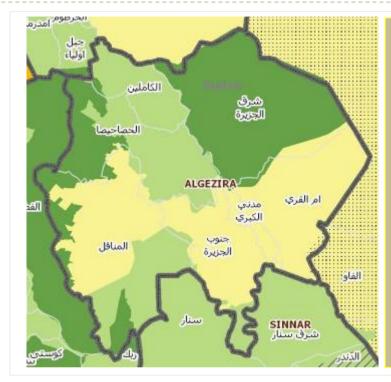
- Majority of population are urban (86%)
- Rural area (14%)
- Jebel Awelia is more affected locality in the state displaced people, diseases and tension

Some general fact on Khartoum:

According to the 2009 CBS data and analysis, the **Depth of Hunger in Khartoum** is about 343 kcal which is equal to the national average, 344 kcal.

Depth of hunger is the amount of calories the deprived population has missed to reach the daily Minimum Dietary Energy Requirements per person level.

13.ALGEZIRA



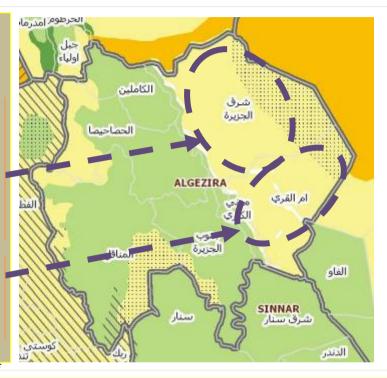
Narrative summary of food security

PHASE 2

Deterioration of the food security situation **in north eastern** part of the state (Agro pastoral zone) covering East Gezira locality | Moderately adequate food access| Good water access in urban areas (439 source), as oppose to rural (31 source), lack of/no access in north & north east.

Targeted planting area in 2010 -11 rain-fed sector is 300.000 feddan | no distribution of improved seed,

Om elgura Locality | Food security situation remains moderately insecure. Crude mortality is more than .5 per 10,000 | Borderline/ adequate food accesses no food diversity moderate access of water.



PHASE 1 to PHASE 2

Western part of Elhasahesa locality: Usually adequate food and water access but unsafe mainly in western Elhasahesa locality. Crop pests, Diseases, esp livestock diseases-Agropastoralist disputes-Population movement-Price fluctuation; Flood affects the agro-pastoral sector, increase diseases & damage the houses, livestock and food shortages.

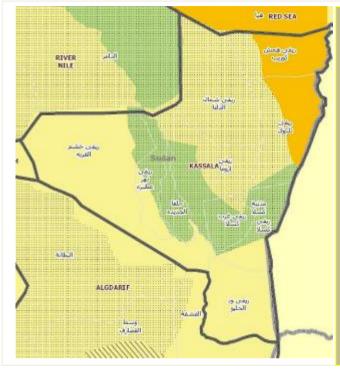
PHASE 2 to PHASE 1

LocalitySouth Gezira | Improving food security situation due to moderately adequate food access, and water access (18 source in urban, and 551 in rural areas), food intake moderately diversified. Livelihoods activities in the locality are: Agricultural in Gezira scheme) and Agro-pastoral. (Targeted area rainfed 300,000 faddan) no distribution of improved seed

Elmnagel locality | Improving food security situation in the central parts of the locality due to moderately adequate food access (water access problems in eastern and northern, and southern parts of the locality). Water sources in the locality are 499 sources in rural, 28 source in urban). Livelihoods activities are: Agricultural in Gezira scheme, and Agro-pastoral (targeted rain-fed area 250,000 faddan).

PHASE 1: Medani locality: Adequate & stable food access, good diversity and access to Water, basic services (health & education). Main Livelihoods activities are Agricultural and Agro-pastoral. Food security situation remains unchanged in Elkamleen locality | usually adequate & stable food access, good diversity in urban, moderately good access of water :25 water source in urban, 315:source in rural.

14.KASSALA

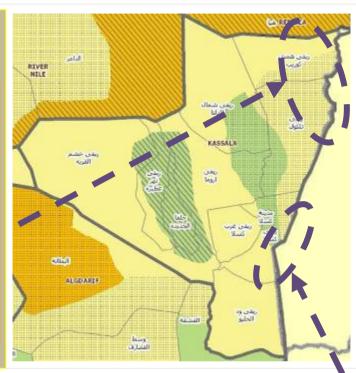


Narrative summary of food security

Phase 3 to PHASE 2

Improving food security situation in the north-western parts of the state due to the following:

- Improved pasture conditions, good and early land preparation, good rains leads to early cultivation, provision of seeds to the farmers, more opportunities for agricultural credit by (ABS), improvement in purchasing power due to compensation of Siteet planned project for Food Security to local population, introduction of nutrition programs by UNICEF, WFP and SMOH.
- The following might put the localities at risk: Lack of safe drinking water, poor sanitation, flash floods that might damage farms and small plants, and possibility of spread of crop pests and diseases, difficulty in physical accessibility to markets and different parts of the localities is highly expected during the rainy season.

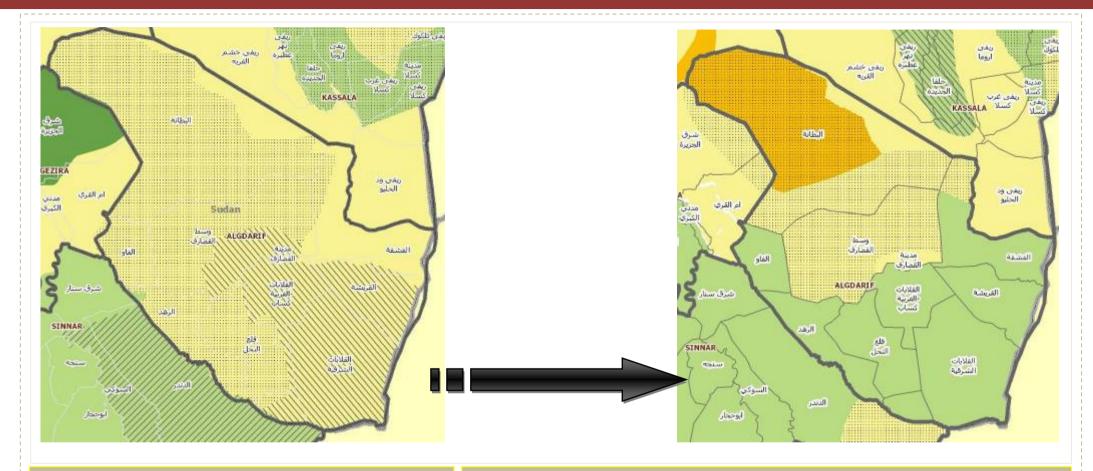


Deterioration of food security situation in Kassala and rural Kassala localities in addition to the following scenarios that might affect the current situation: Influx of refugees add more pressure on the state economy, increase in prices of some food commodities, reduced purchasing power for the HHs, and reduction in agricultural production, and expectation of floods. Floods reported to have killed 15 people, wounded 11 and destroyed about 400 houses.

No major changes in the food security situation in most of the localities

No major changes in the food security situation in most of the localities						
Locality /	Phas	Risk of worsening	Phase	RWP	State IPC group explanation for any phase change	
Livelihood Zone	е	phase (RWP)	(new)	(new)		
River Atbra/New	1b	Watch	1b	Moderate	Due to the recent heavy rains and storms HHs assets, livestock and livelihoods (agriculture, income sources) were affected .with a	
Halfa					high possibility of worsening availability of safe drinking water during the current rainy season, water-borne diseases, reduced	
					physical accessibility to main markets is expected during the wet season.	
Rural/western	2	Watch	2	No Risk	Risks of crop washing by floods, prevalence of crop pests and diseases, anticipated farmer-ship herder conflicts and land mines are	
Kassala					highly expected.	
Algash localities	2	Watch	2	Watch	The following contributed in stabilization of the situation; stable flows of Gash river increased irrigated lands, good land	
(rural aroma, North					preparation, expectations of increased crop production, introduction of nutrition programs by UNICEF, WFP and SMOH,	
Delta					distribution of fodder concentrates, in addition to that the expected risks are poor irrigation system and Reduction of physical access	
					due to heavy rainy season,	
Rural Khasm Al	2	No risk	2	No Risk	Good and early land preparation, good rains leads to early cultivation, provision of seeds to the farmers, more opportunities for	
girba & Wadelhilaw					agricultural credit by (ABS), improvement in purchasing power due to compensation of Siteet planned project for Food Security to	
					local population, good fishing opportunities at girba Dam lake. Risks: flood may damage farms and small plants and possibility of	
					spread of crop pacts and dispasses, difficulty in physical accessibility to markets during the rainy space.	

15.GEDARIF



Phase 1:

- O Stable crop prices; rainfall is above the normal in the state
- o good land preparation this season
- o Expected of infestation of Pests and diseases due to high rainfall

Phase 2:

- o Rainy season (quantity of rains) expected to improve situation
- Expected increase in production due to good rains
- o Expected of infestation of Pests and diseases due to high rainfall
- Expected floods
- Tribal conflict was settled

Phase 3:

- o Population suffered from the lack of water due to low rainfall
- Nutrition survey showed that SAM is 6.9% (very high)
- 0

Some general facts for Gadarif:

According to the 2009 CBS data and analysis, the Depth of Hunger in Gadarif is about 283 kcal which is lower than the national average, 344 kcal. Depth of hunger is the amount of calories the deprived population has missed to reach the daily Minimum Dietary Energy Requirements per person level.

Dietary Energy Consumption (DEC) in Gadarif is 2360 kcal as opposed to the national average of 2180 kcal.