# **SUDAN**

HIGH FOOD INSECURITY LEVELS IN SUDAN PERSIST, DRIVEN BY HIGH INFLATION, A DETERIORATING **ECONOMY AND HIGH FOOD PRICES** 

# **IPC ACUTE FOOD INSECURITY ANALYSIS JUNE - DECEMBER 2020 Issued July 2020**

CURRENT JUNE - SEPTE	MBER 202	20
	Phase 5	000,000 People in Catastrophe
9.6M 21% of the population	Phase 4	<b>2,200,000</b> People in Emergency
analysed People facing high	Phase 3	<b>7,400,000</b> People in Crisis
acute food insecurity (IPC Phase 3 and above)	Phase 2	15,900,000 People in Stress
IN NEED OF URGENT ACTION	Phase 1	19,700,000 People in Food Security

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acute food insecurity (IPC Phase 3 and above)	Phase 2	15,900,000 People in Stress
IN NEED OF URGENT ACTION	Phase 1	19,700,000 People in Food Security

#### **Overview**

In the current period (June to September 2020), an estimated 9.6 million people (21% of the population analysed) are experiencing Crisis or worse levels of food insecurity (IPC Phase 3 or above) and are in need of urgent action. This is the highest figure ever recorded in the history of IPC in Sudan compared to previous years. Around 2.2 million people are facing an Emergency acute food insecurity situation (IPC Phase 4) and around 7.4 million people are facing Crisis acute food insecurity (IPC Phase 3), while nearly 15.9 million people are estimated to be in Stress (IPC Phase 2). This is also a high figure compared to previous analyses; a result of population shifting to worse phases. Overall, all localities from 18 Sudanese States have been classified, with exception of At Tina locality in North Darfur and Abyei PCA area in West Kordofan, where there was no data collected and similar locality data could not be used either.

Food insecurity remains alarmingly high in Sudan with increased and protracted displacement, economic decline and inflation, and high food price hikes exacerbated by the impacts of the COVID-19 pandemic. The lockdown measures to prevent the spread of the COVID-19 pandemic significantly decreased commodity movement, market function and cross-border trade, and compromised livelihoods, daily labour opportunities, reducing household purchasing power and food access of the vulnerable population.

## **Key Drivers**



#### **COVID-19 prevention** measures

Lockdown and other measures put in place to prevent COVID-19 spread had a negative impact on food availability and access, more precisely on prices, on income and food expenditure.



#### **Economic decline** and inflation

Significant macroeconomic challenges still prevail in the country, resulting in high inflation rates exacerbated by COVID-19 prevention : measures

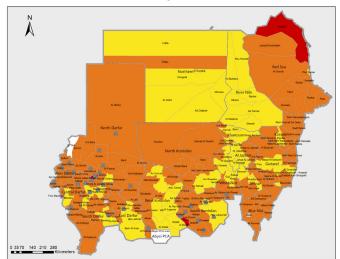


#### **Conflict induced** displacements

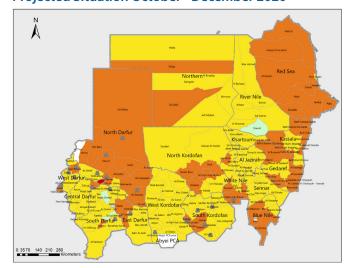
Increased population movements and displacement due to fresh and protracted conflict. Internally displaced population reached 1.89 million people.

#### PROJECTED OCTOBER - DECEMBER 2020 Phase 5 000.000 People in Catastrophe Phase 4 724,000 People in Emergency 14% of the population analysed Phase 3 5,700,000 **People in Crisis** People facing high acute food insecurity Phase 2 16,000,000 (IPC Phase 3 and above) **People in Stress** 22,800,000 Phase 1 IN NEED OF URGENT People in Food **ACTION** Security

## **Current Situation June - September 2020**



## **Projected Situation October - December 2020**



#### **Key for the Map**

## **IPC Acute Food Insecurity Phase Classification**

1 - Minimal

3 - Crisis

5 - Famine

4 - Emergency

- 2 Stress
- Areas with inadequate evidence Areas not analysed

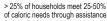
# Map Symbols

Urban settlement classification

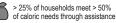
IDPs/other settlements classification

### Area receives significant humanitarian food assistance (accounted for in Phase classification)























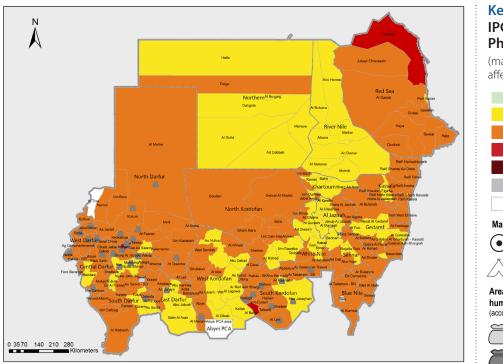








# **CURRENT SITUATION MAP AND POPULATION TABLE (June-September 2020)**



## Key for the Map IPC Acute Food Insecurity Phase Classification

(mapped Phase represents highest severity affecting at least 20% of the population)

1 - Minimal

2 - Stress

3 - Crisis

4 - Emergency

5 - Famine

Areas with inadequate evidence

Areas not analysed

Map Symbols

Urban settlement classification

IDPs/other settlements classification

Area receives significant humanitarian food assistance

(accounted for in Phase classification)

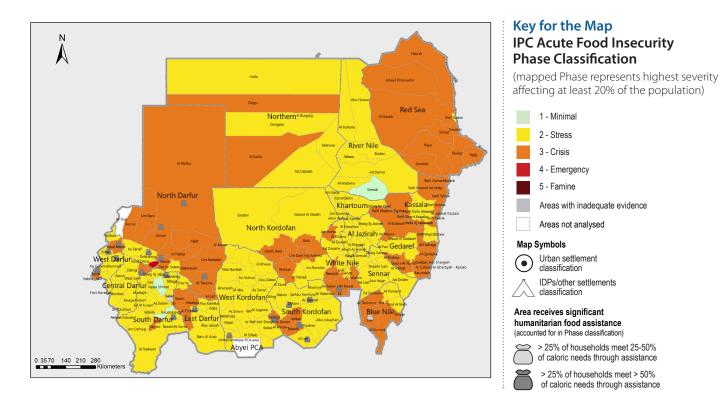
> 25% of households meet 25-50% of caloric needs through assistance

> 25% of households meet > 50% of caloric needs through assistance

State	Total	Phase 1		Phase 2		Phase 3		Phase 4		Phase	5	Phase 3+	F
	population analysed	#people	%	#people	%	#people	%	#people	%	#people	%	#people	%
Northern	969,164	648,244	67	241,340	25	79,579	8	0	0	0	0	79,579	8
River Nile	1,564,643	1,161,322	74	285,212	18	118,109	8	0	0	0	0	118,109	8
Khartoum	8,497,019	4,460,935	52	2,604,336	31	1,006,897	12	424,851	5	0	0	1,431,748	17
Gazera	5,283,870	2,518,219	48	1,887,295	36	645,624	12	232,732	4	0	0	878,356	17
Sinnar	2,016,780	839,343	42	804,428	40	324,211	16	48,797	2	0	0	373,008	18
Blue Nile	1,273,283	356,571	28	484,000	38	344,963	27	87,749	7	0	0	432,713	34
White Nile	2,612,410	1,055,509	40	1,111,626	43	304,112	12	141,163	5	0	0	445,275	17
North Kordofan	2,126,327	951,891	45	721,574	34	452,862	21	000,000	0	0	0	452,862	21
South Kordofan	1,902,123	484,482	25	700,391	37	532,468	28	184,783	10	0	0	717,250	38
West Kordofan	1,748,349	936,384	54	494,230	28	237,926	14	79,809	5	0	0	317,735	18
Kassala	2,624,576	973,448	37	998,610	38	527,764	20	124,755	5	0	0	652,518	25
Gadarif	2,331,140	757,333	32	1,122,420	48	437,781	19	13,606	1	0	0	451,387	19
Red Sea	1,510,348	717,712	48	363,417	24	308,512	20	120,707	8	0	0	429,219	28
Central Darfour	1,692,165	865,265	51	320,491	19	360,072	21	146,337	9	0	0	506,410	30
North Darfour	2,426,498	564,816	23	1,084,848	45	505,858	21	270,977	11	0	0	776,835	32
West Darfour	1,838,371	909,300	49	384,280	21	426,079	23	118,711	6	0	0	544,791	30
South Darfour	3,702,165	1,158,756	31	1,783,234	48	618,028	17	142,147	4	0	0	760,175	21
East Darfur	1,078,878	368,522	34	499,639	46	179,837	17	30,880	3	0	0	210,717	20
Grand Total	45,198,109	19,728,053	44	15,891,371	35	7,410,682	16	2,168,003	5	0	0	9,578,685	21

Note: A population in Phase 3+ does not necessarily reflect the full population in need of urgent action. This is because some households may be in Phase 2 or even 1 but only because of receipt of assistance, and thus, they may be in need of continued action.

# PROJECTED SITUATION MAP AND POPULATION TABLE (October-December 2020)



State	Total	Phase 1		Phase 2		Phase 3		Phase 4		Phase	5	Phase 3+	F
	population analysed	#people	%	#people	%	#people	%	#people	%	#people	%	#people	%
Northern	969,164	578,383	60	316,766	33	74,014	8	0	0	0	0	74,014	8
River Nile	1,564,643	1,061,264	68	394,702	25	108,677	7	0	0	0	0	108,677	7
Khartoum	8,497,019	4,520,414	53	2,761,531	33	1,138,601	13	76,473	1	0	0	1,215,074	14
Gazera	5,283,870	2,518,219	48	2,257,310	43	473,685	9	34,656	1	0	0	508,341	10
Sinnar	2,016,780	1,193,542	59	621,560	31	201,678	10	0	0	0	0	201,678	10
Blue Nile	1,273,283	460,321	36	586,001	46	195,721	15	31,240	2	0	0	226,961	18
White Nile	2,612,410	1,046,713	40	1,086,347	42	339,933	13	139,417	5	0	0	479,350	18
North Kordofan	2,126,327	1,132,448	53	659,385	31	334,494	16	0	0	0	0	334,494	16
South Kordofan	1,902,123	673,633	35	830,224	44	290,614	15	107,652	6	0	0	398,266	21
West Kordofan	1,748,349	1,132,005	65	482,197	28	126,560	7	7,588	0	0	0	134,148	8
Kassala	2,624,576	1,188,900	45	967,634	37	449,324	17	18,718	1	0	0	468,042	18
Gadarif	2,331,140	961,669	41	916,469	39	451,855	19	1,146	0	0	0	453,002	19
Red Sea	1,510,348	766,404	51	445,425	29	240,060	16	58,459	4	0	0	298,519	20
Central Darfour	1,692,165	1,107,282	65	306,421	18	222,383	13	56,080	3	0	0	278,462	16
North Darfour	2,426,498	643,668	27	1,256,540	52	334,228	14	192,062	8	0	0	526,290	22
West Darfour	1,838,371	1,242,025	68	383,600	21	212,747	12	0	0	0	0	212,747	12
South Darfour	3,702,165	2,078,636	56	1,310,577	35	312,952	8	0	0	0	0	312,952	8
East Darfur	1,078,878	525,231	49	403,905	37	149,743	14	0	0	0	0	149,743	14
Grand Total	45,198,109	22,830,757	51	15,986,594	35	5,657,268	13	723,491	2	0	0	6,380,759	14

Note: A population in Phase 3+ does not necessarily reflect the full population in need of urgent action. This is because some households may be in Phase 2 or even 1 but only because of receipt of assistance, and thus, they may be in need of continued action.



# **CURRENT SITUATION OVERVIEW (June-September 2020)**

The current IPC analysis period (June – September 2020) indicates a significant increase of highly food insecure people in Sudan. Overall, 9.6 million people are estimated to be in need of urgent action to save lives, reduce food consumption gaps, restore and protect livelihoods. This represents a 65 percent increase compared to the same period last year (IPC analysis: June – August 2019).

Of major concern are the 10 out of the 18 states of Sudan, a major jump from two compared to the previous IPC analysis (June – August 2019). This is indicative of the severity and magnitude of Sudan's high acute food insecurity, where more than 20% of the population are classified in Crisis (Phase 3) or worse.

The states with highest acute food insecurity are South Kordofan, Blue Nile, North Darfur, Central Darfur, West Darfur, Red Sea, Kassala, South Darfur, North Kordofan and East Darfur. Additionally, the most affected localities are Al Buram, North Jebel Marra and Halaib; in South Kordofan, Central Darfur and Red Sea. These localities are currently classified in Emergency (IPC Phase 4).

## Most affected groups

- 1) The people facing high food insecurity are the internally displaced people (IDPs), returnees, those stranded in conflict areas, refugees from South Sudan and other neighbouring countries.
- 2) Poor groups from agropastoral and pastoral communities in rural areas of Western, Eastern and Northern Sudan (45%) whose livelihoods are directly affected by the impact of COVID-19 control measures.
- 3) Poor groups in urban and semi-urban centers (25%), including Khartoum, Jazeera, White Nile and Red Sea state, in addition to other main towns in the country.

The measures put in place to prevent the spread of the COVID-19 epidemic disrupted access to food and reduced operational capacities of infrastructural facilities such as roads, seaports, and airports, which affects supply chains. This has directly affected the food markets and caused serious labour shortages. The established lockdowns limited income generating opportunities for casual labourers. The soaring food prices and poor purchasing power have negatively affected access to food and essential needs of the population. Sudan continues to suffer from protracted conflict and a high number of internally displaced people (1.89 million) that have caused livelihood disruption, poverty and destitution.

## **Food Availability**

Food availability during the current analysis period is compromised by lower production in sorghum and millet, the main staple foods for most of the Sudanese people. The Crop and Food Supply Assessment Mission report (CFSAM, February 2020) estimated national cereal production in 2019/20 at 5.1 million tonnes, 57% below the previous year and 18% less than the five-year average, mostly due to reduction in planted areas and lower yields. Sorghum production estimated at 4,0 million tonnes, 26% lower than the previous year and 19% less than the five-year average. Millet production was estimated at 1.1 million tonnes, 63% lower than the bumper production of 2018 and 16% less than the five-year average.

Wheat, which is mainly grown in Northern, River Nile states and irrigated sectors, benefits from an increase in production compared to the previous years. Closure of borders with neighbouring countries has severely impacted the commodity chain and the exchange rate, and migrant labourers who seek opportunities across borders. Because of high dependency on commodity exchanges and cross-border trade between neighbouring countries, and due to limited/no domestic availability of food, the local authorities adopted a package of policies for intervention, through application of social distancing in exchange of commodities, in adherence of the established precaution measures.

The 2019-2020 agricultural season registered below average production due a range of factors such as the high cost of production, flooding, pest infestations, which affected most cultivated areas, and the effects of the COVID-19 pandemic, which led to restrictios on the movement of commodities and agricultural activities. In addition, the restrictions to prevent the pandemic disrupted fish and livestock exports to Saudi Arabia, affecting livelihoods of the households along the fish and livestock value chain.

Desert Locust: In the current period, there were reported desert locust infestations in Red Sea, Northern and River Nile states, including the Nile basin. There was no significant damage to pasture and winter crops. Control operations managed to treat 193,000 Ha. Nevertheless, DLIS forecast a second-generation of immature Desert Locust swarms have now started to form, and an increasing number of swarms are expected to migrate northwards with the prevailing winds to Ethiopia and Sudan. Hence, Sudan, in particular, as well as Ethiopia and South Sudan, remain on high alert during the next months. Anticipatory measures and all efforts should be directed to monitor the situation closely throughout the Desert Locust summer breeding zone.

#### **Food Access**

Continuous macroeconomic challenges, the deterioration of the local currency, high inflation rates and hikes in the prices of staple foods and essential commodities, hampered the ability of many people, particularly the most vulnerable households, from accessing adequate and high quality food. Sudan's annual inflation rate increased to 114.23% in May 2020, compared to 98.8% in April 2020 and is likely to continue moving upward throughout the analysis period. The COVID-19 related price rises are in addition to the already steadily accelerating year-on year inflation.

Prices of staple foods have significantly increased across the country. Sorghum and millet prices increased by more than 100% during harvest period (October 2019–February 2020) compared to the same time period a year earlier, and by over 200% compared to the five years average. The increase in food prices is attributed to low production during 2019/2020 season, affected by multiple natural and man-made factors. Furthermore, increases in food prices have been induced by the measures imposed by authorities to stem the



spread of COVID-19 at the national and local levels. In addition, prices increased due to the high cost of transport in addition to the increased market demand due to stockpiling. Staple food prices have continued to increase more rapidly than normal in May 2020 and remained significantly higher compared to the previous year and the five year average. As of June 2020, cereal prices continue to significantly increase by more than three times compared to last year and around four times compared to the last five year average.

Generally, due to the different level of restriction measures, the impacts of COVID-19 are less severe in rural areas compared to in urban areas, where households may have better access to food stocks from their own production. However, the supply chain of many food suppliers is partially affected due to the restriction and breakdown of rural markets' integration with major urban markets. Moreover, Sudan shares borders with seven countries, and border closures/restrictions due to COVID-19 prevention have affected the trade and market systems and supply routes for essential export and import commodities, influencing prices in the local market

The macroeconomic difficulties/currency depreciation persist, the prices of non-locally produced food items continue increasing over all seasons, meanwhile the income of poor households are challenged by limited access to low waged sources of income/ earnings and unemployment. The SDG/USD reached 81% in April 2020, during the post-harvest period. High food prices, the terms of trade values favouring staple food producers/sellers than those of the livestock owners, resulted in increased prices affecting total average expenditure, which were already elevated in terms of food expenditure. Market lockdown and decreased wage labour by COVID-19 control measures have reduced the ability of poor households to afford the basic food basket.

#### **Food Utilization**

Most of Sudan's rural population lack safe drinking water, with limited access to improved sanitation facilities, both during dry and rainy seasons. Most of the rural households also lack clean fuel sources and are therefore heavily reliant on the use of wood or charcoal as fuel. Previous studies and statistics show that only about a third of the Sudanese population has simultaneous access to basic water and sanitation, with low levels of proper handwashing with soap. Often, people walk long distances to collect water from crowded sources. This presents significant challenges in the containment efforts to prevent the spread of COVID-19 if there is widespread community transmission.

# PROJECTED SITUATION OVERVIEW (October-December 2020)

## Key assumptions for the projection period

The key assumptions for the projection period are based on the most likely scenario in the country between October and December 2020. Sudan has a diverse agro-ecology and livelihood system that requires different considerations in establishing the assumptions during the projection period. The rural livelihood systems include pastoralism, agro-pastoralism and crop farmers. The pastoralists predominantly live in areas where rainfall does not support any kind of cropping, but allows enough pasture and watering points for livestock herding. The agro-pastoralists are able to grow mainly millet in most years, but rely very heavily on livestock production to guarantee their survival. The crop production is predominantly rain-fed in many parts of Sudan, irrigated cultivation by riverside smallholders and medium to high commercial farms cultivating cereals and high-value crops.

- Desert Locust: As the vegetation cover is found to be green in the areas that received light to moderate rainfall as well as along the Nile Valley and pivot schemes, this may create favourable conditions for scattered locust to congregate, copulate and lay eggs in those breeding areas during the forecasted period. According to the DL development of East Africa, the possibilities of some swarms to migrate from South Sudan, Ethiopia, Uganda and Kenya to summer breeding areas in Sudan are increasing significantly during the forecasted period. As per DLIS, a second-generation of immature DL swarms have now started to form, and an increasing number of swarms are expected to migrate northwards with the prevailing winds to Ethiopia and Sudan. Therefore, Sudan in particular, as well as Ethiopia, and South Sudan remain on high alert during the next four weeks, anticipatory measures and all efforts should be directed to monitor the situation closely throughout the DL summer breeding zone.
- Floods: Expected flash floods in vulnerable areas are likely to impact agriculture and lead to the outbreaks of diseases such as malaria and cholera.
- COVID-19 restrictions on movement are likely to be lifted and this will lead to improved agricultural labour during the harvest period and other labour opportunities to improve income sources. The flow of remittances is expected to improve if the impact of the COVID-19 pandemic on livelihoods and movement across improves.
- Economic crisis: High prices and inflation has been on an increase since January 2020 and is expected to remain high during the October-December period.
- Disease outbreaks: Human and animal diseases and crop pests are expected to increase during the projection period, due to the seasonality of some epidemic diseases such as malaria in flood-prone areas. Livestock disease such as Foot and Mouth Disease and East Coast Fever are expected to affect the pastoralist areas during this period.



- Conflict: Insecurity, tribal/ethnic clashes and natural resource based conflict between the crop farmers and pastorists are expected during this period.
- Rainfall: The majority of the states in Sudan experience unimodal rainfall patterns. The food security situation is expected to improve because of normal to above-normal rainfall forecasts, likely generating above average pasture conditions and water availability. This will support normal livestock body conditions, and to boost crop yields in rain fed areas.
- Crop production and harvest: Despite the impact of COVID-19 on agricultural activities, good crop production and harvest is expected, creating opportunities for daily labour activities, which will increase income and access to food.
- Livestock production: The above normal rainfall is likely to generate above average pasture conditions and water availability. This will support normal livestock body conditions. As a result, livestock prices are likely to remain stable but at a higher level compared to last year's and the 5 year average.
- **Prices:** Prices are expected to drop during the projection period as low local consumer demands and supply will influence prices during the harvest period. Cereal prices are likely to start seasonal decrease during harvest period. However, prices will remain above average compared to last year and the five year average; this is mainly attributed to continuous macro-economic changes, high inflation rates and a deterioration in the local currency.

### **Projected Situation Overview**

An estimated 6.4 million people (14% of the total population) are expected to experience Crisis or worse levels of acute food insecurity (IPC Phase 3 and above) and will be in need of urgent action. This figure is the highest on record since the introduction of the IPC analysis in Sudan. Around 723,491 individuals are in an Emergency situation of acute food insecurity (IPC Phase 4) and around 5.7 million individuals are in Crisis (IPC Phase 3), while nearly 16 million are estimated to be in Stress (IPC Phase 2).

During the projection period (October-December 2020), the food security situation is expected to improve relative to the current situation, as a result of the positive prospects on the upcoming 2020/2021 harvest season, the increased stocks at household level and an improved livestock productivity, water availability. Expected improvement in crops and livestock productivity will impact positively on availability of food stock, household income, purchasing power resulting in an improved access to food. Improved food availability at household levels will reduce the reliance on markets for food supplies. As a result, the majority of households are expected to have improved food consumption.

### **Food Availability**

Generally, a higher yield is expected during the harvest season (October- December 2020), with good productivity of food and cash crops, which will improve household level food stocks from own production. According to ICPAC and Sudan Metrological forecast, normal to above normal rain are forecasted during the production season, which will have a significant impact on crop production and availability of pasture and water for livestock producing areas. The latter, will positively affect availability of milk and meat at household level and supply to the local market. Food availability from own production, in-kind payment from agricultural labour and wild foods are likely to improve during projection period. Availability of food in the market is expected to improve seasonally with the availability of better supplies from the new harvest. Moreover, food insecure households will have access to cereals from the early mature varieties and the new harvest, therefore, dependency on market and wild foods as food sources will slightly reduce. However, this positive outlook may be mitigated by the flood, high cost of production and shortage in fuel.

#### **Food Access**

As a result of the expected good harvest, food prices are likely to drop. However, the prices are expected to remain high, and above the five year average during the projected period, due to ongoing macro-economic crises. With the assumption of a future lifting of the COVID-19 lockdown measures, it is expected to have easier access to markets with better opportunities, increased purchasing power, and improved terms of trade for both wage to cereal and livestock to cereal and remain below average.

Cereal and livestock prices are expected to drop during the projection period compared to the current (lean season), while it's likely to remain above the last year and the five year average, due to the high cost of production (fuel, seeds, labour, animal herding), as low local consumer demands and supply will influence prices during the harvest period. The increase in cash crops prices, in relation to stable food crops, is likely to encourage expansion of sesame cultivation areas, affecting the production, thereby prices of sorghum and millet. The prices of non-locally produced crops and food items will continue increasing, as the macroeconomic difficulties are expected to persist through the projection period. Labour wages from sesame and groundnut harvesting, crop sales and livestock sales are expected to improve in many parts of rain fed agriculture areas. During this period, households will exercise additional income earning opportunities, including on farm and non-farm activities, selling of milk and livestock. Remittance is among the key income sources to households whose families migrated, mainly to the Middle East, Europe and the US. If the COVID-19 restriction measures would be lifted also in these countries, the flow of remittances might improve, contributing to households' ability to afford food.



#### Food Utilization

The rainfall across the country will improve availability and access to water, however, expected disease outbreaks and contamination of potable water sources may occur. Following the rainy season, especially the flood prone areas of Kassala, Gedaref, West Kordofan, Sennar, White Nile, Eastern and Western parts of the country are expected to be negatively impacted by reduced access to clean water. Shortage of water, especially for human consumption in the desert, arid and semi-arid areas of the pastoral and nomadic communities, will affect their health and exposure to disease and health hazards.

## **COVID-19 IMPACT ON FOOD SECURITY**

Lockdown and movement restrictions imposed may be lifted in the near future, however, the economic impact on trade/labour will likely continue. COVID-19 restrictions may have an indirect impact on agriculture production through reduced labour supply (less willingness to hire outsiders or increased illness and loss of productivity among labour supply). A FAO Sudan report on the adverse impact of COVID-19 shows that restricted internal and cross-border movements, livestock transhumance and nomadic migrations were already curtailed, causing the concentration of herds in limited spaces. This resulted in deteriorated health and body conditions of livestock and depletion of environment and natural resources. Furthermore, high food insecurity and livelihoods losses are anticipated, due to the adverse impacts of COVID-19 measures, coupled with the pre-existing common driving factors, in the immediate, medium and longer terms.

The effect of lockdown on market activities of selling and buying different needs; closures of state and national borders also affected transportation and availability of food commodities within and outside the States and drastically increased the prices. The daily labourers were among the most negatively affected groups. Food availability and supply to the market is affected by agricultural labour shortages and increased cost of transportation.

Access to food is also affected because many micro-enterprises and petty/small informal businesses were restricted or curtailed, causing loss of income that enabled vulnerable people to purchase food and other livelihood necessities.

Food utilization is affected by lower market availability and higher prices of nutritious foods, in addition to high rates of illiteracy and traditional food culture, which may result in increased acute malnutrition.

Above all, food stability is affected due to the restrictions/interruptions of flow of goods and services. In addition, the flow of safety nets and social protection of the vulnerable population might be affected by the COVID-19 restriction measures.

## **HUMANITARIAN FOOD ASSISTANCE**

In the current and projection analysis periods, out of 86 localities that received Humanitarian Food Assistance (HFA), 32 localities had at least 25% of their households benefiting from the assistance in the form of food or food vouchers, and all the beneficiaries were receiving 50% and above of the daily caloric requirements. The people targeted by this humanitarian assistance are mainly Internally displaced populations, vulnerable host families, refugees and returnees, particularly in the states where some of the localities have received significant HFA: Khartoum, Blue Nile, White Nile, South Kordofan, West Kordofan, Central Darfour, North Darfour, West Darfour, South Darfour and East Darfur. Humanitarian assistance has contributed to reducing the impact of COVID-19 on the food security of the assisted population. However, the evolution of the COVID-19 pandemic and the measures taken to limit its spread will likely amplify needs, particularly in main urban centres, especially for those who lost their employment and those relying on daily wage labour.

In the projection period, 22 localities out of 86 will have 25% of households benefiting from the assistance and all of them will receive 50% and above of the daily caloric requirements. Humanitarian assistance in form of food or food vouchers should be scaled up and continue targeting IDPs, refugees, returnees and vulnerable households in the host community, as well as giving priority to populations classified in Emergency and Crisis.



## RECOMMENDATIONS FOR ACTION

## **Response Priorities**

- Provide urgent actions to save lives and livelihoods of populations estimated in IPC Phase 4 (Emergency) as well as to protect livelihoods and reduce food consumption gaps of the populations estimated in IPC Phase 3 (Crisis);
- Provide emergency agricultural and livestock support to farmers, with special focus on localities prone to natural disasters including floods, drought and desert locust;
- Scale up diversified livelihoods programmes for improved self-reliance, resilience building and social protection to all vulnerable communities classified under Phase 2. 3 and 4:
- Conduct Agriculture and market polices and localization of improved seed cultivation;
- Rehabilitate the infrastructure (roads, markets);
- Implement water harvesting programs in water- deficit states;
- Scale up and improve access to basic services (health and WASH) throughout the year;
- Strengthen and support initiatives addressing cross-cutting issues of food security and nutrition status of vulnerable groups;
- Promote good nutritional practices at household levels through nutrition sensitive activities such as home gardening and educational awareness on food and water safety.

## **Situation Monitoring and Update**

The next IPC analysis update of the projection would occur depending on changes of the projection assumptions and availability of updated contributing data from various sources. After seizure of the lock down, FSTS with partners will organise to conduct rapid assessments in areas and target specific vulnerable groups with high food insecurity.

- COVID-19 has a significant impact on the food security situation of the urban and rural areas in addition to the health hazards. The economic impact of COVID-19 has to be monitored to avoid the health crisis is transformed to a food crisis. The IPC TWG and partners are expected to monitor the food security situation both in rural and urban areas. COVID-19 and containment measures have a significant impact on major urban centres of the country, compared to the rural areas;
- Strengthen and expand food price monitoring in the major markets of the country;
- Monitor weather forecasts and early warning system communication to prone areas against natural hazards such as droughts and floods:
- Strengthen the capacities of national and state level Technical Working Groups on food security information systems and produce timely information.

#### **Risk Factors to Monitor**

- Weather monitoring: forecasted rainfall indicates above average rainfall and will likely lead to flash floods that could contribute to worsening the food insecurity situation;
- **Desert Locusts:** the situation is alarming and rapidly progressing; there are some isolated adults in Nile Valley and this might spread further if the rainfall performance is as good as predicted;
- **Prices:** as inflation is expected to remain high throughout the projection period, prices of staple food and non-food items will likely remain high and could be exacerbated by COVID-19 cross border restrictions, including the cost of production and agriculture inputs.

## PROCESS AND METHODOLOGY

The Federal TWG in collaboration with the IPC GSU organized the first IPC Level 1 training, based on the IPC Version 3.0 Manual, in Sudan prior to the IPC analysis. Due to the current context of travel restrictions and containment, the IPC TWG, in collaboration with the IPC Global Support Unit, adapted virtual analysis processes, facilitated by experienced food security and nutrition analysts supporting the country team facilitation. A total of around 60 participants from the Government, Donors, UN Agencies and NGOs attended the virtual training and analysis from all the 18 states, despite challenges of internet connection. Participating agencies included the Ministry of Agriculture and Natural Resources (FSTS), Ministry of Production and Economic Resources, Ministry of Health, Ministry of Water Resources, Irrigation and Electricity, Ministry of Animal Resources, Ministry of Social Welfare, Central Bureau of Statistics and States Bureaus, Humanitarian Aid Commission, Sudan Meteorological Authority, WFP, FEWSNET, USAID, FAO, CRS, COOPI, OCHA, UNHCR, EU, SIDA, ECHO, NCA, Practical Action, SRC, and OXFAM. The virtual IPC AFI analysis was conducted from the 2 June to the 20 June 2020, using WFP's Food Security Monitoring System (FSMS) and Comprehensive Food Security and Vulnerability Assessment (CFSVA) data collected from December 2019 to January 2020 to inform food security outcomes, alongside with data provided by different sources such as FEWSNET (Price monitoring), FSTS-FAO-WFP (CFSAM-February 2020), SME (rainfall forecast), IOM (displacement), FSTS (COVID-19 impact on food security in 6 states), CBS (demographics, exchange rate and inflation), etc. The analysis covered two periods: the current period (June -September 2020) based on the data collected during January/March 2020, reflecting the existing factors that lead to food insecurity and the projected period (October to December 2020), considering the contributing factors, outcome indicator evidences with the projection assumptions factors.

Due to limited internet connectivity especially for participants from state level, the analysis was conducted and documented using a hybrid excel format that mimics the computerbased software IPC Information Support System (ISS). This facilitated the documentation and convergence of the evidence and the results under the current and the projection. In close collaboration with the National IPC Technical Working Group, several groups were put in place and facilitated by national and GSU experts. All available data was shared with all analysts and was also available on an online drive for easy access and use.

## Limitations of the analysis

The outcomes data from CFSVA used for the analysis was collected during the harvest period, while the analysis period coincided with the lean period and did not include possible effects of COVID-19. In addition, while data provided by CFSVA was representative at locality level for the vast majority of these, in the localities of As Sunut, Al lagowa, Keilak and Al Dibub (West Kordofan), Al Buhaira (Northern), Heiban, Um Durein, Al Buram (South Kordofan) and Kosti (White Nile), protocols on similar nearby areas were applied according to the IPC Protocols Version 3.0. The population estimates are based on figures provided by the Central Bureau of Statistics based on a projection developed on 2008 demographics; as such, the accuracy of the estimation of population in need of urgent action might be affected in its accuracy. Limited capacity in IPC Version 3.0 tools and procedures, coupled with weak internet connectivity greatly hampered the analysis process. The analysis period coincided with the COVID-19 pandemic lockdown. In addition, a 24-hour curfew in some states have hampered frequency of meetings.

## What is the IPC and IPC Acute Food Insecurity?

The IPC is a set of tools and procedures to classify the severity and characteristics of acute food and nutrition crises as well as chronic food insecurity based on international standards. The IPC consists of four mutually reinforcing functions, each with a set of specific protocols (tools and procedures). The core IPC parameters include consensus building, convergence of evidence, accountability, transparency and comparability. The IPC analysis aims at informing emergency response as well as medium and long-term food security policy and programming.

For the IPC, Acute Food Insecurity is defined as any manifestation of food insecurity found in a specified area at a specific point in time of a severity that threatens lives or livelihoods, or both, regardless of the causes, context or duration. It is highly susceptible to change and can occur and manifest in a population within a short amount of time, as a result of sudden changes or shocks that negatively impact on the determinants of food insecurity.

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This analysis has been conducted under the patronage of the Food Security Technical Secretariat. It has benefited from the technical and financial support of the European Union.

Classification of food insecurity and malnutrition was conducted using the IPC protocols, which are developed and implemented worldwide by the IPC Global Partnership - Action Against Hunger, CARE, CILSS, EC-JRC, FAO, FEWSNET, Global Food Security Cluster, Global Nutrition Cluster, IGAD, Oxfam, PROGRESAN-SICA, SADC, Save the Children, UNICEF and WFP.

#### **IPC Analysis Partners:**

























State	Locality	Total	Phase 1		Phase 2	!	Phase :	3	Phase	4	Phase	5	Area	Phase 3	+
		population analysed	#people	%	#people	%	#people	%	#people	%	#people	%	Phase	#people	%
	Al Lait	127,420	25,484	20	70,081	55	25,484	20	6,371	5	0	0	3	31,855	25
	Dar As Salam	122,054	48,822	40	54,924	45	12,205	10	6,103	5	0	0	2	18,308	15
	Al Fasher	565,065	84,760	15	254,279	45	141,266	25	84,760	15	0	0	3	226,026	40
	As Serief	62,866	12,573	20	31,433	50	12,573	20	6,287	10	0	0	3	18,860	30
	At Tawisha	104,748	15,712	15	62,849	60	20,950	20	5,237	5	0	0	3	26,187	25
	Kelemando	71,576	10,736	15	39,367	55	10,736	15	10,736	15	0	0	3	21,473	30
	Kebkabiya	203,010	71,054	35	81,204	40	30,452	15	20,301	10	0	0	3	50,753	25
N .1	Kernoi	102,321	40,928	40	40,928	40	10,232	10	10,232	10	0	0	3	20,464	20
North Darfur	Al Koma	25,649	7,695	30	7,695	30	6,412	25	3,847	15	0	0	3	10,260	40
	Kutum	235,397	58,849	25	70,619	30	70,619	30	35,310	15	0	0	3	105,929	45
	Al Malha	91,700	13,755	15	50,435	55	22,925	25	4,585	5	0	0	3	27,510	30
	Melit	164,875	32,975	20	74,194	45	32,975	20	24,731	15	0	0	3	57,706	35
	Saraf Omra	159,330	63,732	40	63,732	40	23,900	15	7,967	5	0	0	3	31,866	20
	Tawila	140,630	21,095	15	77,347	55	35,158	25	7,032	5	0	0	3	42,189	30
	Um Baru	116,362	23,272	20	52,363	45	23,272	20	17,454	15	0	0	3	40,727	35
	Um Kadadah	133,495	33,374	25	53,398	40	26,699	20	20,024	15	0	0	3	46,723	35
	Total	2,426,498	564,816	23	1,084,848	45	505,858	21	270,977	11	0	0		776,835	32
	Beliel	276,528	96,785	35	124,438	45	27,653	10	27,653	10	0	0	3	55,306	20
	Buram	167,424	50,227	30	92,083	55	25,114	15	0	0	0	0	2	25,114	15
	Damso	167,424	41,856	25	66,970	40	41,856	25	16,742	10	0	0	3	58,598	35
	Sharg Aj Jabal	13,602	4,081	30	6,801	50	2,720	20	0	0	0	0	3	2,720	20
	Ed Al Fursan	246,157	61,539	25	110,771	45	61,539	25	12,308	5	0	0	3	73,847	30
	Al Radoum	155,019	46,506	30	69,759	45	38,755	25	0	0	0	0	3	38,755	25
	As Salam - SD	107,452	26,863	25	53,726	50	21,490	20	5,373	5	0	0	3	26,863	25
	As Sunta	148,561	44,568	30	81,709	55	22,284	15	0	0	0	0	2	22,284	15
	Al Wihda	58,381	11,676	20	26,271	45	11,676	20	8,757	15	0	0	3	20,433	35
	Gereida	169,548	33,910	20	59,342	35	59,342	35	16,955	10	0	0	3	76,297	45
South	Kubum	213,413	53,353	25	128,048	60	32,012	15	0	0	0	0	2	32,012	15
Darfur	Kas	228,082	79,829	35	125,445	55	22,808	10	0	0	0	0	2	22,808	10
	Kateila	132,649	39,795	30	59,692	45	19,897	15	13,265	10	0	0	3	33,162	25
	Mershing	100,711	25,178	25	60,427	60	10,071	10	5,036	5	0	0	2	15,107	15
	Nitega	115,968	28,992	25	57,984	50	23,194	20	5,798	5	0	0	3	28,992	25
	Nyala Shimal	377,765	113,330	30	207,771	55	56,665	15	0	0	0	0	2	56,665	15
	Rehaid Albirdi	227,360	113,680	50	68,208	30	34,104	15	11,368	5	0	0	3	45,472	20
	Shattaya	53,487	18,720	35	24,069	45	10,697	20	0	0	0	0	3	10,697	20
	Nyala Janoub	364,790	109,437	30	200,635	55	54,719	15	0	0	0	0	2	54,719	15
	Tulus	304,898	121,959	40	137,204	45	30,490	10	15,245	5	0	0	2	45,735	15
	Um Dafoug	72,946	36,473	50	21,884	30	10,942	15	3,647	5	0	0	3	14,589	20
	Total	3,702,165	1,158,756	31	1,783,234	48	618,028	17	142,147	4	0	0		760,175	21



State	Locality	Total	Phase 1	1	Phase 2	2	Phase	3	Phase	4	Phase	5	Area	Phase 3	3+
		population analysed	#people	%	#people	%	#people	%	#people	%	#people	%	Phase	#people	%
	Beida	222,579	89,032	40	55,645	25	55,645	25	22,258	10	0	0	3	77,903	35
	Ag Geneina	626,726	313,363	50	125,345	20	125,345	20	62,673	10	0	0	3	188,018	30
	Foro Baranga	83,375	41,688	50	25,013	30	16,675	20	0	0	0	0	3	16,675	20
	Habila - WD	128,114	64,057	50	25,623	20	25,623	20	12,811	10	0	0	3	38,434	30
West Darfur	Jebel Moon	66,517	26,607	40	19,955	30	13,303	20	6,652	10	0	0	3	19,955	30
	Kereneik	472,762	236,381	50	94,552	20	141,829	30	0	0	0	0	3	141,829	30
	Kulbus	48,056	24,028	50	9,611	20	9,611	20	4,806	10	0	0	3	14,417	30
	Sirba	190,242	114,145	60	28,536	15	38,048	20	9,512	5	0	0	3	47,561	25
	Total	1,838,371	909,300	49	384,280	21	426,079	23	118,711	6	0	0		544,791	30
	Azum	82,775	33,110	40	24,833	30	20,694	25	4,139	5	0	0	3	24,833	30
	Bendasi	114,051	91,241	80	11,405	10	11,405	10	0	0	0	0	2	11,405	10
	Wasat Jabal Marrah	151,438	45,431	30	30,288	20	53,003	35	22,716	15	0	0	3	75,719	50
	Mukjar	148,146	103,702	70	14,815	10	22,222	15	7,407	5	0	0	3	29,629	20
Central Darfur	Shamal Jabal Marrah	181,120	54,336	30	36,224	20	45,280	25	45,280	25	0	0	4	90,560	50
	Um Dukhun	146,423	73,212	50	29,285	20	36,606	25	7,321	5	0	0	3	43,927	30
	Wadi Salih	321,272	160,636	50	64,254	20	64,254	20	32,127	10	0	0	3	96,382	30
	Gharb Jabal Marrah	245,672	122,836	50	49,134	20	61,418	25	12,284	5	0	0	3	73,702	30
	Zalingi	301,268	180,761	60	60,254	20	45,190	15	15,063	5	0	0	3	60,254	20
	Total	1,692,165	865,265	51	320,491	19	360,072	21	146,337	9	0	0		506,410	30
	Abu Jabrah	89,297	35,719	40	40,184	45	13,395	15	0	0	0	0	2	13,395	15
	Abu Karinka	162,823	56,988	35	81,412	50	24,423	15	0	0	0	0	2	24,423	15
	Adila	131,396	32,849	25	52,558	40	39,419	30	6,570	5	0	0	3	45,989	35
	Assalaya	129,184	64,592	50	38,755	30	19,378	15	6,459	5	0	0	3	25,837	20
East	Bahr Al Arab	179,220	53,766	30	98,571	55	17,922	10	8,961	5	0	0	2	26,883	15
Darfur	Ad Du'ayn	141,089	63,490	45	63,490	45	14,109	10	0	0	0	0	2	14,109	10
	Al Firdous	102,755	25,689	25	56,515	55	15,413	15	5,138	5	0	0	3	20,551	20
	Shia'ria	75,047	15,009	20	37,524	50	18,762	25	3,752	5	0	0	3	22,514	30
	Yassin	68,067	20,420	30	30,630	45	17,017	25	0	0	0	0	3	17,017	25
	Total	1,078,878	368,522	34	499,639	46	179,837	17	30,880	3	0	0		210,717	20
	Reifi Khashm Elgirba	145,084	50,779	35	65,288	45	21,763	15	7,254	5	0	0	3	29,017	20
	Reifi Aroma	150,686	45,206	30	75,343	50	22,603	15	7,534	5	0	0	3	30,137	20
	Reifi Nahr Atbara	200,767	80,307	40	90,345	45	30,115	15	0	0	0	0	2	30,115	15
	Halfa Aj Jadeedah	310,678	201,941	65	62,136	20	31,068	10	15,534	5	0	0	2	46,602	15
	Reifi Hamashkureib	374,355	56,153	15	149,742	40	131,024	35	37,436 -	10	0		3	168,460	45
Kassala	Madeinat Kassala	437,764	284,547	65	109,441	25	43,776	10	0	0	0	0	2	43,776	10
	Reifi Shamal Ad Delta	134,690	33,673	25	53,876	40	33,673	25	13,469	10	0	0	3	47,142	35
	Reifi Kassla	226,750	68,025	30	90,700	40	56,688	25	11,338	5	0	0	3	68,025	30
	Reifi Telkok	403,228	80,646	20	181,453	45	120,968	30	20,161	5	0	0	3	141,130	35
	Reifi Wad Elhilaiw	124,177	37,253	30	62,089	50	18,627	15	6,209	5	0	0	3	24,835	20
	Reifi Gharb Kassala	116,397	34,919	30	58,199	50	17,460	15	5,820	5	0	0	3	23,279	20
	Total	2,624,576	973,448	37	998,610	38	527,764	20	124,755	5	0	0		652,518	25



State	Locality	Total	Phase 1	ı	Phase 2	2	Phase :	3	Phase	4	Phase	5	Area	Phase 3	3+
		population analysed	#people	%	#people	%	#people	%	#people	%	#people	%	Phase	#people	%
	Agig	85,542	42,771	50	21,386	25	17,108	20	4,277	5	0	0	3	21,386	25
	Dordieb	64,920	29,214	45	16,230	25	12,984	20	6,492	10	0	0	3	19,476	30
	Jubayt Elma'aadin	109,596	21,919	20	32,879	30	38,359	35	16,439	15	0	0	3	54,798	50
	Al Ganab	127,842	57,529	45	31,961	25	25,568	20	12,784	10	0	0	3	38,353	30
	Hala'ib	28,290	5,658	20	7,073	25	8,487	30	7,073	25	0	0	4	15,560	55
Red Sea	Haya	317,593	158,797	50	79,398	25	47,639	15	31,759	10	0	0	3	79,398	25
	Port Sudan	312,209	202,936	65	62,442	20	46,831	15	0	0	0	0	2	46,831	15
	Sinkat	191,787	67,125	35	57,536	30	47,947	25	19,179	10	0	0	3	67,125	35
	Sawakin	91,068	50,087	55	18,214	20	18,214	20	4,553	5	0	0	3	22,767	25
	Tawkar	181,501	81,675	45	36,300	20	45,375	25	18,150	10	0	0	3	63,525	35
	Total	2,426,498	564,816	23	1,084,848	45	505,858	21	270,977	11	0	0		429,219	28
	Baw	175,333	43,833	25	70,133	40	43,833	25	17,533	10	0	0	3	61,367	35
	Ed Damazine	298,377	59,675	20	119,351	40	104,432	35	14,919	5	0	0	3	119,351	40
	Ar Rusayris	248,903	99,561	40	87,116	35	49,781	20	12,445	5	0	0	3	62,226	25
Blue Nile	At Tadamon - BN	126,246	44,186	35	37,874	30	31,562	25	12,625	10	0	0	3	44,186	35
	Geisan	143,099	42,930	30	42,930	30	50,085	35	7,155	5	0	0	3	57,240	40
	Al Kurmuk	180,125	36,025	20	81,056	45	45,031	25	18,013	10	0	0	3	63,044	35
	Wad Al Mahi	101,200	30,360	30	45,540	45	20,240	20	5,060	5	0	0	3	25,300	25
	Total	1,273,283	356,571	28	484,000	38	344,963	27	87,749	7	0	0		432,713	34
	Ad Diwaim	437,433	174,973	40	196,845	45	43,743	10	21,872	5	0	0	2	65,615	15
	Al Gitaina	362,709	145,084	40	163,219	45	36,271	10	18,135	5	0	0	2	54,406	15
	Aj Jabalain	349,077	122,177	35	157,085	45	52,362	15	17,454	5	0	0	3	69,815	20
	As Salam / Ar Rawat	332,421	132,968	40	132,968	40	49,863	15	16,621	5	0	0	3	66,484	20
White Nile	Guli/kosti	384,058	172,826	45	153,623	40	38,406	10	19,203	5	0	0	2	57,609	15
	Rabak	359,941	143,976	40	161,973	45	35,994	10	17,997	5	0	0	2	53,991	15
	Tendalti	210,850	84,340	40	84,340	40	21,085	10	21,085	10	0	0	3	42,170	20
	Um Rimta	175,921	79,164	45	61,572	35	26,388	15	8,796	5	0	0	3	35,184	20
	Total	2,612,410	1,055,509	40	1,111,626	43	304,112	12	141,163	5	0	0		445,275	17
	Ar Rahad	164,557	82,279	50	57,595	35	24,684	15	0	0	0	0	2	24,684	15
	Bara	191,058	85,976	45	57,317	30	47,765	25	0	0	0	0	3	47,765	25
	Gebrat Al Sheikh	241,051	96,420	40	96,420	40	48,210	20	0	0	0	0	3	48,210	20
	Um Rawaba	360,600	198,330	55	108,180	30	54,090	15	0	0	0	0	2	54,090	15
North Kordofan	Sheikan	563,925	281,963	50	140,981	25	140,981	25	0	0	0	0	3	140,981	25
	Soudari	283,022	84,907	30	141,511	50	56,604	20	0	0	0	0	3	56,604	20
	Um Dam Haj Ahmed	136,581	47,803	35	54,632	40	34,145	25	0	0	0	0	3	34,145	25
	Gharb Bara	185,533	74,213	40	64,937	35	46,383	25	0	0	0	0	3	46,383	25
	Total	2,126,327	951,891	45	721,574	34	452,862	21	0	0	0	0		452,862	21



State	Locality	Total	Phase 1	l	Phase 2	2	Phase	3	Phase	4	Phase	5	Area	Phase 3	<b>3</b> +
		population analysed	#people	%	#people	%	#people	%	#people	%	#people	%	Phase	#people	%
	Abu Zabad	110,634	49,785	45	44,254	40	16,595	15	0	0	0	0	2	16,595	15
	Abyei	222,996	111,498	50	55,749	25	44,599	20	11,150	5	0	0	3	55,749	25
	Al Dibab	79,008	47,405	60	19,752	25	7,901	10	3,950	5	0	0	2	11,851	15
	Al Khiwai	90,218	40,598	45	27,065	30	13,533	15	9,022	10	0	0	3	22,555	25
	An Nuhud	265,207	119,343	45	106,083	40	26,521	10	13,260	5	0	0	2	39,781	15
	Al Idia	141,490	77,820	55	28,298	20	21,224	15	14,149	10	0	0	3	35,373	25
	Al Meiram	52,690	15,807	30	23,711	45	10,538	20	2,635	5	0	0	3	13,173	25
West Kordofan	Babanusa	56,390	25,376	45	16,917	30	11,278	20	2,820	5	0	0	3	14,098	25
Roldolali	As Salam - WK	112,527	61,890	55	33,758	30	16,879	15	0	0	0	0	2	16,879	15
	Ghubaish	151,754	75,877	50	37,939	25	30,351	20	7,588	5	0	0	3	37,939	25
	Wad Bandah	152,360	76,180	50	38,090	25	22,854	15	15,236	10	0	0	3	38,090	25
	As Sunut	140,395	105,296	75	28,079	20	7,020	5	0	0	0	0	2	7,020	5
	Al Lagowa	98,172	73,629	75	19,634	20	4,909	5	0	0	0	0	2	4,909	5
	Keilak	74,508	55,881	75	14,902	20	3,725	5	0	0	0	0	2	3,725	5
	Total	1,748,349	936,384	54	494,230	28	237,926	14	79,809	5	0	0		317,735	18
	Abassiya	127,781	44,723	35	38,334	30	38,334	30	6,389	5	0	0	3	44,723	35
	Abu Jubayhah	190,397	66,639	35	95,199	50	28,560	15	0	0	0	0	2	28,560	15
	Abu Kershola	102,619	20,524	20	30,786	30	35,917	35	15,393	15	0	0	3	51,310	50
	Al Leri	40,875	10,219	25	22,481	55	6,131	15	2,044	5	0	0	3	8,175	20
	Delami	52,029	10,406	20	15,609	30	18,210	35	7,804	15	0	0	3	26,015	50
	Dilling	218,105	43,621	20	87,242	40	65,432	30	21,811	10	0	0	3	87,242	40
	Al Quoz	121,861	24,372	20	54,837	45	36,558	30	6,093	5	0	0	3	42,651	35
	Ar Reif Ash Shargi	63,601	15,900	25	28,620	45	15,900	25	3,180	5	0	0	3	19,080	30
South Kordofan	At Tadamon - SK	82,124	20,531	25	32,850	40	20,531	25	8,212	10	0	0	3	28,743	35
	Ghadeer	54,198	13,550	25	24,389	45	13,550	25	2,710	5	0	0	3	16,259	30
	Habila - SK	71,456	17,864	25	25,010	35	21,437	30	7,146	10	0	0	3	28,582	40
	Kadugli	149,161	44,748	30	59,664	40	37,290	25	7,458	5	0	0	3	44,748	30
	Ar Rashad	65,913	23,070	35	32,957	50	9,887	15	0	0	0	0	2	9,887	15
	Talawdi	42,369	12,711	30	19,066	45	8,474	20	2,118	5	0	0	3	10,592	25
	Heiban	233,565	58,391	25	70,070	30	70,070	30	35,035	15	0	0	3	105,104	45
	Um Durein	121,275	24,255	20	30,319	25	48,510	40	18,191	15	0	0	3	66,701	55
	Al Buram	164,794	32,959	20	32,959	20	57,678	35	41,199	25	0	0	4	98,876	60
	Total	1,902,123	484,482	25	700,391	37	532,468	28	184,783	10	0	0		717,250	38



State	Locality	Total	Phase 1		Phase 2	!	Phase 3	3	Phase	4	Phase	5	Area	Phase 3	+
		population analysed	#people	%	#people	%	#people	%	#people	%	#people	%	Phase	#people	%
	Al Mafaza	114,916	34,475	30	51,712	45	22,983	20	5,746	5	0	0	3	28,729	25
	Basundah	90,200	27,060	30	40,590	45	22,550	25	0	0	0	0	3	22,550	25
	Wasat Al Gedaref	210,976	126,586	60	52,744	25	31,646	15	0	0	0	0	2	31,646	15
	Galabat Ash- Shargiah	214,288	42,858	20	107,144	50	64,286	30	0	0	0	0	3	64,286	30
	Al Butanah	134,281	40,284	30	53,712	40	33,570	25	6,714	5	0	0	3	40,284	30
	Al Fashaga	22,927	6,878	30	9,171	40	5,732	25	1,146	5	0	0	3	6,878	30
Gadarif	Al Galabat Al Gharbyah - Kassab	173,520	60,732	35	86,760	50	26,028	15	0	0	0	0	2	26,028	15
	Al Qureisha	145,964	51,087	35	72,982	50	21,895	15	0	0	0	0	2	21,895	15
	Ar Rahad	256,331	64,083	25	115,349	45	76,899	30	0	0	0	0	3	76,899	30
	Al Fao	333,790	100,137	30	183,585	55	50,069	15	0	0	0	0	2	50,069	15
	Madeinat Al Gedaref	509,094	178,183	35	280,002	55	50,909	10	0	0	0	0	2	50,909	10
	Gala'a Al Nahal	124,853	24,971	20	68,669	55	31,213	25	0	0	0	0	3	31,213	25
	Total	2,331,140	757,333	32	1,122,420	48	437,781	19	13,606	1	0	0		451,387	19
	Bahri	934,672	467,336	50	327,135	35	93,467	10	46,734	5	0	0	2	140,201	15
	Jebel Awlia	1,529,463	764,732	50	458,839	30	229,419	15	76,473	5	0	0	3	305,893	20
	Karrari	1,189,583	594,792	50	416,354	35	118,958	10	59,479	5	0	0	2	178,437	15
	Khartoum	1,019,642	611,785	60	254,911	25	101,964	10	50,982	5	0	0	2	152,946	15
Khartoum	Um Durman	849,702	467,336	55	254,911	30	84,970	10	42,485	5	0	0	2	127,455	15
	Sharg An Neel	1,359,523	747,738	55	407,857	30	135,952	10	67,976	5	0	0	2	203,928	15
	Um Bada	1,614,434	807,217	50	484,330	30	242,165	15	80,722	5	0	0	3	322,887	20
	Total	8,497,019	4,460,935	52	2,604,336	31	1,006,897	12	424,851	5	0	0		1,431,748	17
	Abu Hujar	204,322	81,729	40	71,513	35	40,864	20	10,216	5	0	0	3	51,081	25
	As Suki	329,319	115,262	35	164,660	50	49,398	15	0	0	0	0	2	49,398	15
	Ad Dali	110,574	49,758	45	33,172	30	22,115	20	5,529	5	0	0	3	27,644	25
Sinnar	Ad Dinder	300,474	105,166	35	135,213	45	45,071	15	15,024	5	0	0	3	60,095	20
2	Sharg Sennar	360,569	108,171	30	162,256	45	72,114	20	18,028	5	0	0	3	90,142	25
	Sinja	241,581	120,791	50	96,632	40	24,158	10	0	0	0	0	2	24,158	10
	Sennar	469,941	258,468	55	140,982	30	70,491	15	0	0	0	0	2	70,491	15
	Total	2,016,780	839,343	42	804,428	40	324,211	16	48,797	2	0	0		373,008	18
	Ad Dabbah	205,130	143,591	70	51,283	25	10,257	5	0	0	0	0	2	10,257	5
	Al Golid	111,463	78,024	70	22,293	20	11,146	10	0	0	0	0	2	11,146	10
	Al Burgaig	122,141	85,499	70	24,428	20	12,214	10	0	0	0	0	2	12,214	10
AL Shimalia	Delgo	58,911	32,401	55	14,728	25	11,782	20	0	0	0	0	3	11,782	20
(Northern)	Dongola	212,083	137,854	65	53,021	25	21,208	10	0	0	0	0	2	21,208	10
	Halfa	44,845	31,392	70	11,211	25	2,242	5	0	0	0	0	2	2,242	5
	Merwoe	214,591	139,484	65	64,377	30	10,730	5	0	0	0	0	2	10,730	5
	Total	969,164	648,244	67	241,340	25	79,579	8	0	0	0	0		79,579	8



State	Locality	Total	Phase 1		Phase 2		Phase 3	3	Phase 4	1	Phase	5	Area	Phase 3-	+
		population analysed	#people	%	#people	%	#people	%	#people	%	#people	%	Phase	#people	%
	Al Kamlin	594,492	297,246	50	208,072	35	59,449	10	29,725	5	0	0	2	89,174	15
	Al Qurashi	493,737	222,182	45	197,495	40	49,374	10	24,687	5	0	0	2	74,061	15
	Al Hasahisa	901,173	405,528	45	360,469	40	90,117	10	45,059	5	0	0	2	135,176	15
	Al Manaqil	814,049	366,322	45	325,620	40	81,405	10	40,702	5	0	0	2	122,107	15
Al Gazira	Sharg Aj Jazirah	693,129	381,221	55	138,626	20	138,626	20	34,656	5	0	0	3	173,282	25
	Medani Al Kubra	629,236	283,156	45	251,694	40	94,385	15	0	0	0	0	2	94,385	15
	Janub Aj Jazirah	828,804	414,402	50	290,081	35	82,880	10	41,440	5	0	0	2	124,321	15
	Um Algura	329,250	148,163	45	115,238	35	49,388	15	16,463	5	0	0	3	65,850	20
	Total	5,283,870	2,518,219	48	1,887,295	36	645,624	12	232,732	4	0	0		878,356	17
	Abu Hamad	178,742	142,994	80	26,811	15	8,937	5	0	0	0	0	2	8,937	5
	Ad Damar	396,798	277,759	70	79,360	20	39,680	10	0	0	0	0	2	39,680	10
	Atbara	187,943	131,560	70	37,589	20	18,794	10	0	0	0	0	2	18,794	10
River Nile	Barbar	212,787	138,312	65	53,197	25	21,279	10	0	0	0	0	2	21,279	10
	Al Matama	212,105	169,684	80	31,816	15	10,605	5	0	0	0	0	2	10,605	5
	Shendi	376,268	301,014	80	56,440	15	18,813	5	0	0	0	0	2	18,813	5
	Total	1,564,643	1,161,322	74	285,212	18	118,109	8	0	0	0	0		118,109	8
Gran	d Total	45,198,109	19,728,053	44	15,891,371	35	7,410,682	16	2,168,003	5	0	0		9,578,685	21



State	Locality	Total	Phase 1		Phase 2		Phase	3	Phase	4	Phase	5	Area	Phase 3	+
		population analysed	#people	%	#people	%	#people	%	#people	%	#people	%	Phase	#people	%
	Al Lait	127,420	31,855	25	70,081	55	19,113	15	6,371	5	0	0	3	25,484	20
	Dar As Salam	122,054	48,822	40	61,027	50	6,103	5	6,103	5	0	0	2	12,205	10
	Al Fasher	565,065	113,013	20	310,786	55	84,760	15	56,507	10	0	0	3	141,266	25
	As Serief	62,866	15,717	25	37,720	60	6,287	10	3,143	5	0	0	2	9,430	15
	At Tawisha	104,748	15,712	15	62,849	60	20,950	20	5,237	5	0	0	3	26,187	25
	Kelemando	71,576	14,315	20	42,946	60	7,158	10	7,158	10	0	0	3	14,315	20
	Kebkabiya	203,010	71,054	35	101,505	50	20,301	10	10,151	5	0	0	2	30,452	15
	Kernoi	102,321	40,928	40	40,928	40	10,232	10	10,232	10	0	0	3	20,464	20
North Darfur	Al Koma	25,649	8,977	35	10,260	40	3,847	15	2,565	10	0	0	3	6,412	25
	Kutum	235,397	70,619	30	94,159	40	47,079	20	23,540	10	0	0	3	70,619	30
	Al Malha	91,700	13,755	15	55,020	60	18,340	20	4,585	5	0	0	3	22,925	25
	Melit	164,875	49,463	30	82,438	50	16,488	10	16,488	10	0	0	3	32,975	20
	Saraf Omra	159,330	71,699	45	71,699	45	7,967	5	7,967	5	0	0	2	15,933	10
	Tawila	140,630	21,095	15	84,378	60	28,126	20	7,032	5	0	0	3	35,158	25
	Um Baru	116,362	23,272	20	63,999	55	17,454	15	11,636	10	0	0	3	29,091	25
	Um Kadadah	133,495	33,374	25	66,748	50	20,024	15	13,350	10	0	0	3	33,374	25
	Total	2,426,498	643,668	27	1,256,540	52	334,228	14	192,062	8	0	0		526,290	22
	Beliel	276,528	110,611	40	138,264	50	27,653	10	0	0	0	0	2	27,653	10
	Buram	167,424	75,341	45	83,712	50	8,371	5	0	0	0	0	2	8,371	5
	Damso	167,424	66,970	40	66,970	40	33,485	20	0	0	0	0	3	33,485	20
	Sharg Aj Jabal	13,602	7,481	55	4,761	35	1,360	10	0	0	0	0	2	1,360	10
	Ed Al Fursan	246,157	98,463	40	123,079	50	24,616	10	0	0	0	0	2	24,616	10
	Al Radoum	155,019	62,008	40	69,759	45	23,253	15	0	0	0	0	2	23,253	15
	As Salam - SD	107,452	37,608	35	53,726	50	16,118	15	0	0	0	0	2	16,118	15
	As Sunta	148,561	59,424	40	81,709	55	7,428	5	0	0	0	0	2	7,428	5
	Al Wihda	58,381	17,514	30	32,110	55	8,757	15	0	0	0	0	2	8,757	15
	Gereida	169,548	67,819	40	76,297	45	25,432	15	0	0	0	0	2	25,432	15
South Darfur	Kubum	213,413	85,365	40	117,377	55	10,671	5	0	0	0	0	2	10,671	5
30utii Dai iui	Kas	228,082	182,466	80	45,616	20	0	0	0	0	0	0	2	0	0
	Kateila	132,649	53,060	40	66,325	50	13,265	10	0	0	0	0	2	13,265	10
	Mershing	100,711	80,569	80	10,071	10	10,071	10	0	0	0	0	2	10,071	10
	Nitega	115,968	34,790	30	63,782	55	17,395	15	0	0	0	0	2	17,395	15
	Nyala Shimal	377,765	321,100	85	37,777	10	18,888	5	0	0	0	0	1	18,888	5
	Rehaid Albirdi	227,360	90,944	40	113,680	50	22,736	10	0	0	0	0	2	22,736	10
	Shattaya	53,487	21,395	40	29,418	55	2,674	5	0	0	0	0	2	2,674	5
	Nyala Janoub	364,790	310,072	85	36,479	10	18,240	5	0	0	0	0	1	18,240	5
	Tulus	304,898	259,163	85	30,490	10	15,245	5	0	0	0	0	1	15,245	5
	Um Dafoug	72,946	36,473	50	29,178	40	7,295	10	0	0	0	0	2	7,295	10
	Total	3,702,165	2,078,636	56	1,310,577	35	312,952	8	0	0	0	0		312,952	8



State	Locality	Total	Phase 1		Phase 2	2	Phase	3	Phase	4	Phase	5	Area	Phase 3	5+
		population analysed	#people	%	#people	%	#people	%	#people	%	#people	%	Phase	#people	%
	Beida	222,579	111,290	50	66,774	30	44,516	20	0	0	0	0	3	44,516	20
	Ag Geneina	626,726	438,708	70	125,345	20	62,673	10	0	0	0	0	2	62,673	10
	Foro Baranga	83,375	41,688	50	33,350	40	8,338	10	0	0	0	0	2	8,338	10
	Habila - WD	128,114	76,868	60	38,434	30	12,811	10	0	0	0	0	2	12,811	10
West Darfur	Jebel Moon	66,517	33,259	50	19,955	30	13,303	20	0	0	0	0	3	13,303	20
	Kereneik	472,762	378,210	80	47,276	10	47,276	10	0	0	0	0	2	47,276	10
	Kulbus	48,056	28,834	60	14,417	30	4,806	10	0	0	0	0	2	4,806	10
	Sirba	190,242	133,169	70	38,048	20	19,024	10	0	0	0	0	2	19,024	10
	Total	1,838,371	1,242,025	68	383,600	21	212,747	12	0	0	0	0		212,747	12
	Azum	82,775	49,665	60	20,694	25	12,416	15	0	0	0	0	2	12,416	15
	Bendasi	114,051	91,241	80	22,810	20		-	0	0	0	0	2	0	0
	Wasat Jabal Marrah	151,438	75,719	50	30,288	20	37,860	25	7,572	5	0	0	3	45,431	30
	Mukjar	148,146	118,517	80	14,815	10	14,815	10	0	0	0	0	2	14,815	10
Central Darfur	Shamal Jabal Marrah	181,120	54,336	30	54,336	30	36,224	20	36,224	20	0	0	4	72,448	40
	Um Dukhun	146,423	102,496	70	21,963	15	21,963	15	0	0	0	0	2	21,963	15
	Wadi Salih	321,272	257,018	80	32,127	10	32,127	10	0	0	0	0	2	32,127	10
	Gharb Jabal Marrah	245,672	147,403	60	49,134	20	36,851	15	12,284	5	0	0	3	49,134	20
	Zalingi	301,268	210,888	70	60,254	20	30,127	10	0	0	0	0	2	30,127	10
	Total	1,692,165	1,107,282	65	306,421	18	222,383	13	56,080	3	0	0		278,462	16
	Abu Jabrah	89,297	58,043	65	17,859	20	13,395	15	0	0	0	0	2	13,395	15
	Abu Karinka	162,823	81,412	50	73,270	45	8,141	5	0	0	0	0	2	8,141	5
	Adila	131,396	72,268	55	39,419	30	19,709	15	0	0	0	0	2	19,709	15
	Assalaya	129,184	51,674	40	51,674	40	25,837	20	0	0	0	0	3	25,837	20
East Darfur	Bahr Al Arab	179,220	80,649	45	71,688	40	26,883	15	0	0	0	0	2	26,883	15
	Ad Du'ayn	141,089	70,545	50	56,436	40	14,109	10	0	0	0	0	2	14,109	10
	Al Firdous	102,755	46,240	45	35,964	35	20,551	20	0	0	0	0	3	20,551	20
	Shia'ria	75,047	33,771	45	33,771	45	7,505	10	0	0	0	0	2	7,505	10
	Yassin	68,067	30,630	45	23,823	35	13,613	20	0	0	0	0	3	13,613	20
	Total	1,078,878	525,231	49	403,905	37	149,743	14	0	0	0	0		149,743	14
	Reifi Khashm Elgirba	145,084	58,034	40	58,034	40	29,017	20	0	0	0	0	3	29,017	20
	Reifi Aroma	150,686	52,740	35	75,343	50	22,603	15	0	0	0	0	2	22,603	15
	Reifi Nahr Atbara	200,767	90,345	45	90,345	45	20,077	10	0	0	0	0	2	20,077	10
	Halfa Aj Jadeedah	310,678	248,542	80	46,602	15	15,534	5	0	0	0	0	2	15,534	5
	Reifi Hamashkureib	374,355	56,153	15	168,460	45	131,024	35	18,718	5	0	0	3	149,742	40
Kassala	Madeinat Kassala	437,764	372,099	85	43,776	10	21,888	5	0	0	0	0	1	21,888	5
	Reifi Shamal Ad Delta	134,690	40,407	30	67,345	50	26,938	20	0	0	0	0	3	26,938	20
	Reifi Kassla	226,750	79,363	35	102,038	45	45,350	20	0	0	0	0	3	45,350	20
	Reifi Telkok	403,228	100,807	25	201,614	50	100,807	25	0	0	0	0	3	100,807	25
	Reifi Wad Elhilaiw	124,177	49,671	40	55,880	45	18,627	15	0	0	0	0	2	18,627	15
	Reifi Gharb Kassala	116,397	40,739	35	58,199	50	17,460	15	0	0	0	0	2	17,460	15
	Total	2,624,576	1,188,900	45	967,634	37	449,324	17	18,718	1	0	0		468,042	18



State	Locality	Total	Phase 1		Phase 2	!	Phase :	3	Phase	4	Phase	5	Area	Phase 3	+
		population analysed	#people	%	#people	%	#people	%	#people	%	#people	%	Phase	#people	%
	Agig	85,542	47,048	55	21,386	25	17,108	20	0	0	0	0	3	17,108	20
	Dordieb	64,920	32,460	50	16,230	25	12,984	20	3,246	5	0	0	3	16,230	25
	Jubayt Elma'aadin	109,596	27,399	25	49,318	45	27,399	25	5,480	5	0	0	3	32,879	30
	Al Ganab	127,842	57,529	45	38,353	30	25,568	20	6,392	5	0	0	3	31,961	25
	Hala'ib	28,290	7,073	25	8,487	30	8,487	30	4,244	15	0	0	3	12,731	45
Red Sea	Haya	317,593	158,797	50	95,278	30	47,639	15	15,880	5	0	0	3	63,519	20
	Port Sudan	312,209	218,546	70	62,442	20	31,221	10	0	0	0	0	2	31,221	10
	Sinkat	191,787	76,715	40	76,715	40	28,768	15	9,589	5	0	0	3	38,357	20
	Sawakin	91,068	50,087	55	22,767	25	13,660	15	4,553	5	0	0	3	18,214	20
	Tawkar	181,501	90,751	50	54,450	30	27,225	15	9,075	5	0	0	3	36,300	20
	Total	2,426,498	766,404	51	445,425	29	240,060	16	58,459	4	0	0		298,519	20
	Baw	175,333	52,600	30	78,900	45	35,067	20	8,767	5	0	0	3	43,833	25
	Ed Damazine	298,377	89,513	30	164,107	55	44,757	15	0	0	0	0	2	44,757	15
	Ar Rusayris	248,903	112,006	45	112,006	45	24,890	10	0	0	0	0	2	24,890	10
Blue Nile	At Tadamon - BN	126,246	50,498	40	44,186	35	25,249	20	6,312	5	0	0	3	31,562	25
	Geisan	143,099	57,240	40	50,085	35	28,620	20	7,155	5	0	0	3	35,775	25
	Al Kurmuk	180,125	63,044	35	81,056	45	27,019	15	9,006	5	0	0	3	36,025	20
	Wad Al Mahi	101,200	35,420	35	55,660	55	10,120	10	0	0	0	0	2	10,120	10
	Total	1,273,283	460,321	36	586,001	46	195,721	15	31,240	2	0	0		226,961	18
	Ad Diwaim	437,433	174,973	40	196,845	45	43,743	10	21,872	5	0	0	2	65,615	15
	Al Gitaina	362,709	145,084	40	163,219	45	36,271	10	18,135	5	0	0	2	54,406	15
	Aj Jabalain	349,077	122,177	35	139,631	40	69,815	20	17,454	5	0	0	3	87,269	25
	As Salam / Ar Rawat	332,421	132,968	40	116,347	35	66,484	20	16,621	5	0	0	3	83,105	25
White Nile	Guli/kosti	384,058	172,826	45	153,623	40	38,406	10	19,203	5	0	0	2	57,609	15
	Rabak	359,941	143,976	40	161,973	45	35,994	10	17,997	5	0	0	2	53,991	15
	Tendalti	210,850	84,340	40	84,340	40	31,628	15	10,543	5	0	0	3	42,170	20
	Um Rimta	175,921	70,368	40	70,368	40	17,592	10	17,592	10	0	0	3	35,184	20
	Total	2,612,410	1,046,713	40	1,086,347	42	339,933	13	139,417	5	0	0		479,350	18
	Ar Rahad	164,557	98,734	60	49,367	30	16,456	10	0	0	0	0	2	16,456	10
	Bara	191,058	105,082	55	47,765	25	38,212	20	0	0	0	0	3	38,212	20
	Gebrat Al Sheikh	241,051	120,526	50	96,420	40	24,105	10	0	0	0	0	2	24,105	10
North Kordofan	Um Rawaba	360,600	216,360	60	108,180	30	36,060	10	0	0	0	0	2	36,060	10
	Sheikan	563,925	310,159	55	140,981	25	112,785	20	0	0	0	0	3	112,785	20
	Soudari	283,022	127,360	45	113,209	40	42,453	15	0	0	0	0	2	42,453	15
	Um Dam Haj Ahmed	136,581	61,461	45	47,803	35	27,316	20	0	0	0	0	3	27,316	20
	Gharb Bara	185,533	92,767	50	55,660	30	37,107	20	0	0	0	0	3	37,107	20
	Total	2,126,327	1,132,448	53	659,385	31	334,494	16	0	0	0	0		334,494	16



State	Locality	Total	Phase 1		Phase 2	2	Phase :	3	Phase 4		Phase	Phase 5		Phase 3	<b>š</b> +
		population analysed	#people	%	#people	%	#people	%	#people	%	#people	%	Phase	#people	%
	Abu Zabad	110,634	55,317	50	44,254	40	11,063	10	0	0	0	0	2	11,063	10
	Abyei	222,996	122,648	55	78,049	35	22,300	10	0	0	0	0	2	22,300	10
	Al Dibab	79,008	51,355	65	23,702	30	3,950	5	0	0	0	0	2	3,950	5
	Al Khiwai	90,218	45,109	50	36,087	40	9,022	10	0	0	0	0	2	9,022	10
	An Nuhud	265,207	212,166	80	39,781	15	13,260	5	0	0	0	0	2	13,260	5
	Al Idia	141,490	113,192	80	21,224	15	7,075	5	0	0	0	0	2	7,075	5
	Al Meiram	52,690	26,345	50	21,076	40	5,269	10	0	0	0	0	2	5,269	10
West Kordofan	Babanusa	56,390	25,376	45	25,376	45	5,639	10	0	0	0	0	2	5,639	10
	As Salam - WK	112,527	67,516	60	39,384	35	5,626	5	0	0	0	0	2	5,626	5
	Ghubaish	151,754	83,465	55	45,526	30	15,175	10	7,588	5	0	0	2	22,763	15
	Wad Bandah	152,360	91,416	60	53,326	35	7,618	5	0	0	0	0	2	7,618	5
	As Sunut	140,395	112,316	80	21,059	15	7,020	5	0	0	0	0	2	7,020	5
	Al Lagowa	98,172	73,629	75	14,726	15	9,817	10	0	0	0	0	2	9,817	10
	Keilak	74,508	52,156	70	18,627	25	3,725	5	0	0	0	0	2	3,725	5
	Total	1,748,349	1,132,005	65	482,197	28	126,560	7	7,588	0	0	0		134,148	8
	Abassiya	127,781	57,501	45	51,112	40	12,778	10	6,389	5	0	0	2	19,167	15
	Abu Jubayhah	190,397	95,199	50	76,159	40	19,040	10	0	0	0	0	2	19,040	10
	Abu Kershola	102,619	35,917	35	51,310	50	10,262	10	5,131	5	0	0	2	15,393	15
	Al Leri	40,875	12,263	30	24,525	60	4,088	10	0	0	0	0	2	4,088	10
	Delami	52,029	18,210	35	26,015	50	5,203	10	2,601	5	0	0	2	7,804	15
	Dilling	218,105	76,337	35	109,053	50	21,811	10	10,905	5	0	0	2	32,716	15
	Al Quoz	121,861	36,558	30	67,024	55	12,186	10	6,093	5	0	0	2	18,279	15
	Ar Reif Ash Shargi	63,601	22,260	35	31,801	50	6,360	10	3,180	5	0	0	2	9,540	15
South Kordofan	At Tadamon - SK	82,124	28,743	35	41,062	50	12,319	15	0	0	0	0	2	12,319	15
	Ghadeer	54,198	18,969	35	27,099	50	8,130	15	0	0	0	0	2	8,130	15
	Habila - SK	71,456	25,010	35	35,728	50	7,146	10	3,573	5	0	0	2	10,718	15
	Kadugli	149,161	52,206	35	67,122	45	22,374	15	7,458	5	0	0	3	29,832	20
	Ar Rashad	65,913	26,365	40	32,957	50	6,591	10	0	0	0	0	2	6,591	10
	Talawdi	42,369	14,829	35	19,066	45	6,355	15	2,118	5	0	0	3	8,474	20
	Heiban	233,565	81,748	35	70,070	30	58,391	25	23,357	10	0	0	3	81,748	35
	Um Durein	121,275	30,319	25	42,446	35	36,383	30	12,128	10	0	0	3	48,510	40
	Al Buram	164,794	41,199	25	57,678	35	41,199	25	24,719	15	0	0	3	65,918	40
	Total	1,902,123	673,633	35	830,224	44	290,614	15	107,652	6	0	0		398,266	21



State	Locality	Total	Phase 1	I	Phase 2	2	Phase 3	3	Phase	4	Phase	5	Area	Phase 3	+
		population analysed	#people	%	#people	%	#people	%	#people	%	#people	%	Phase	#people	%
	Al Mafaza	114,916	40,221	35	51,712	45	22,983	20	0	0	0	0	3	22,983	20
	Basundah	90,200	31,570	35	36,080	40	22,550	25	0	0	0	0	3	22,550	25
	Wasat Al Gedaref	210,976	94,939	45	84,390	40	31,646	15	0	0	0	0	2	31,646	15
	Galabat Ash- Shargiah	214,288	85,715	40	85,715	40	42,858	20	0	0	0	0	3	42,858	20
	Al Butanah	134,281	46,998	35	46,998	35	40,284	30	0	0	0	0	3	40,284	30
	Al Fashaga	22,927	9,171	40	8,024	35	4,585	20	1,146	5	0	0	3	5,732	25
Gadarif	Al Galabat Al Gharbyah - Kassab	173,520	78,084	45	69,408	40	26,028	15	0	0	0	0	2	26,028	15
	Al Qureisha	145,964	58,386	40	51,087	35	36,491	25	0	0	0	0	3	36,491	25
	Ar Rahad	256,331	76,899	30	89,716	35	89,716	35	0	0	0	0	3	89,716	35
	Al Fao	333,790	166,895	50	133,516	40	33,379	10	0	0	0	0	2	33,379	10
	Madeinat Al Gedaref	509,094	229,092	45	203,638	40	76,364	15	0	0	0	0	2	76,364	15
	Gala'a Al Nahal	124,853	43,699	35	56,184	45	24,971	20	0	0	0	0	3	24,971	20
	Total	2,331,140	961,669	41	916,469	39	451,855	19	1,146	0	0	0		453,002	19
	Bahri	934,672	467,336	50	327,135	35	140,201	15	0	0	0	0	2	140,201	15
	Jebel Awlia	1,529,463	764,732	50	535,312	35	152,946	10	76,473	5	0	0	2	229,419	15
	Karrari	1,189,583	654,271	55	416,354	35	118,958	10	0	0	0	0	2	118,958	10
Khartoum	Khartoum	1,019,642	611,785	60	254,911	25	152,946	15	0	0	0	0	2	152,946	15
Kilaitouiii	Um Durman	849,702	467,336	55	254,911	30	127,455	15	0	0	0	0	2	127,455	15
	Sharg An Neel	1,359,523	747,738	55	407,857	30	203,928	15	0	0	0	0	2	203,928	15
	Um Bada	1,614,434	807,217	50	565,052	35	242,165	15	0	0	0	0	2	242,165	15
	Total	8,497,019	4,520,414	53	2,761,531	33	1,138,601	13	76,473	1	0	0		1,215,074	14
	Abu Hujar	204,322	81,729	40	102,161	50	20,432	10	0	0	0	0	2	20,432	10
	As Suki	329,319	181,125	55	115,262	35	32,932	10	0	0	0	0	2	32,932	10
	Ad Dali	110,574	60,816	55	38,701	35	11,057	10	0	0	0	0	2	11,057	10
Sinnar	Ad Dinder	300,474	180,284	60	90,142	30	30,047	10	0	0	0	0	2	30,047	10
Jiiiiai	Sharg Sennar	360,569	216,341	60	108,171	30	36,057	10	0	0	0	0	2	36,057	10
	Sinja	241,581	120,791	50	96,632	40	24,158	10	0	0	0	0	2	24,158	10
	Sennar	469,941	352,456	75	70,491	15	46,994	10	0	0	0	0	2	46,994	10
	Total	2,016,780	1,193,542	59	621,560	31	201,678	10	0	0	0	0		201,678	10
	Ad Dabbah	205,130	123,078	60	71,796	35	10,257	5	0	0	0	0	2	10,257	5
	Al Golid	111,463	61,305	55	27,866	25	22,293	20	0	0	0	0	3	22,293	20
	Al Burgaig	122,141	79,392	65	36,642	30	6,107	5	0	0	0	0	2	6,107	5
AL Shimalia	Delgo	58,911	29,456	50	17,673	30	11,782	20	0	0	0	0	3	11,782	20
(Northern)	Dongola	212,083	127,250	60	74,229	35	10,604	5	0	0	0	0	2	10,604	5
	Halfa	44,845	29,149	65	13,454	30	2,242	5	0	0	0	0	2	2,242	5
	Merwoe	214,591	128,755	60	75,107	35	10,730	5	0	0	0	0	2	10,730	5
	Total	969,164	578,383	60	316,766	33	74,014	8	0	0	0	0		74,014	8



State	Locality	Total	Phase 1	Phase 1		Phase 2			Phase	4	Phase	5	Area	Phase 3+	
		population analysed	#people	%	#people	%	#people	%	#people	%	#people	%	Phase	#people	%
	Al Kamlin	594,492	297,246	50	267,521	45	29,725	5	0	0	0	0	2	29,725	5
	Al Qurashi	493,737	222,182	45	222,182	45	49,374	10	0	0	0	0	2	49,374	10
	Al Hasahisa	901,173	405,528	45	405,528	45	90,117	10	0	0	0	0	2	90,117	10
	Al Manaqil	814,049	366,322	45	366,322	45	81,405	10	0	0	0	0	2	81,405	10
Al Gazira	Sharg Aj Jazirah	693,129	381,221	55	207,939	30	69,313	10	34,656	5	0	0	2	103,969	15
711 Guziru	Medani Al Kubra	629,236	283,156	45	283,156	45	62,924	10	0	0	0	0	2	62,924	10
	Janub Aj Jazirah	828,804	414,402	50	372,962	45	41,440	5	0	0	0	0	2	41,440	5
	Um Algura	329,250	148,163	45	131,700	40	49,388	15	0	0	0	0	2	49,388	15
	Total	5,283,870	2,518,219	48	2,257,310	43	473,685	9	34,656	1	0	0		508,341	10
	Abu Hamad	178,742	125,119	70	44,686	25	8,937	5	0	0	0	0	2	8,937	5
	Ad Damar	396,798	238,079	60	119,039	30	39,680	10	0	0	0	0	2	39,680	10
	Atbara	187,943	112,766	60	65,780	35	9,397	5	0	0	0	0	2	9,397	5
River Nile	Barbar	212,787	106,394	50	95,754	45	10,639	5	0	0	0	0	2	10,639	5
	Al Matama	212,105	159,079	75	31,816	15	21,211	10	0	0	0	0	2	21,211	10
	Shendi	376,268	319,828	85	37,627	10	18,813	5	0	0	0	0	2	18,813	5
	Total	1,564,643	1,061,264	68	394,702	25	108,677	7	0	0	0	0		108,677	7
Gran	d Total	45,198,109	22,830,757	51	15,986,594	35	5,657,268	13	723,491	2	0	0		6,380,759	14