Outcomes for more affected areas: *(phase 3 and worse)*
From total Sudan states, 179 Out of 186 localities were analyzed. 33 localities classified in Phase 3 were identified as most affected areas by food insecurity, for the following reasons:

Food consumption:
More than 9% of the population are poor food consumption due to depletion in the stock at household level, poor food diversity in addition to the high food prices, security situation and the entry of more than 1.2 million refugees from South Sudan, shortage of quantity and poor quality of drinking water, poor infrastructure.

Livelihood change:
There has been a slight change in the livelihood of move from agriculture to traditional mining and marginal occupations

Nutrition status:
GAM rate 10 - 30% in some localities, spread of some diseases such as watery diarrhea, Malaria, hepatitis and hemorrhagic fever.

Summary of causes, the situation and the key issue:
The most hazard and risks affecting food security situation as follows:
- Dry spells is affecting production areas in (Darfur, Gedaref, Kassala and North Kordofan).
- Agricultural pests (Crowd Worm) in parts of the of Gedaref, Blue Nile and Sennar states.
- Entranced of Animals in some production areas especially in West Darfour.
- Shortage of water requirement for some cops in some areas (graph1).
- Weak agricultural policies and, no announcement of incentive price for producers.
- High food prices.
- Fodder gap estimated at 6 million tons in Kassala state.
- Entry numbers of refugees from neighboring countries.
- Shortage and poor quality of drinking water.
- Spread of diseases and high rates of malnutrition
Part 2: Summary of Findings, Methods, and Next Steps

Food Availability:

The mid-season report (Sep 2017) indicate that the agricultural season in most production areas is good, Sorghum cultivated area (until the end of September) is estimated by 86% of the total targeted area, while the cultivated area of Millet is increased by 21% of the target area due to early rain in some areas of Millet production and the incentive price of millet. Some Parts of North, South, West and Central Darfur, Kassala, Gedaref and North Kordofan have been affected by dry spells. Despite the affecting dry spells, there is a significant positive improvement in the vegetation cover in terms of density and distribution in most production areas, promising good production and rangeland in pastoral and agro pastoral areas, except some parts of Kassala and Gedaref.

The following maps illustrate the rates of rainfall and vegetation in October compared to the averages:

Water Requirement Satisfaction Index

Source: Sudan Metrological Authority.
**Food access:**

Compared with the previous year (October 2016), the prices of Sorghum, millet and wheat increase by 10%, 33% and 37%, respectively. Livestock prices increased by more than 30%, also there is increase in prices of animal products. Generally the increase in prices is due to the lean season, fluctuation of rainfall, poor pasture, conflicts, high inflation rates and devaluation. All these factors negatively affect the purchasing power of the most vulnerable groups. Increasing flow of refugees from South Sudan, affect food security situation. This is likely to increase the competition on available domestic food and lead to increase in food price.

The following figures shows the average wholesale prices of Food grains and livestock in Oct 2017 compared to Oct 2016

**Food Utilization:**

Sudan is characterized by a variety of horticultural, livestock and fishing production, enhancing income and food diversity, good food practices which lead to stabilizing the nutritional status of the population in Phase 1 and 2, on the other side, poor cultural practices affecting food diversity and lead to high levels of malnutrition Some areas in the eastern and western parts, in addition to shortage and poor quality of water, poor sanitation, Some diseases, such as watery diarrhea malaria, typhoid, have affected the nutritional status(phase 3).
The Classifications:

- 18 states and 179 localities are calcified as table bellows:

<table>
<thead>
<tr>
<th>Phase</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Total</th>
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<tbody>
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<td>5</td>
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<tr>
<td>No of Localities</td>
<td>50</td>
<td>96</td>
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- 7 localities were not classified, in Southern Kordofan (Um Doreen, Heban, Bram), Blue Nile (Bau), North Darfur (Karnoi, Um Uru, Tina) due to lack of information
- Use locality as a unit for analysis
- Analysis based on contributing factors that affect the food security situation (vulnerability, Risks) and the four food security dimensions (availability, access, utilization, stability)
- Indicate Phase classification for food security outcome (food consumption, livelihood change, nutritional status, mortality rate)
- Classification based on the 20% rule and phase description in Reference Table
- As result Sudan classified in phase 2 (29%)
- (9%) of the total population classified in phase 3 and the worst (about 3,845,805) required urgent interventions and humanitarian assistance.
- The figure below shows the proportion of Sudan's population at each phase

![Pie chart showing population distribution](image)

**Phase 1**: (62%) of the total population classified in phase 1 for the following reasons:

- Acceptable food consumption for most of the population, due to the abundance of food from local production and stocks (strategic and household level), as well as the availability of animal and fish products.
- The availability of food for the diversity of sources of income and the good infrastructure for roads and markets and stability of the security situation,
- in general there is food diversification, improvement in child care practices in terms of breastfeeding practices, availability of water in terms of quantity and quality, the average water per capita in urban areas is 21-31 liters and 30-60 liters in rural areas.
- Stability in livelihood, the majority of the population works in different fields (Agriculture, pastures, trade, employment and other jobs)
- Stability in nutritional status, no epidemiological diseases, GAMrate1%- 5%
**Phase 2:** (29%) of the total population classified in phase 2 for the following reasons:

- Borderline food consumption for most of the population, as impact of low production in some areas affected by the drought, shortage of most household stock, increase prices, which negatively affected the access to food for most of the poor household.
- There has been a slight change in the livelihoods in some localities, where some people have moved from agriculture to traditional mining, there is a shift agricultural labor and other activities such as collecting firewood, brick making and marginal trade.
- GAM rate 6-10%.

**Phase 3:** (9%) of the total population classified in phase 3 for the following reasons:

- Poor food consumption for most of the population, due to the depletion of household stocks and low food supply in the markets. High food prices affect food access, poor infrastructure, in addition to conflicts and instability of the security situation. Increasing flow of refugees affect food security situation. This is likely to increase the competition on available domestic food and lead to increase in food price; some areas have poor food diversity as a result of poor health and nutrition awareness, weak awareness of breastfeeding practice, bad food habits and high illiteracy rates in some areas. shortage of healthy water for drinking and cooking
- There has been a change in livelihoods,. There is a shift from agriculture to other activities such as traditional mining and migration of youth to urban areas for work, migration as a result of conflicts and insecurity., which led to the loss of most of assets
- Deterioration of nutritional status due to the spread of diseases such as watery diarrhea, malaria, hepatitis and high GAM rates (10%-40%) in some localities
Methods, Process & Key Issues:
- The analysis was carried out in accordance with the tools and procedures of the IPC Version 2.1 and the indicators agreed upon in Sudan.
- Use analytical framework, reference tables and analysis work sheets.
- STWG organizing several meetings for the analysis, technical consensus and compatibility of classification.
- Send a states’ analysis to the Federal TWG for further review and technical consensus.

Sources of information at states and national level:
- Ministry of Agriculture and Forests & states ministries.
- Ministry of Animal Resources & Fisheries & states ministries.
- Ministry of Health & states ministries.
- Ministry of Finance and National Planning & states ministries.
- Ministry of Education & states ministries.
- Strategic Reserve Department.
- Central Bureau Of Statistics & states Bureaus.
- Water Corporations at states.
- Humanitarian Aid commission.
- Sudan Metrological Authority.
- FEWSNET.
- UN agencies and NGOs and at states.

Key constraints and challenges at states level:
- Not allocating budgets for the State TWG from the state budget.
- Lack of updated information required for analysis.
- The absence of some members of TWG leads to delaying the analysis process.
- Turnover of TWG members.
- IPC is not included in States annual Plan.
- Structure of FSTS at state is not completed.

Recommendations and Next Steps:
- Conduct studies and surveys that support analysis.
- Inform decision makers of the results of the IPC analysis and the importance of the interventions necessary to improve food security situation.
- Establishment of state food security and nutrition councils and FSTS in the states.
- Complete the composition of food security technical committees in the states.
- Complete TWG matrix, representing all relevant institutions in TWG.
- Training and raising the capacity of the TWG.
- Establishment of data base in different institutions.
## Food security seasonal calendar

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Strategic objectives

Recommendations for interventions:

Interventions range from short-term interventions to medium- and long-term interventions population in phase 1 and 2 needs development programs that enable them to build capacity and raise their resilience to cope with crises. While population in phase 3 need firstly food aid and then other interventions for recovery and capacity-building.

Phase I and 2
- Technical packages to improve productivity
- Development and improve Agricultural marketing
- Improve food processing and household farming
- Support the extension services to improve the crop and animal performance.
- Exemption agricultural inputs from taxes
- Integration of Federal and states efforts to achieved food security
- Set price policies to control food prices
- Activate microfinance for small farmers
- Activate of producers associations
- Activate the role of strategic reserve department in price concentration.
- Intensifying women and child care awareness campaigns
- Programmes to change the poor cultural practices.
- Supporting agricultural exports
- Improve infrastructure (Roads, Markets, Transportation…)

Phase 3
- Providing food aid to the most affected population
- Protecting livelihood assets from deterioration
- Reduce the effect of risks (high prices, floods, conflicts...)
- Prevention nutrition programmes to improve the nutrition status
- Open animal routes to avoid conflict between farmers and herders
- Support the early warning systems for close monitoring and precautions
- Continue supporting conflict resolutions and peace building