

SUDAN

Floods

As of 20 August, some 179,000 people have been affected by heavy rains and flooding across 15 states in Sudan according to the government's Humanitarian Aid Commission. Worst affected is White Nile state with nearly 66,500 people who are impacted by flooding. Flood water destroyed or damaged at least 34,500 homes and impacted WASH and health facilities. Additionally, thousands of livestock have been killed which is likely to affect livelihoods and food security, especially of poor households. Particularly vulnerable are the South Sudanese refugees and Sudanese IDP's whose living conditions were already dire before the onset of the crisis. Most urgent needs reported are shelter, WASH, health and food assistance (OCHA 20/08/2019).

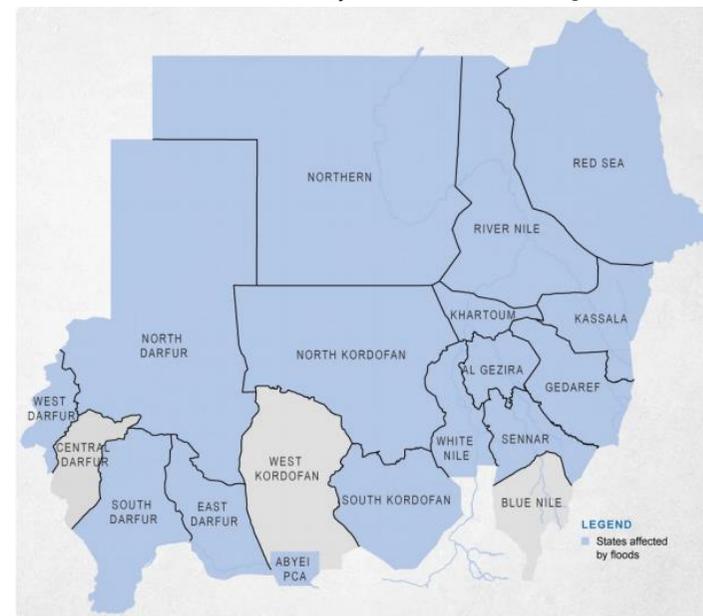
NEED FOR INTERNATIONAL ASSISTANCE



IMPACT



Sudanese states affected by floods as of 20 August 2019



Source: OCHA (20/08/2019)

Anticipated scope and scale

Sudan's rainy season runs from **June until the end of September**. Continuous rainfall is forecast for the coming days. More rain coupled with soil saturation is highly likely to lead to **further flooding**. Pooled water is likely to increase mosquito breeding grounds and exacerbate **health risks**. The risk of **waterborne disease outbreak** is more likely following the destruction of WASH facilities and limited supply of clean drinking water.

Key priorities



+179,000
People affected



+34,500
Houses damaged or destroyed



High WASH needs
Risk of disease outbreak

Humanitarian constraints



Severe operational constraints have been reported as a result of the damage to the road infrastructure caused by the flooding. Especially cut off connections to the capital are concerning for the aid supply. Some remote areas are currently inaccessible. Sudan's fragile security situation is likely to

Limitations

Assessments are ongoing, and the impact is likely to increase over the coming days. The exact scope of the impact is therefore unclear.

Crisis impact

Heavy rains, that started on 13 August, caused flash floods in 15 out of 18 states across Sudan. States affected include El Gezira, Gedaref, Kassala, Khartoum, North Darfur, North Kordofan, Red Sea, River Nile, Sennar, White Nile, South Darfur, East Darfur, West Darfur, South Kordofan and the Abyei area. As of 20 August, flooding has affected an estimated 179,000 people as reported by the government's Humanitarian Aid Commission (HAC). At least 54 people have died as a result of the flooding. According to initial assessments, conducted by the HAC, over 22,800 houses are destroyed and at least another 11,700 are damaged (OCHA 20/08/2019). The floods also damaged an unknown number of public facilities including mosques, schools, health centres and government institutions (Radio Dabanga 18/08/2019). With nearly 66,500 people affected, the White Nile state is the worst impacted. About 13,300 houses have been either damaged or destroyed by the flooding, in addition to some 335 latrines (OCHA 20/08/2019). As assessments are still ongoing, these numbers represent merely an estimate of the impact on the assessed regions. Furthermore, it is unclear what the HAC means by the term "affected". Numbers of people displaced by the floods have not been reported.

Sudan's rainy season typically lasts from June to September. Torrential rainfall is forecast in the coming days until at least 24 August in the River Nile, Northern, Red Sea, Gedaef, Gezera, White Nile, North Darfur, South Kordofan, North Kordofan and Khartoum states. Ongoing rains raise the risk of additional flooding in these states (HAC 19/08/2019).

Impact of the flooding in Sudan as of 20 August

Sate affected	People Affected	Houses destroyed	Houses Damaged	Latrines damaged or destroyed
Khartoum	11,840	1,609	759	129
Kassala	19,235	2,431	1,416	1,300
White Nile State	66,485	10,517	2,780	335
Red Sea	10,315	1,623	440	635
North Darfur	11,580	1,161	1,155	1,500
South Darfur	7,700	1,200	340	1,008
Sennar	10,095	902	1,117	100
North Kordofan	3,355	409	262	313
El Gezira	11,450	1,108	1,182	256
River Nile	3,775	401	354	52
West Darfur	5,800	X	1,67*	X
East Darfur	200	X	X	X
Gedaref	14,850	1,196	1,774	X
Northern	1,000	77	123	X
South Kordofan	X	X	X	X
Abyei PCA	1,200	250	X	X
Total	178,880***	22,884**	11,702	5,628

Source: OCHA 20/08/2019

* Figure reported by HAC in the OCHA situation report (20/08/2019). It is unclear what is meant by 1,67 houses damaged in the West Darfur state. The number is therefore not included in the calculation of the total number of houses damaged by floods in Sudan.

** The total number includes the houses destroyed in the Abyei PCA. The Abyei area is a contested area between Sudan and South Sudan. Abyei is claimed by both countries and has been a source of conflict in Sudan for over 50 years.

***Total sum of the breakdown per state as reported by HAC differs from the total number of people affected reported by HAC in the OCHA situation report (20/08/2019). Total number in the report leaves out the people affected in West Darfur and East Darfur states as well as the Abyei area.

Most people affected are in need of shelter, WASH, food and health assistance.

Shelter & NFI's: With over 34,586 houses damaged or destroyed, emergency shelter is a major need among the affected population. Families are reported to be sleeping under trees. It is unclear how many people have been displaced by the flooding. NFI needs include plastic sheeting, blankets, mats and household supplies (OCHA 20/08/2019).

WASH: Most of the affected people are in need of WASH assistance. Over 5,600 latrines have been destroyed across the affected region. Drainage of stagnant water has started in some areas, especially in Khartoum state, but has not yet commenced in most of the affected areas (OCHA 20/08/2019). Stagnant floodwater may become contaminated with sewage due to the deconstruction of latrines leading to infectious diseases (HAC 19/08/2019). Damage to water stations has been reported. People in some areas do not have access to safe drinking water (OCHA 20/08/2019). Poor water supply is an underlying problem across Sudan. Communities have often relied on water trucking to meet demand, and successive water system breakdowns have substantially reduced water access (HNO 13/03/2018).

Health: Flooding may indirectly cause an increase in vector-borne diseases as standing waters, caused by heavy rainfall or overflowing rivers, are possible breeding sites for mosquitoes expanding the number and range of vector habitats. Flood-affected populations tend to be more exposed to infections such as dengue and malaria (HAC 19/08/2019). The need for mosquito nets has been reported (OCHA 20/08/2019). Additionally, flooding raises the risk of water-borne diseases. The impact may be worsened by poor hygiene practices among affected communities as well as damaged WASH infrastructure and health facilities (HAC 19/08/2019). As of 18 August, two cases of acute watery diarrhoea (suspected to be cholera) were reported (Radio Dabanga 18/08/2019). Cholera cases are difficult to verify and respond to as the government of Sudan prefers to use the term acute watery diarrhoea and the scope of the WHO to assess suspected cholera cases is limited (Radio Dabanga 03/05/2018). Sudan experienced a large cholera outbreak in 2016 and 2017 when over 900 people were reportedly killed (Radio Dabanga 18/08/2019). Several health centres have been damaged by floodwater. It is unknown that what extent these are operational. Due to the economic crisis, there are severe shortages of medicines countrywide. While WHO has distributed a number of medical supplies and medicines, the need for additional support has been reported (OCHA 20/08/2019). Access to affordable and quality health services are severely restricted in remote areas in Sudan. The health system, including the capacity and provision of local health facilities, is badly equipped (WHO 2019).

Food and livelihoods: As many families have lost their homes as well as their income, the affected population is in urgent need of food assistance. Assessments report on the need for ready-made meals in the emergency response. Flooding has killed thousands of livestock (OCHA 20/08/2019). Loss of livestock and livelihood assets will especially impact poor households and exacerbate the food insecurity situation in the affected area. Damages to crops are expected, particularly in the considerable cropped Blue Nile, Sinnar and Gezera state states (HAC 19/08/2019).

Education: At least 12 education facilities in Red Sea, North Darfur, South Darfur and Sennar states have been damaged by the floodwaters. It is unknown what the extent of the damages are and how the activities in those facilities are impacted (OCHA 20/08/2019).

Vulnerable groups affected

South Sudanese refugees, as well as Sudanese IDP's staying in camps, are particularly vulnerable to the impact of the floods. White Nile, the worst affected state, hosts with some 235,539 South Sudanese refugees the second-largest South Sudanese refugee population in the country (UNHCR 2019). Damages to refugee camps and IDP settlements in the affected areas are reported (OCHA 20/08/2019). Both groups are at risk of secondary displacement and have low coping capacity to respond to the flood situation. Especially, refugee populations do not have an extended familial or social community to rely upon for assistance (OCHA 20/08/2019; HAC 19/08/2019). About 70% of the South Sudanese refugees in areas with active response lack access to adequate shelter (South Sudan Regional Refugee Response Plan 2018). This group is likely to be disproportionately affected by the flooding.

Humanitarian and operational constraints

Humanitarian operations have been significantly constrained mainly due to insecurity related to the political instability as well as the impact of the flooding on the critical infrastructure and the period of the Eid holidays.

Impact on critical infrastructure

Floodwaters have washed away and damaged roads and high ways, including connections between the capital, Khartoum where large stocks of the aid is stored, and other affected areas (Radio Dabanga 08/08/2019). Cut-off roads, poor road conditions and flooded valleys and creeks as a result of the flooding have impacted the humanitarian access, including access to essential medical services, and delivery of aid (OCHA 20/08/2019; HAC 19/08/2019). There are also reports of power outages due to collapsing power lines (Radio Dabanga 13/08/2019).

Political instability and security situation

Despite the new Sovereign Council agreed on 17 August, the political situation in Sudan remains fragile (BBC 21/08/2019). Since December 2018, security forces have violently raided peaceful demonstrations. Violence against protesters is likely to continue. International humanitarian organisations have evacuated staff after the escalation of violence against protesters on 3 June when over 120 people were killed, and more than 780 people injured. The security situation is likely to continue to pose severe operational constraints in the country (Institute for Security Studies 24/06/2019).

Eid holidays

Operational challenges were reported during the Eid holidays between 11 and 16 August. Absence of coordination with key stakeholders during this period led to a delay of operations.

Economic crisis

Cash and fuel shortages attributed to the economic crisis as well as general strikes may hamper humanitarian operations (OCHA 11/06/2019).

Aggravating factors

Rainy Season

Sudan is prone to heavy rainfall that often leads to floods. Sudan's rainy season runs from June until September. Historically, the number of people affected by floods peaks in August. More heavy rainfall is forecast in the coming days (HAC 19/08/2019). Continued seasonal rainfall is likely to lead to oversaturation of the soil and, consequently, flooding in new areas (FEWS NET 21/06/2019; OCHA 20/06/2019).

Type of housing

Houses in rural areas or suburbs across Sudan tend to be built from a mud and stone (or brick) combination. Some IDPs that only got recently displaced may stay in tents. These materials make them susceptible to heavy damage during strong rains and floods (Inter-Agency RNA 02/08/2018; Radio Dabanga 13/08/2019).

Previous flooding

The impact of the floods on the affected population is likely to be aggravated by pre-existing vulnerabilities caused by previous flooding in the affected areas.

June 2019: In June the region of Darfur received multiple events of torrential rainfall that affected host, IDP and returnee populations and left around 6,520 people in need of

humanitarian assistance. About 480 houses were destroyed and over 785 houses were particularly affected in all five Tawilla IDP camps.

Rainy season 2018: Heavy rains and flash floods affected over 222,000 people across 15 states during Sudan's 2018 rainy season. Some 24,000 were displaced. The flooding affected livelihoods and led to slight crop production shortfalls (OCHA 01/12/2018; FEWSNET 5 October 2018)

Political instability and economic crisis

Sudan has faced severe economic challenges since the beginning of 2018. The elimination of wheat and flour subsidies in February 2018, coupled with continual devaluations of the Sudanese pound (SDG) caused shortages of essential commodities and hard currency. The economic crisis is disrupting public services, impacting agricultural activities, and resulting in dramatic price increases for staple foods (Crisis Group International 14/01/2019; Middle East Eye 21/08/2019). Households across Sudan, including most IDPs, are struggling to meet their basic needs as staple food prices for wheat, millet and sorghum increased to 250-300% above the five-year average (FEWS NET 07/2019). Despite the new Sovereign Council, a power-sharing solution that was agreed upon on 17 August between Transitional Military Council and opposition Forces for Freedom and Change (FFC), a fragile political situation remains and the conflict of interests among the civilian and military leaders are posing main obstacles to form a functional government that can address the economic challenges. Hope arises as Abdalla Hamdok, a well-known economist and deputy executive secretary of the United Nations Economic Commission for Africa, was nominated to serve as prime minister during the transition (France 24 21/08/2019; Middle East Eye 21/08/2019; Al-Aswat 20/08/2019). However, quick foreign investment is unlikely as the country is still classified as a 'state sponsor of terror' (HRW 07/11/2018; Radio Dabanga 13/08/2019). Strikes and high-security concerns are exacerbating the risks of a drastic economic decline, especially when the oil trades with South Sudan, one of Sudan's major income source, is affected.

Key characteristics

- **Population of Sudan:** 40.8 Million (HNO 2018)
- **Food security figures:** An estimated 5.8 million people experienced Crisis (IPC 3) or worse levels of acute food insecurity, including more than 1 million people who experienced Emergency (IPC 4) conditions, as of March
- **Nutrition levels**
 - GAM Caseload 2.47 Million (HNO 2018)
 - SAM Caseload 694,000 (HNO 2018)
- **WASH statistics:** 4.9 million people across Sudan do not have access to adequate drinking water and safe access to latrines (HNO 2018)

Response capacity

Local and national response capacity

Sudanese authorities at a national and state level are responsible for the overall coordination of the response effort. The Humanitarian Aid Commission (HAC) activated the Flood Steering Committee as well as the Flood Task Force (FTF) which is expected to scale up response planning in flood-affected areas. The FTF provides food, WASH, health, nutrition and shelter assistance. Both the Steering Committee and the Floods Task Force will remain active until the end of the rainy season. Some initial interventions have started. However, the scale and scope of these interventions are unclear (HAC 19/08/2019; OCHA 20/08/2019). In previous flooding, the national civil defence council and the Sudanese Red Crescent were involved.

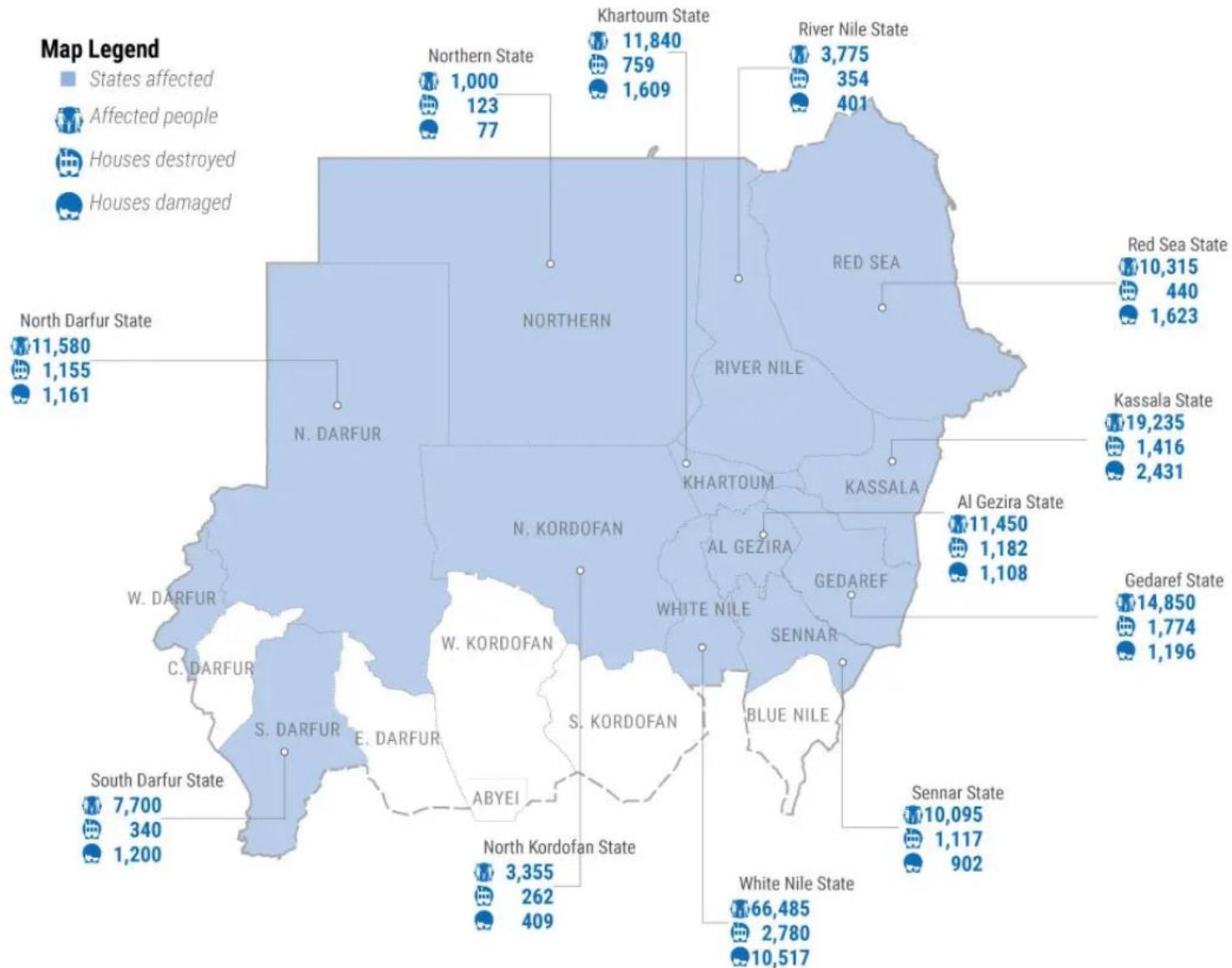
International response capacity

UN agencies including WHO, UNICEF, UNHCR and IOM, and several INGO have started initial response activities and have distributed critical aid including tents, plastic sheeting, NFI kits, dignity kits, food and nutrition supplies, etc. WHO is supporting the medical assistance in the affected areas and has provided supplies and medicine as well as support with establishing mobile health teams.

Information gaps and needs

- As not all areas have been assessed yet and heavy rains are ongoing, the actual scope of the impact remains unclear;
- The numbers of people affected are collected by the HAC. It is unclear what is meant by the term “affected”;
- There are no figures on people displaced. Moreover, it is unclear where people have been displaced to as a result of the floods;
- There is a lack of demographic breakdown of the affected population. Information about specific vulnerabilities is limited;
- The severity of needs of the affected population is not known;
- The level of access to public services is often unclear in rural and remote areas.

Map: Sudanese states affected by flooding as of 20 August 2019



Source: OCHA (20/08/2019)