Needs analysis working group

12 November 2019
Agenda

1. Flooding
   a. Updated maps of flood-affected locations
   b. Update on ongoing response -- Response Matrix
   c. Overview of HCT Operational Guidance for Flooding

2. Locations recommended for response scale-up

3. Locations recommended for close monitoring

4. Locations for field follow up and common service support

5. A.O.B.
FLOODS in South Sudan as of 7 November 2019 (Flood-affected populations in 1,000)

Legend
- National capital
- Undetermined boundary*
- Abyei region**
- International boundaries
- State boundaries
- 8 Sub-Office (OCHA)
- 20 Deep Field Coordinator (DFC)

* Final boundary between the Republic of South Sudan and Republic of Sudan has not yet been determined. Final status of the Abyei area is not yet determined.

Sources: OCHA and Partners
Feedback: imusouth@un.org, ochaouthsudan@un.org
www.unocha.org/south-sudan www.reliefweb.int
Overview Map: Flooding-affected areas and existing vulnerabilities (as of November 5, 2019)

In 2019, unprecedented flooding has reportedly washed away crops, destroyed homes, and contaminated water sources, as well as cut off or constrained access to critical basic services in some parts of the country. To inform the emergency response, REACH conducted key informant interviews with local partners and authorities and Participatory Mapping between October 21 – November 5 to provide a better understanding of where critical flooding has occurred, and its impact on the local population. The Needs Analysis Working Group (NAWG) conducts country-wide analysis of critical humanitarian needs to support the Inter Cluster Working Group (ICWG) with emergency prioritisation. It identifies counties that confirm any of the following 5 triggers: Disease outbreaks, displacement > 5,000 individuals. IPC Population in Phase 5, GAM > 15%, or Increased Mortality. Counties with at least one trigger identified are classified as “Confirmed”. The map below compiles indicative numbers of the flood-affected population in each county with existing vulnerabilities identified by the Integrated Needs Tracking System relating to FSL, WASH, Health, and Nutrition to identify areas of particular concern for the humanitarian response.

Note: Data, designations and boundaries contained on this map are not necessarily to scale and do not imply acceptance by the REACH partners, associates, donors mentioned on this map.
Current Geographical Prioritization of Flooded Affected Areas

Immediate Response
• Pibor County: Pibor town, Gumruk
• Lukangole and Verthet - response to be initiated asap when landable
• Panyagor in Twic East.
• Duk, Akobo, Uror, Nyirol, Ulang and Nasir (as next priorities).

Assessments conducted
• Ayod County: Mogok, Jiech and Gorwai in Ayod county (Tue 29 and Wed 30 Oct) and
• Uror County: Pieri, Yuai and Pathai in Uror county (Thu 31 Oct – 2 Nov).
• The State ICWG will conduct a preliminary desktop analysis on the impact of the flood event using the following indicators and thresholds:
  • Population affected > 5,000 people;
  • Combination with other events (conflict, disease outbreak, cattle raiding, intra/inter communal conflict) > 1;
  • Individual property uninhabitable as a direct result of the floods > 50%; and
  • Integrated Food Security Phase Classification > Phase 4, or Phase 4 with pockets of Phase 5.
  • Floods-related water-borne outbreak

*If the affected county has an IPC Phase 5 and water-borne disease outbreak is confirmed, the multi-sector response will be automatic and immediate. Otherwise, for an assessment to be activated, at least 3 of the above 5 thresholds need to be exceeded.*
If the initial rapid desktop assessment determines the need to activate a field assessment as per the process outlined under Part 1, there will be two types of further assessments conducted: 1) Impact Assessment; and 2) Technical Assessment.

The Impact Assessment in the affected area will collect information to analyze the following indicators and thresholds to determine the severity of the flood, subsequent impact on the affected population and to guide a decision on whether or not to respond:

- Population affected > 5,000;
- Combination with other events (conflict, disease outbreak, cattle raiding, intra/inter communal conflict) > 1;
- Individual property uninhabitable as a direct result of the floods > 50%;
- Integrated Food Security Phase Classification > Phase 4 or Phase 4 with pockets of Phase 5;
- Water infrastructure destroyed > 50%;
- Health and nutrition facilities (permanent or temporary) destroyed > 50%;
- Loss of productive assets > 40%; and
- Loss of cultivated land > 40%.

The Technical Assessment will analyse the extent of the flood event spatially, as well as the intensity by using remote sensing techniques and rainfall data, when available.

A response will be activated automatically if the affected county has an IPC Phase > 5 and/or if there is a disease outbreak as a result of the event. Otherwise, 5 of the above 8 thresholds will have to be exceeded to activate a response.
Indicators for prioritization of emergency flooding response

- Number of affected people (absolute/%?)
- Infrastructure destruction or damage (including critical services, roads)
- Loss of assets
- Damage/destruction of crops or cropland
- Water level in populated areas
- Timing

In tandem with:
- Data on rainfall patterns, soil type, and topography of the region
- Existing vulnerabilities (to determine impact)
## Flooding: Vulnerability/Risk Matrix

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<tr>
<th>State</th>
<th>County</th>
<th>Est. # Individuals Affected</th>
<th>Overall Risk (INT)</th>
<th>Previous NAWO Rec.</th>
<th>IPC Phase</th>
<th>GAM over 15%</th>
<th>IPC Phase FSL</th>
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<th>NUTRITION (INT)</th>
<th>WASH (INT)</th>
<th>NALTH (INT)</th>
<th>NAWO Rec. as of 29 Oct</th>
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• IRNA to Ayod, Jonglei

• Locations: Mogok, Jiech and Gorwai in Ayod County of Jonglei State

• IRNA conducted 29-30 October 2019 by WASH, Health, NFI/ES and OCHA

• Affected populations:
  o Mogok: No directly affected HH (according to authorities, approx. 1,550 HH affected in June/July)
  o Jiech: 500 most affected HH
  o Gorwai: 638 HH
• Key recommendations

- **Mogok:**
  - No urgent need of response to flooding
  - However, population in Mogok is in need for health services (medicine and equipment health facility) and WASH services (provision of hygiene items, borehole spare parts, latrines)

- **Jiech:**
  - Distribution of Emergency Flood Rapid Response Kits (RRK) for 500 most affected and vulnerable HH
  - Additional 500 RRK to be distributed in Kuach Deng (Kodalok)

- **Gorwai (Pajiek Payam):**
  - Report yet to be finalized
• Mogok Center

Jiech Center

Gorwai Center
(in September)
Yuai IRNA findings and recommendations
31 October – 2 November 2019
Overview

- Flooding periodically occurs in Yuai however, it reached unparalleled levels this year leaving villages like Juet entirely submerged. Juet, Uleng, Dhuong, Thamai, Wek, Patuet and Patet are the most affected villages.
- Significant destruction of shelter leading to displacements since August.
- 959 households (approximately 5766) individuals have been severely affected by floods
### Population figures

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Findings

• Affected populations are residing in churches, medical facilities, former NGO compounds and SPLM barracks.
• Latrines are flooded and some are completely damaged.
• Livestock deaths have been reported with Juet reportedly losing the entire population of goats.
• Snake bites account for 6% of the reports to the clinic coupled with increase in Malaria cases.
• No malaria test kits and anti- malaria at the PHCU. Patients are being clinically diagnosed.
• Open defecation is the most common method of excreta disposal.
• 70% of boreholes dysfunctional, many people are relying on stream water
Recommendations

SHORT TERM

• Prepositioning of anti-Malarial drugs.
• Provision of malaria test kits
• Rehabilitation of broken boreholes and provision of borehole parts.
• Provision of temporary shelter materials
• Construction of communal latrines in most affected areas and key places like Yuai Primary School
• Distribution of NFI’s – mosquito nets, blankets, flash lights
• Awareness raising for parents to supervise children when crossing streams
Flooding Impact:

- Returnee and IDP populations both present in the area, so flooding will exacerbate the needs of a population with existing vulnerabilities.
- Predicted to move from IPC Phase 4 (Emergency) to Phase 3 (Crisis) between September-December 2019, but damage to crops and wild foods will likely increase food shortages in the short and long-term.
- Localised violence may limit already constrained access to wild foods.
- Movement routes cut off due to flooding, leading to higher population density than expected at this time of year.
County Profile: Akobo, Jonglei

Flooding Impact

- Abnormally high flooding in October may have damaged sorghum crops prior to harvesting, as well as access to supplementary wild foods that are a critical coping strategy for populations going into the lean season.
- Deteriorated livelihoods can also be expected in agro-pastoralist area reliant on cultivation.
- Flooding in Akobo town has also constrained access to the market, thereby impacting short-term food availability.
- Humanitarian access limited for region that is extremely dependent on humanitarian assistance as main source of food.
Flooding Impact:
- Having already seen an increase in IDPs living in temporary shelters the county is likely to see higher vulnerability to shelter damage due to flooding
- The already significant IDP population may also contribute to large numbers of unregistered populations that may not be accounted for in flooding planning
- WASH needs have been historically high along the Nile in Jonglei, making the area vulnerable to waterborne diseases such as cholera and typhoid, which when coupled with poor access to healthcare may lead to disease outbreak, and long-term increases in malnutrition in the area
- Ongoing cattle raiding and intercommunal violence across the county has contributed to reduced access to livelihoods and basic services, and eroded household resilience
Flooding Impact:

- Continuously rising water has reportedly destroyed shelters, displaced people to higher grounds, and led to a loss of NFIs.
- Flooding has reportedly negatively impacted critical assets such as livestock, which are dying or falling ill, as well as fishing equipment in an area heavily reliant on pastoralism and fishing as principle livelihood activities.
- Coping strategies such as relocating to towns with functional markets to sell existing livestock are becoming more common in the immediate aftermath of the floods. Sale of livestock is notably the most important source of cash in the region and as such is likely to have long-term negative repercussions on the livelihoods of the area.
Flooding Impact:

- Local populations were reportedly displaced, with women and children heading Mandeng settlement, and men heading to Dualdong.
- Updates from IRNA (14 – 17 Oct): no safe drinking water available; no latrines + people defecating in same water as for HH use; IDPs living in open; snake bites reported.
- Flooding may have had a severe impact on cattle-keeping as grazing grounds are destroyed, migration paths are washed away and livestock disease spreads more easily.
Flooding Impact:

- Excess rains have caused displacement to surrounding highlands and roadside areas due to flooding and IDPs are reportedly relying on relatives or social networks for shelter and resources.
- Reported destruction of crops by flooding will likely impede access to food in the short and medium-term, with reports of increased sales of livestock in the market as a coping mechanism.
- Flooding has destroyed waterpoints and local community members are reportedly relying on open-water sources, such as rivers and swamps, which is a severe health risk given reports of widespread open defecation practices near rivers. This risk is further exacerbated by the reportedly flooded health and nutrition facilities in the area.
- Destruction of fishing kits and other key livelihood assets has limited access to one of the key seasonal food sources.
County Profile: Lafon County, Eastern Equatoria

Flooding Impact (Source: HealthLink Assessment)

- Floods have killed much of the livestock; of those who survived, many are sick
- Torit-Lafon road is inaccessible so there are no basic goods in the market
- Population is currently dependent on wild fruits and fish as crops were destroyed from flooding
- Widespread practice of open defecation → contaminating water sources, including boreholes, leading to use of unprotected sources (river)
- Many shelters destroyed or submerged
Flooding occurred from July through September in low-lying and river-adjacent areas of Meen, Maper, Madol, and Wunrieng Payams, resulting in displacement towards Rumbek Centre and unaffected areas in the east of the county.

Excess ground water has resulted in damage to staple cereals such as sorghum, and disrupted other important livelihood activities such as livestock and cattle rearing.

Due to increased illnesses like malaria and waterborne diseases, outputs of normally productive family members may be reduced, resulting in a greater burden of daily activities to fall upon more vulnerable household members, and a parallel reduction in livelihood activities.
County Profile: Yirol East, Lakes

Flooding Impact:

- Exposure to multiple shocks over the course of several years has eroded community resilience in Yirol East, notably the only county reported to have populations in IPC Phase 5 (Catastrophe) in August 2019
- Access and availability of food will be reduced as crops are damaged and access to markets are cut off, which will aggravate an already food insecure community
- Reduced access to health and nutrition services during the flooding period, and possible contamination of water sources will increase cases of malaria and other waterborne diseases
- High likelihood of displacement to Yirol Town and Mingkaman, further straining populations in urban centres
Flooding Impact

- Roads have deteriorated and become impassable due to flooding, which is also severely impacting people’s access to water in this community as most households have reported clean water sources are more than 30 minutes walking distance from their homes (REACH AOK).
- Members of the affected population have reportedly started to engage in coping strategies, such as collecting more wild foods to sustain their households after crop and livestock destruction.
- Areas in and around Aweil Town have been hardest hit and high rates of displacement are seen across the county, with likely knock-on negative effects on areas receiving an influx of IDPs.
Flooding Impact:

- Flooding has impacted road accessibility across the county, which may impact trade routes with Sudan.
- County was predicted to move from IPC Phase 4 (Emergency) to Phase 3 (Crisis) between September-December 2019, but crop and wild food destruction due to flooding will increase food shortages in the short and long-term.
- Increased cases of malaria and waterborne diseases are already being reported as the primary health concern, which will likely increase with continued rains.
Flooding Impact:
- Roads have deteriorated and become impassable due to flooding, which is also severely impacting people’s access to water in this community as most households have reported clean water sources are more than 30 minutes walking distance from their homes (REACH AOK).
- Sustained flooding has resulted in little to no harvest, as well as deaths of livestock, which is the main food and income source in this county; flooding is therefore expected to reduce food availability and income sources in the coming months.
- Impact on livelihoods will likely encourage an increase in migration to Sudan in search for casual labour opportunities.
County Profile: Twic, Warrap

Flooding Impact:

- Already vulnerable populations displaced by intercommunal violence have been displaced a second time due to flooding.
- According to REACH AOK data, the proportion of assessed settlement reporting flooding as the main cause of displacement increased from 5% to 80% between August and September in Twic County.
- Reduced crop yields will likely negatively impact access to food in the long term, as food stocks will be depleted earlier into the lean season.
- The likely increase in cases of malaria and waterborne diseases, alongside decreased access to health services with destroyed roads, will exacerbate existing humanitarian needs.
Flooding Impact:

- Heavy rainfall contributed to atypical flooding in the southern, western, and northern areas of the county.
- Flooding has reportedly restricted road access to some of the more remote areas of Gogrial West, limiting access to markets and humanitarian services for already vulnerable populations.
- Given the high dependence on cultivation, the reduced yield will likely result in an early-onset lean season, further exacerbating food insecurity.
- Flooding has also reportedly damaged key grazing land around cattle camps for livestock, which will likely have longer-term implications on livestock health and livelihoods.
**County Profile: Tonj North, Warrap**

**Flooding Impact:**
- Reported destruction of crops due to flooding and displacement will likely impede access to food and basic services in Tonj North, which is a largely rural area that already faces seasonal access constraints.
- Poor harvest resulting from the destruction of crops during flooding may have short, medium and long-term food security implications given high reliance on agriculture across the country.
- Increased cases of malaria and waterborne diseases, alongside decreased access to health services, may exacerbate existing health needs.
### 2b. New proposed locations?

<table>
<thead>
<tr>
<th>NAWG TRIGGERS</th>
<th>Present?</th>
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<tbody>
<tr>
<td>IPC Phase 5</td>
<td></td>
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<tr>
<td>Displaced/ returnee +5000</td>
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<tr>
<td>Mortality increasing</td>
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<td>Disease outbreak</td>
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<td>GAM + 15% (Emergency WHO Thresholds)</td>
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