

SOUTH SUDAN

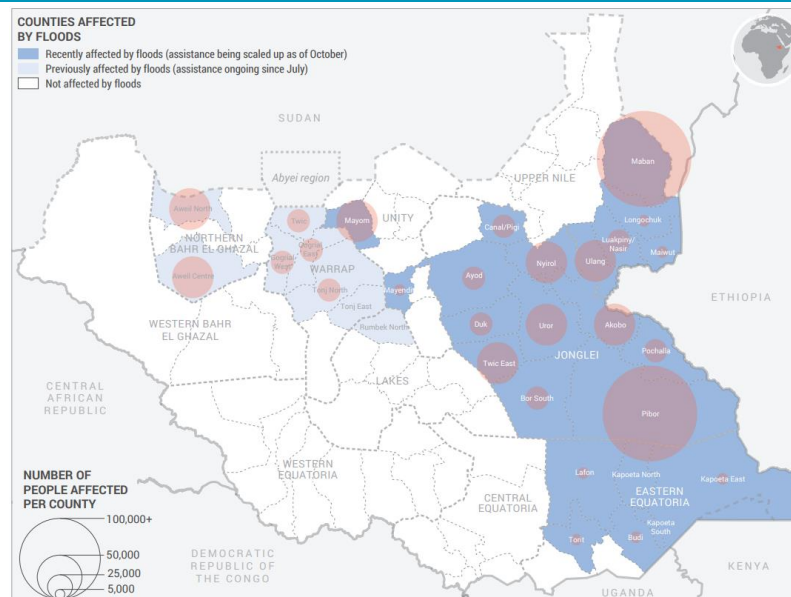
Floods

Heavy flooding caused by intense seasonal rains has been impacting large areas of South Sudan. An estimated 900,000 people have been affected and an estimated 420,000 people have been displaced, as floods have destroyed shelters and infrastructure and disrupted people's access to services. Major access constraints hamper humanitarian assistance. The floods are compounding pre-existing humanitarian needs, including food insecurity and malnutrition, related to the complex crisis in South Sudan.

NEED FOR INTERNATIONAL ASSISTANCE



IMPACT



Map source: OCHA 25/10/2019

Anticipated scope and scale

The seasonal floods have impacted large areas across South Sudan, especially in the north and east. Floods have been ongoing since July but intensified in October. Available data indicates that **Maban county** in Upper Nile state and **Pibor county** in Jonglei state have been particularly affected. Other significantly impacted counties include Twic East, Uror, Akobo, and Nyirol in Jonglei state, Ulang in Upper Nile state, and Mayom in Unity state. **Rains are ongoing and likely to continue into November**, which could further exacerbate needs and access constraints.

Key priorities



+900,000
people affected



WASH and Health
to prevent disease outbreaks



Shelter
destruction reported



Food insecurity
and malnutrition before flood onset

Humanitarian constraints



Access has been severely disrupted. Floods have blocked road access to many affected areas and restrict people's access to services.

Limitations

There are major information gaps. Consolidated figures of affected and displaced people and breakdowns of needs by geographic area or population group are not available; and for many affected areas information on humanitarian needs and conditions is scarce. However, the available information is sufficient to give an indication of the general scale of needs and priorities. This briefing note covers the most affected areas in South Sudan, though where possible it reflects the geographic focus of the START alert.

Crisis impact

Heavy flooding has been affecting South Sudan since July. Over 900,000 people are estimated to have been affected across the country. Displacement, urgent humanitarian needs, destruction of shelter and assets, and major humanitarian access issues are reported in the affected areas, compounding an already dire humanitarian situation (OCHA 25/10/2019).

During the rainy season, which usually lasts from June to October, flooding is common particularly during September and October (FEWS NET 12/2013). This year, the flooding has been particularly heavy, exacerbated by rainfall in Kenya and Ethiopia, which led to the swelling of Pibor river along the Ethiopian border (UNHCR 24/10/2019; MSF 25/10/2019). Agencies are describing it the most severe flooding in South Sudan in decades (UNHCR 24/10/2019).

Forecasts indicate that rains in Ethiopia and in the border region with South Sudan are likely to continue into November. This could worsen the situation as ground waters are saturated (NOAA 30/10/2019; OCHA 25/10/2019; Oxfam 26/10/2019).

Thirty-two counties in seven states have been particularly impacted. On 30 October, the government declared a state of emergency in the affected areas (Radio Tamazuj 30/10/2019).

There is currently no geographic breakdown of affected or displaced populations. According to OCHA, Maban county, Upper Nile state, and Pibor county, Jonglei state, have been particularly affected. Other significantly affected counties include Twic East, Uror, Akobo, and Nyirol in Jonglei state, Ulang in Upper Nile state, and Mayom in Unity state. (OCHA 25/10/2019). Humanitarian needs resulting from floods have also been reported in Eastern Equatoria (UNMISS 31/10/2019).

Displacement: Displacement has been reported across the affected areas; however, there are no consolidated figures. Reports indicate that a significant part of the affected population has been displaced. Some 420,000 people have been displaced across the affected regions (OCHA 25/10/2019). In Jonglei state, the whole population of Pibor town has been displaced by the floods, and according to local news, over 40,000 people were displaced in Panyang area of Duk county (UNMISS 29/10/2019; Radio Tamazuj 16/10/2019). According to one local source, some people from Jonglei state have been displaced to Ethiopia (EyeRadio 22/10/2019). In September, the displacement of some 30,000 people in Tonj North, Warrap state, was reported (WHO 16/09/2019).

WASH: The floods have destroyed and damaged sanitation facilities, which is associated with a risk of contamination of drinking water (UNHCR 24/10/2019). Access to safe drinking water is a key priority for the affected population (OCHA 21/10/2019). Water purification tablets are needed to purify untreated water (OCHA 25/10/2019). In Pibor, Jonglei state, a lack of latrines and severely limited access to drinking water was reported, with one

borehole serving some 50,000 people (MSF 25/10/2019). In Akobo, Jonglei state, approximately 11,800 people are reportedly without access to drinking water (Radio Tamazuj 21/10/2019).

Health: Priority interventions in the health sector include the improvement of access to healthcare and the prevention of the outbreak of waterborne and vector-borne diseases.

The floods have had a significant impact on the availability and access to healthcare. Hospitals have flooded, health equipment has been damaged or lost, and cold chains have been disrupted, for example in Pibor, Jonglei state (MSF 25/10/2019). Even where health services remain available, affected people are most likely not able to access them, due to the severe disruption of infrastructure (UNICEF 25/10/2019).

Floods are associated with the risk of **waterborne diseases** such as cholera and hepatitis A, if drinking water is contaminated (WHO, accessed 31/10/2019). South Sudan has been cholera-free since early 2018 but there is a high concern that the disease could now reappear through the contamination of water sources (MSF 21/10/2019).

There is a risk of an increase of **vector-borne diseases**, such as malaria, which is endemic in South Sudan. Mosquitoes breed in standing water, with floodwaters becoming vector habitats once they turn stagnant (WHO, accessed 31/10/2019). In some areas of South Sudan, a rise in malaria cases linked to the floodwaters, especially among children, as well as malaria-related deaths have been reported (Radio Tamazuj 24/10/2019; UNHCR 30/09/2019; WHO 16/09/2019). Mosquito nets and malaria medication is needed to prevent and respond to malaria outbreaks (OCHA 25/10/2019).

Other diseases that are likely to increase due to the floods are acute watery diarrhoea, respiratory tract infections, and skin diseases (MSF 21/10/2019; UNHCR 24/10/2019).

The risk of snakebites has also increased as snakes move to the same dry land where people converge (MSF 21/10/2019).

Food and Livelihoods: Emergency food assistance is needed for the affected population. Particularly the displaced population is in need of food (Oxfam 26/10/2019). As of August, over half of South Sudan's population is classified at the Crisis (IPC Phase 3) level of food insecurity or worse (IPC 11/09/2019). The flood-related disruptions of access to food and livelihoods likely further compound an already dire food situation for the affected population.

In Maban, Upper Nile state, the availability of goods in functioning markets has been reduced because rains have limited access. As a consequence, prices have increased significantly, reducing people's access to food (UNHCR 24/10/2019; MSF 21/10/2019).

There are concerns about the medium- and long-term impacts of the floods on livelihoods. The floods have destroyed crops, submerged grazing lands, and killed

livestock, implying a disruption of livelihoods and income sources (Oxfam 26/10/2019; OCHA 21/10/2019; UNICEF 25/10/2019). An assessment carried out in September in Twic East, Jonglei state found that around 90% of crops had been destroyed and approximately 10% of livestock had been killed by flooding (USAID 30/09/2019).

The impact of the floods on the current harvest season has not yet been determined. A flood-related reduction of the harvest yield could lead to lower food stocks and impact food security during the lean season.

Nutrition: The majority of counties affected by flooding already had critical levels of malnutrition, with GAM prevalence between 15.0% and 29.9% (IPC 11/09/2019). The floods have disrupted nutrition services as nutrition centres had to close. Together with the disrupted access to food and water and the risk of disease outbreaks, this leads to a high concern for an increase in acute malnutrition (UNICEF 25/10/2019).

Shelter/NFI: The displaced population is in need of shelter support. Needs include tents and plastic sheeting (tarpaulins) for temporary shelter, as well as NFIs such as mosquito nets (OCHA 25/10/2019; UNHCR 24/10/2019).

Destruction of shelter has been reported across the affected areas. There are no consolidated figures available and accounts vary. In Maban, Upper Nile state, shelter has been severely affected, with most shelters in Gendrassa refugee camp reportedly destroyed (UNHCR 24/10/2019). According to one local news report, in the Panyang area of Duk county, Jonglei state, 80,000 houses were destroyed (Radio Tamazuj 16/10/2019). In early October, local media reported shelter destruction in Twic South and Athooc, Jonglei state, with 200 houses destroyed in Twic South and 86 destroyed in Athooc (Radio Tamazuj 07/10/2019; Radio Tamazuj 03/10/2019).

Protection: Some sources highlight general protection concerns related to floods, such as the increased risk of children being exploited and abused (UNICEF 25/10/2019). The risk of family/children separation or GBV also increases with displacement. As people seek shelter in the nearest dry areas, overcrowding poses high protection risks for women and girls. Mental distress can also be a consequence of forced displacement, family separation, or loss of assets and shelter (Interviews 29-31/10/2019).

Education: The floods have disrupted access to education. Some schools have been destroyed, for example in northern Unity state (Radio Tamazuj 30/09/2019). In some areas of the flood-affected regions, schools are used as emergency shelters for displaced people (UNICEF 25/10/2019).

Humanitarian and operational constraints

Major access disruptions are affecting humanitarian operations and people's access to services. Many roads have been cut off by the floods and affected communities need to

be serviced by air, whenever possible. In some areas, access by plane or helicopter was also found to be very difficult due to rains and flooded terrain (Interviews 29-31/10/2019). In Upper Nile state, the only road leading to Maban has been cut off since August, and a single airstrip, which is in need of repair, is used to access the area (UNHCR 24/10/2019). Road access to refugee camps in the area has been severely disrupted (UNHCR 24/10/2019). In Jonglei, most roads have been closed as well (WFP, Logistics Cluster 25/10/2019).

The flooding is severely impacting people's access to hospitals, markets, and other services (OCHA 21/10/2019).

Flooding has impacted humanitarian infrastructure such as warehouses and staff housing (JRS 24/10/2019).

Flooding not only hampered operations but is also limiting humanitarian organisations' ability to assess the impact of the floods in some of the affected areas (Interviews 29-31/10/2019).

Generally, humanitarian organisations face major access issues throughout South Sudan, though fewer incidents have been reported in 2019 in comparison with 2018. Access incidents are often related to violence against humanitarian personnel or humanitarian assets (OCHA 19/09/2019).

Vulnerable groups affected

UNICEF estimates that some 490,000 children have been affected by the flooding (UNICEF 25/10/2019). They are particularly at risk of contracting diseases such as malaria (IFRC 18/09/2019).

In Maban, refugee camps, hosting some 150,000 refugees, and 70,000 members of the host communities have been affected by the floods (UNHCR 24/10/2019).

Aggravating factors

Weather Forecast

Rains are expected to continue into November in Ethiopia and the border area between Ethiopia, South Sudan, and Sudan (NOAA 30/10/2019). As the recent floods have been significantly exacerbated by the rainwaters from Ethiopia, this could result in additional flooding in South Sudan.

Pre-existing food insecurity and malnutrition

Over the past years, South Sudan has been facing a complex humanitarian crisis linked to internal armed conflict. Disruption of food production and humanitarian access and a collapsing economy have resulted in high levels of food insecurity (ACAPS 02/2018).

While **food security** has generally improved slightly over the course of 2019 due to reduced conflict events, high levels of food insecurity prevail (FEWS NET 09/2019). Over half of the population are in Crisis (IPC Phase 3) and above as of August 2019 (IPC 11/09/2019). Projections for September to December 2019, published in early September before the current intensification of the flooding, indicate a slight improvement in food security due to seasonal harvests becoming available (IPC 11/09/2019).

The following table shows the population estimates for food insecurity for the period September-December 2019:

Former States	Mid-2019 Population (NBS)	Minimal	Stressed	Crisis	Emergency	Catastrophe	% of Crisis, Emergency & Humanitarian Catastrophe
Central Equatoria	1,453,508	425,000	715,000	305,000	10,000	-	21.6%
Eastern Equatoria	1,067,162	295,000	395,000	320,000	60,000	-	35.5%
Jonglei	1,931,052	250,000	675,000	815,000	195,000	-	52.2%
Lakes	1,137,753	270,000	400,000	365,000	105,000	-	41.2%
Northern Bahr el Ghazal	946,905	200,000	295,000	350,000	100,000	-	47.6%
Unity	1,059,682	120,000	355,000	475,000	115,000	-	55.4%
Upper Nile	1,377,076	260,000	455,000	505,000	150,000	-	47.8%
Warrap	1,222,397	210,000	750,000	190,000	75,000	-	21.6%
Western Bahr el Ghazal	646,245	95,000	250,000	250,000	50,000	-	46.5%
Western Equatoria	861,331	310,000	445,000	95,000	15,000	-	12.7%
Total	11,703,111	2,435,000	4,735,000	3,670,000	875,000	-	38.8%

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 as a result they may be in need of continued action.

Source: (IPC 11/09/2019)

Pre-existing **malnutrition** in the flood-affected areas is of significant concern as well. In August, GAM rates in most counties across northern and eastern South Sudan were at critical levels (between 15% and 29.9%) (IPC 11/09/2019). For the period September-December 2019, projections indicate a slight improvement of the nutrition situation in northern and eastern states, including Upper Nile and Jonglei; with most counties remaining stable and some (notably Pibor in Jonglei) deteriorating (IPC 11/09/2019). This projection does not take into account the recent unusually heavy floods.

Key drivers of malnutrition in South Sudan are food insecurity and poor diversity and quality of food, poor child feeding practices, and the weak health system, with rainy seasons compounding these issues as access to nutrition and health services is reduced (IPC 11/09/2019).

Previous floods

Flooding is seasonal in South Sudan and regularly affects many communities during the rainy season. While the intensity of this year's flooding has not been seen in decades, South Sudan has experienced episodes of heavy flooding in previous years.

For example, in September 2017, significant flooding impacted Northern Bahr el Ghazal and Jonglei states due to heavy rains (UNICEF 30/09/2017). Pibor county in Jonglei and Maban county in Upper Nile were among those affected (UNMISS 13/10/2017; WHO 29/09/2017).

Response capacity

Local and national response capacity

With support from humanitarian organisations, the government has been responding in Northern Bahr el Ghazal, Jonglei, Upper Nile, Eastern Equatoria, and Unity states (OCHA 31/10/2019). Historically, the government's response capacity is low (ACAPS 05/04/2017). National and local NGOs often operate as partners of UN agencies or INGOs.

International response capacity

UN agencies and international NGOs, which were present in the affected areas before the flooding, have been scaling up to respond to the crisis (OCHA 25/10/2019). For example, UNICEF has been providing WASH and nutrition assistance (UNICEF 25/10/2019). UNHCR has been distributing food to refugees and the host community in Maban and has pre-positioned shelter assistance (UNHCR 24/10/2019).

Clusters such as the WASH, Shelter and NFI, and Food Security Cluster are responding to the floods (Interviews 29-31/10/2019).

Agencies noted that more assistance is needed (OCHA 25/10/2019). The capacity to respond has been significantly hampered by access issues.

Information gaps and needs

- There is no demographic breakdown of the affected population.
- For most locations, detailed information on specific needs is not available.
- There is little information on concrete protection needs of the affected population.

Lessons learned

- Flooding is seasonal in South Sudan, and this year the severity of the flooding was influenced by rainfall in Ethiopia. Early warning systems can help prepare for major flooding events, as long as there is a capacity to respond to warnings by taking preventive actions or evacuating (ACF, accessed 31/10/2019).
- A quick WASH response in flood events can limit the outbreak and spread of diseases (ACF, accessed 31/10/2019).
- A quick provision of shelter for flood-affected people can help to limit disease outbreaks and make community spaces such as education facilities, which have been used to shelter displaced people, available again (ACF, accessed 31/10/2019).
- Needs in flooding emergencies can change over time and assessment results can quickly become obsolete, for example if people start moving back to their homes. This means multiple assessments may be needed (ALNAP 2014).
- Consulting with the affected population is recommended to ensure that assistance is sustainable (ALNAP 2014).