

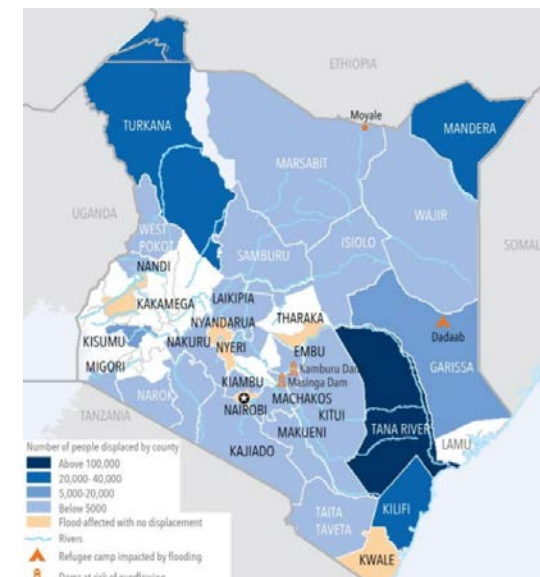
KENYA

Floods

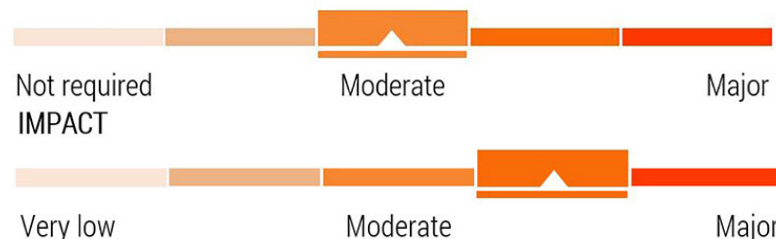
Significantly above-average rainfall since the beginning of the Long Rains rainy season in March have led to flooding across the country. Between 244,000 and 260,000 people are estimated to have been displaced. Rains are expected to continue in the following weeks, meaning further flooding is likely and recovery will take time. Among the displaced population, there are needs for shelter, food, WASH, and health assistance. Active cholera outbreaks are ongoing in Garissa, Turkana, Meru, West Pokot, Isiolo, and Nairobi, and there is a risk of further spread or new outbreaks in flood-affected areas. Response is ongoing but capacity is stretched.

Displacement by county

Source: OCHA 03/05/2018



NEED FOR INTERNATIONAL ASSISTANCE



Anticipated scope and scale

Flooding has caused destruction and damage of shelters, agriculture and livelihoods across the country which will take time to recover from. **Tana River** and **Garissa** are particularly affected as they border River Tana, which broke its banks, but multiple counties are affected and the secondary impacts, including the risk of disease outbreak. More rains are forecast through May, with rainfall expected to lessen towards the end of May. Mudslides pose an ongoing risk.

Key priorities



+244,000 IDPs
across the country



Shelter destruction
homes damaged and destroyed



WASH assistance
to prevent disease outbreaks



Crops impacted
+21,700 acres destroyed

Humanitarian constraints



Infrastructure has been severely impacted across the flood-affected counties, with some locations inaccessible by road.

Limitations

County-level and sub-county level displacement figures have largely only been reported by local media (quoting the Kenyan Red Cross). However, such estimates are often different from those reported by OCHA and other humanitarian agencies, likely because numbers are still growing. The distinction between “people affected” and “displaced people” is sometimes unclear. The primary focus of this note is on Garissa, Kilifi, Tana River, Kisumu, Mandera, and Turkana counties, but other counties such as Lamu have been affected as well.

Crisis impact

Heavy rains and flash floods have been affecting Kenya since the beginning of the Long Rains rainy season in March. The rains and their impact intensified in late April. In some areas, including in Garissa, Tana River, and Turkana counties, rainfall has been over 200% of the total seasonal average (FEWSNET 01/05/2018). Estimates of the number of people killed in the floods range from 80 to over 100 people (OCHA 03/05/2018, IFRC 03/05/2018, DW 01/05/2018). The Red Cross notes that the counties most affected by the floods are Tana River, Garissa, Turkana, Kisumu, Mandera, Kakamega, Samburu, Isiolo, Wajir, Narok, Nakuru, Nyeri, Isiolo, Marsabit, and Homa Bay (IFRC 01/05/2018).

Overall, between 244,000 and 260,000 people are estimated to have been displaced across the country due to the floods, with estimates continuing to rise as new reports come in (OCHA 03/05/2018, IFRC 03/05/2018). At least 23,000 people were displaced in the week to 3 May, as rains continue to induce flooding and displacement (OCHA 03/05/2018). The highest displaced populations per county are in Tana River, Turkana, Mandera and Kilifi counties (OCHA 03/05/2018). Breakdown of the IDP numbers population by region has not been reported since 1 May, when almost 146,000 IDPs were reported in Coast counties, 46,000 in Northeastern Kenya, 31,000 in North Rift, and 8,500 in Western Kenya (The Star 01/05/2018).

The floods have caused widespread destruction of shelter, property, crops, and infrastructure. Garissa and Tana River counties are most affected as the River Tana overflowed and excess water of upstream dams was released (FEWSNET 01/05/2018, The Star 27/04/2018). However, water basins and low-lying areas in other counties have also been affected by heavy rains and floods.

From 4-10 May, heavy rainfall totaling more than 50mm is expected across western Kenya (FEWS NET 03/05/2018). The rains are expected to continue through May and lessen towards the end of May in most regions (The Star 02/05/2018). Moderate to severe flooding is expected to continue to affect Kenya through the end of May (FEWSNET 01/05/2018). However, the Red Cross considers that heavy rains could continue until July (IFRC 01/05/2018). Flood-related IDPs will likely need further humanitarian assistance, including shelter, food, health, and WASH, through May and June (FEWSNET 01/05/2018).

In **Tana River**, over 150,000 people are estimated to have been affected by the floods (Nation 30/04/2018), including 67,200 in Tana North sub-county, 58,800 in Tana Delta sub-county, and 33,600 in Tana River sub-county (Nation 30/04/2018). Local reports are unclear as to whether these affected people have been displaced. Moreover, estimates vary widely between sources: OCHA reported that 50,000 people are displaced in Tana River (OCHA 25/04/2018). Other reports state that 64,000 people have been displaced

in Tana River (Nation 02/05/2018). 15,000 IDPs have been reported in Galole constituency (Nation 29/04/2018).

In **Garissa**, displacement has been reported but there are no consolidated figures available (The Star 27/04/2018, Tuko 27/04/2018). One source reports an estimated 50,400 IDPs (Hivisasa 27/04/2018). The Dadaab refugee camps have been impacted by the floods. An unknown number of refugees within the camp are sheltered in schools (OCHA 25/04/2018).

In **Kilifi**, 3,000 people reportedly have been displaced in Garashi, Sabaki, and Kakuyuni wards (Nation 26/04/2018). But other sources reported that 40,000 have been displaced in Kilifi (Nation 29/04/2018).

In **Turkana**, some 10,000 people were reportedly displaced in Lodwar (Nation 29/04/2018).

In **Mandera**, some 15,000 people have been affected (Nation 03/05/2018). 4,500 people are estimated to have been displaced (Save the Children 20/04/2018). In Mandera South sub-county, an estimated 8,600 people have been affected, including an estimated 6,300 in El Wak town (Nation 29/04/2018).

In **Kisumu**, the Nyando River has broken its banks (The Star 17/04/2018). Between 1,800 and an estimated 6,300 people have been displaced (Nation 30/04/2018, The Star 17/04/2018).

Other areas affected include Moyale, Marsabit county, where some 50,000 people reportedly have been cut off from any aid and services as the road connecting them to Moyale town was blocked by floods. They have been without assistance for over 10 days (OCHA 03/05/2018). In Lamu county, over 3,000 people have been displaced (Nation 30/04/2018). In Murang'a county, mudslides reportedly killed eight people (The Star 01/05/2018). Landslides have displaced some 150 people in Tharaka-Nithi county and an estimated 1,260 in Nandi (Nation 01/05/2018, Nation 28/04/2018, OCHA 03/05/2018).

Shelter and NFIs: Some 30,000 houses reportedly have been destroyed in Tana River (The Star 25/04/2018). IDP camps have been set up by the Red Cross, however, in Tana Delta, overcrowding of camps has left some 10,500 people without shelter (The Star 25/04/2018). The latest reports indicate that only 4,000 of the IDPs in Tana River have shelter (The Star 03/05/2018). Destruction of shelter in Dadaab, Garissa, has been reported. The displaced people have been sheltering in schools (Save the Children 20/04/2018). In Mandera, at least 750 homes have been destroyed (Save the Children 20/04/2018). Overall, the majority of the displaced population is staying in evacuation centres and is in need of shelter support (IFRC 01/05/2018).

WASH: There are WASH needs in affected areas due to the damage of water infrastructure and the risk of disease outbreak. Damaged water sources need restoring and chemicals for water treatment need to be distributed (ECHO 26/04/2018). In Malindi, Kilifi county, water pumps and boreholes were destroyed (Nation 30/04/2018). In Dadaab refugee camps, Garissa county, rainwater cannot easily drain due to the lack of a drainage system. Pit latrines have been overflowing, leading to concerns regarding the

contamination of water and the outbreak of diseases like cholera (Save the Children 20/04/2018, Citizen 27/04/2018, OCHA 25/04/2018). In the camps set up by the Red Cross, there is reportedly a lack of toilets (The Star 03/05/2018).

Food and livelihoods: The floods have led to losses of crops and livestock. At least 21,700 acres of farmland have been destroyed and 19,200 livestock killed by the floods across the country (OCHA 03/05/2018, The Star 01/05/2018). Some 1,000 livestock have been stranded on an island between Kipao, Tana River, and Mwa, Lamu, for over a week (Nation 30/04/2018). Over 1,000 hectares of land have been flooded in Kisumu (Nation 29/04/2018). According to the Red Cross, the counties most affected by crop and livestock losses include Tana River, Garissa, Kilifi, Kisumu, Turkana, Homa Bay, Elegeyo Marakwet, and Marsabit (IFRC 01/05/2018).

The floods have also disrupted market access and the loss of income for affected households, which results in reduced purchasing power (IFRC 01/05/2018). In Mandera, food prices have reportedly increased due to the floods (The Star 03/05/2018). In April, livestock trade was picking up due to early season rains improving cattle conditions, as well as high turnover associated with religious festivities (FEWS NET 03/05/2018). While heavy rains improve pastures, the disruption to markets due to floods can lead to missed livelihoods opportunities and dent drought recovery prospects. The destruction of crops could exacerbate food insecurity in the semi-arid counties (Xinhua 01/05/2018, IFRC 01/05/2018).

Many of the flood-affected counties have been affected by pre-existing food insecurity. For the April-May period, most parts of the Arid and Semi-Arid Lands counties (ASAL counties) are in Stressed (IPC Phase 2), with some parts being in Crisis (IPC Phase 3) (FEWSNET 01/05/2018). Most areas of Garissa and Tana River as well as eastern Turkana are in Crisis (FEWSNET 01/05/2018). For the June-September projection period, food insecurity is expected to improve to Minimal (IPC Phase 1) for most of the country, with the areas that were previously in Crisis expected to improve to Stressed (FEWSNET 01/05/2018).

Health: Flash floods have reportedly damaged health facilities in the affected areas (OCHA 25/04/2018). In Tana River, four health facilities have been flooded (IFRC 01/05/2018). In flood-affected areas, there is a risk of the outbreak of diseases (DW 01/05/2018). Warm weather conditions in combination with high precipitation are conducive for the breeding of mosquitoes, which could lead to the spread of vector-borne diseases like Chikungunya, Malaria, and Dengue (IFRC 01/05/2018). An ongoing cholera outbreak is heightening health concerns and polio remains a risk in Kenya (OCHA 03/05/2018). Flood-displaced people may be in need of psychosocial assistance (IFRC 01/05/2018).

Education: The second school term started on 30 April. Residents in some areas have asked local authorities to delay the school term by a week, while they recover from the floods. As many IDPs sought shelter in school buildings, there are concerns about the

disruption of education in the flood-affected regions. For example, in Kakuyuni, Kilifi, some 3,500 IDPs have been sheltering at a primary school (Nation 29/04/2018).

Furthermore, some schools are inaccessible due to flooding and some school buildings have been damaged or destroyed. About 70 schools in Tana River could not open as planned (Nation 02/05/2018). In the Tana Delta alone, 34 schools are inaccessible and seven schools have been destroyed (Nation 02/05/2018). In Kilifi, several school buildings are inaccessible (Nation 29/04/2018). Half of the primary schools in Nyando, Kisumu county, are expected not to open due to flood damage and infrastructure disruptions (Standard 01/05/2018).

Protection: There is a risk of increased cases of sexual and gender-based violence (SGBV) in displaced communities due to the breakdown of social structures (IFRC 01/05/2018).

In the Tana Delta area, wild animals entering flooded villages raise protection concerns, because they could injure people in the flooded areas. One person reportedly has been attacked by a crocodile (OCHA 25/04/2018, Nation 23/04/2018). Hippos have been spotted in Tana River and there are concerns that they might attack people stranded by the floods (The Star 25/04/2018).

An incident in Ongata Rongai, Kajado County, reported on 4 May, where five people drowned while crossing a bridge as they attempted to return home after being stranded on the other side of the river, highlight the physical dangers posed by the floods. Furthermore, the protests that followed the incident indicate social tensions between flood affected communities and local authorities, who some feel have prepared and responded poorly to the disaster (Kenya Daily Nation 04/05/2018).

Impact on critical infrastructure

The floods have damaged and disrupted road infrastructure across the affected counties, as well as health and education facilities (OCHA 03/05/2018).

The main road from Nairobi to Mombasa was flooded at the end of April (The Star 01/05/2018). In mid-April, most roads in Turkana were not passable due to floods (The Star 15/04/2018). In Kakuyuni, Kilifi county, affected people had to be evacuated by helicopter (Nation 26/04/2018). Most roads in Tana River and Kilifi are not passable (Nation 27/04/2018). Only a third of Tana River is currently accessible by road (The Star 25/04/2018).

Flooding has affected people's access to aid and services, including markets and hospitals (FEWSNET 01/05/2018). In Moyale, Marsabit county, a road linking 50,000 people to Moyale town was cut off (Nation 23/04/2018).

In mid-April, electricity supply in Mandera and Wajir counties was interrupted for two days due to fuel deliveries being delayed along flooded supply routes (The Star 20/04/2018).

Vulnerable groups affected

Poor households have reported losing all their assets and basic goods in the floods; they are likely to need urgent assistance (FEWSNET 01/05/2018).

People with disabilities, elderly people, and children are at risk of being left behind when their communities move to higher grounds (IFRC 01/05/2018).

Humanitarian and operational constraints

Infrastructure damage due to the floods is constraining access to affected populations, particularly in Wajir, Isiolo, Mandera, Marsabit, Tana River and Garissa counties, where roads have been cut off. Some 29 schools and 33 health facilities are impassable, and floods may impact ongoing vaccination campaigns (OCHA 03/05/2018). In Kilifi and Tana River, most roads are impassable (Nation 27/04/2018). Some parts of Dadaab camp are reportedly inaccessible due to flooding (Citizen 27/04/2018). Roads in northeastern counties are impassable in places (OCHA 03/05/2018).

Aggravating factors

Long Rains season

In eastern and northern Kenya, the Long Rains rainy season lasts from mid-March to mid-June. In western Kenya and in the Rift Valley it runs from mid-February to mid-August (FEWSNET 16/03/2018).

Drought

Drought conditions have been affecting ASAL (Arid and Semi-Arid Lands) counties, due to below-average rainy seasons (UNICEF 02/03/2018).

The impact of the rains has furthermore been exacerbated in some areas by the impact of climate change, deforestation, and desertification, as this has led to a lack of vegetation and the soil not being able to absorb the moisture of the rainfall, thus being swept away (Save the Children 20/04/2018).

Prolonged drought has also impacted on livelihoods and coping strategies in pastoralist areas. Pastoralists who lost cows in the drought have switched to more resilient but less lucrative herds, including goats and sheep. However, social tensions have also arisen as drought and herd losses have driven raiding and overgrazing (Reuters 04/05/2018). Food and

water remain expensive and livestock prices even after the rains have begun to alleviate the drought (ECHO 03/05/2018).

Disease outbreaks

Various disease outbreaks are affecting Kenya. There is currently a cholera outbreak active in Garissa, Turkana, Meru, West Pokot, Isiolo, and Nairobi, with 2,943 suspected cases and 55 deaths in 2018 so far (CFR: 1.9%) (OCHA 03/05/2018, WHO 20/04/2018).

Mandera and Wajir counties are currently affected by a measles outbreak, with 139 suspected cases in total, of which 100 have been registered in Mandera. One death was recorded in Mandera. The overall CFR is 0.7% (WHO 20/04/2018).

A chikungunya outbreak is affecting Mombasa and Lamu counties. Since mid-December 2017, 1,096 suspected cases and no deaths have been recorded (WHO 20/04/2018). Malaria is endemic to Kenya (WHO 04/2017).

In March 2018, Kenya had to launch a polio vaccination campaign, after a suspected (later confirmed) vaccine derived polio type 2 case was recorded in Eastleigh, Kamukunji Sub-county. Prior to this, the most recent cases of polio were recorded in 2013, when a wild polio virus outbreak in Somalia led to 14 cases in neighbouring Kenya (The East African 03/05/2018).

Insecurity

The counties bordering Somalia (Garissa, Mandera, Lamu, and Wajir) have been affected by presence and activity of the Islamist militant group Al Shabaab, which is active in Somalia. The most recent attack attributed to Al Shabaab in Kenya occurred in Fino, Mandera, at the beginning of March, when five police officers were killed and three were injured (Nation 02/03/2018). In April, Al Shabaab allegedly tried to recruit youths from Kilifi and Lamu counties (Standard 02/05/2018).

Political instability

In relation to the presidential elections on 8 August 2017, Kenya was impacted by several months of political tensions. The election period was marred by violence. In Nairobi, over 100 people were killed during the period (HRW 25/02/2018). On 9 March, President Uhuru Kenyatta and his main opponent Raila Odinga jointly held a press conference and announced they would work to resolve their differences, which has calmed tensions in

the country (Crisis Group 13/03/2018). Further political violence is unlikely in the short to medium term.

Contextual information

Refugees, asylum seekers, and IDPs

Kenya hosts some 481,200 refugees and asylum seekers (UNHCR 31/03/2018). 226,500 are located at Dadaab in Garissa county, 187,000 are in Kakuma in Turkana county, and 67,500 are in Nairobi (UNHCR 31/03/2018). The main countries of origin are Somalia (272,600), South Sudan (114,000), and DR Congo (37,000) (UNHCR 31/03/2018).

As of November 2017, there are some 309,000 IDPs in Kenya, including some 39,000 people displaced in 2017 due to the drought (OCHA 03/11/2017). There is little information about their location and their needs.

Key characteristics

Demographic profile: Total population of Kenya: 47,615,739, of which 26.5% is urban and 73.5% rural.

Poverty rate: In Kenya, the poverty rate is 45.9%.

Food security figures: 2.55 million people in Kenya are currently food insecure, compared to 3.5 million in 2017.

Nutrition levels: In Kenya, the current caseload for malnutrition of children under 5 is 328,260 for MAM and 71,560 for SAM.

Health statistics: In Kenya, the infant mortality rate is 37.1 deaths/1,000 live births. The maternal mortality ratio is 510 deaths/100,000 live births.

WASH statistics: In Kenya, 63.2% of the total population has access to improved drinking water. 56.8% of the rural population has access to improved drinking water. 30.1% of the total population and 29.7% of the rural population has access to improved sanitation facilities.

Lighting and cooking sources: In Kenya, the main lighting sources are tin lamps (38.5%), lanterns (30.6%), and electricity (22.9%).

Literacy levels: 78% of the population over 15 can read and write.

Sources: World Factbook 2018, Worldbank 2018, Knoema 2018, HumData 2018, SID 2013, UNICEF 02/03/2018, IPC 28/02/2018, FEWSNET 16/03/2018

Response capacity

Local and national response capacity

The government has been involved in overseeing the distribution of flood relief, however the humanitarian response to the crisis so far has been overstretched (The Star 01/05/2018, Xinhua 01/05/2018). Priorities were planned to be reassessed on 3 May but communication on decisions are yet to be announced (OCHA 03/05/2018).

The Kenyan Red Cross Society (KRCS) and local governments have been providing assistance to flood-affected populations, including shelter, food, and NFIs (ECHO 26/04/2018).

The KRCS has set up IDP camps, including 108 in Tana River and eight in Kilifi (The Star 03/05/2018). KRCS has also been providing WASH assistance in emergency shelters and basic health services (IFRC 25/04/2018). Chlorine and water purification tablets have been distributed in Tana River and Kilifi counties (OCHA 03/05/2018). Some 5,000 households have received shelter and NFI items from KRCS (IFRC 25/04/2018). KRCS is also involved in search and rescue efforts and evacuations of affected people (IFRC 25/04/2018).

On 29 April, the secretary general of the KRCS asked the national government to declare a national disaster in order to provide additional resources for the emergency response (The Star 01/05/2018).

The Kenya Defence Forces (KDF) and the police have been involved in the response. Together with the KRCS, other humanitarian organisations, and local governments, they have been evacuating stranded people. More than 3,000 people were evacuated in Kilifi (Nation 27/04/2018).

The government announced that KDF and police helicopters would be used to supply food to affected populations in inaccessible areas (The Star 28/04/2018). Airlifts have been used to reach some inaccessible populations (OCHA 03/05/2018).

International response capacity

The International Red Cross and UN agencies have been supporting the KRCS in responding to the crisis (OCHA 25/04/2018, The Star 17/04/2018). UNICEF has also distributed NFIs and other items in multiple areas (OCHA 03/05/2018).

World Vision has provided tents and NFIs to affected people in Garashi, Kilifi (Nation 30/04/2018). UNICEF has distributed family kits in Garissa and Kisumu (IFRC 01/05/2018).

In Dadaab refugee camp, UN agencies like the WFP and INGOs such as Save the Children have been impacted by funding cuts (Save the Children 20/04/2018).

Information gaps and needs

The exact number of flood-related IDPs remains unclear. At the county-level and sub-county level, most figures have only been reported by local media, with estimates varying significantly in some cases.

The extent of the shelter damage in Dadaab refugee camps is unknown (Save the Children 20/04/2018).

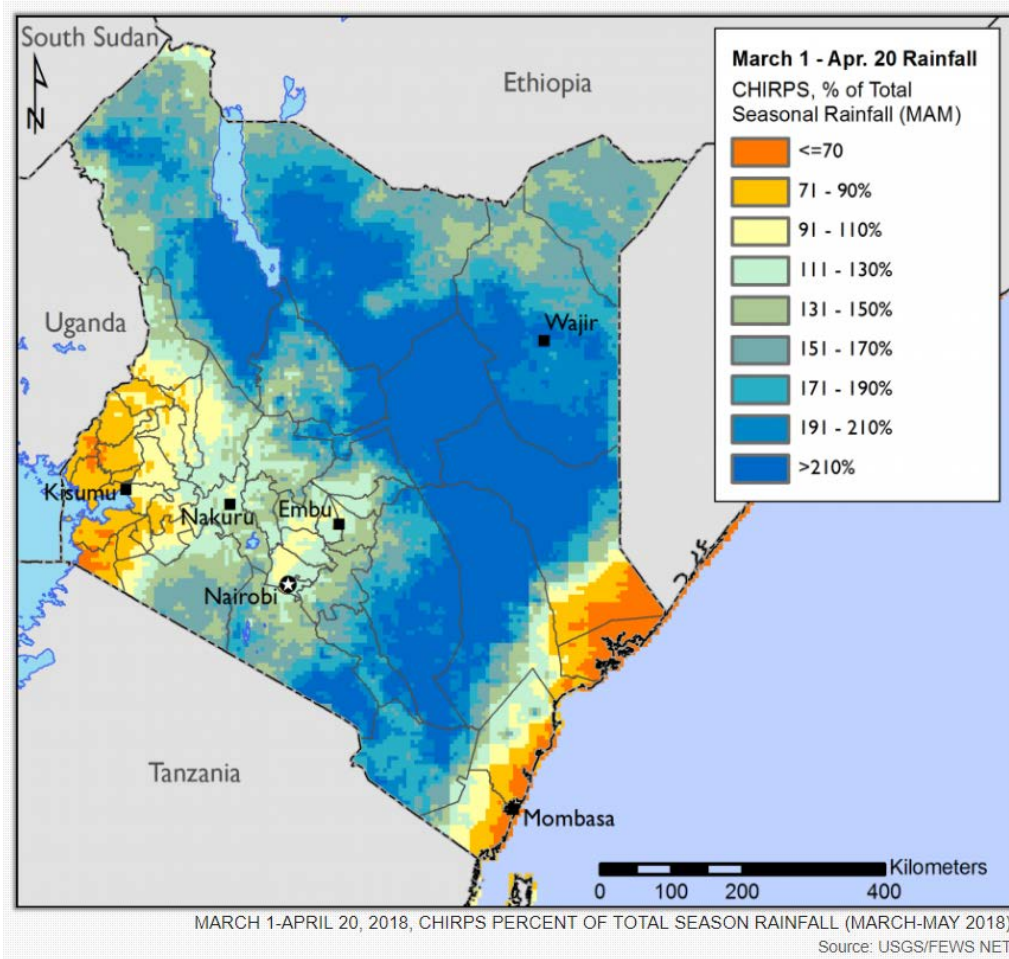
There is no information available about whether floods have affected Kalobeyi and Kakuma refugee camps in Turkana.

- Floods can have a long-term impact, for example due to the disruption and losses of livelihoods (ALNAP 2014).

Lessons learned

- Flooding in Kenya is common, particularly during the Long Rains season. In April 2016, heavy rains and flooding affected some 34,000 people in Turkana, Taita Taveta, Kwale, and Nairobi (IFRC 03/06/2016). In April 2013, some 141,000 people were displaced by floods across Kenya (IFRC 14/11/2013). Heavy rains can also occur during the Short Rains rainy season from October to December. In November 2015, over 100,000 people were estimated to have been displaced across the country with Tana River and Garissa among the most affected counties (WFP 02/12/2015, IFRC 04/01/2016).
- 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).
- After the floods in Kenya in April 2016, ICRC noted that the response in Turkana and Taita Taveta was not timely and could have been improved through the deployment of volunteers at the community level. Access and mobility constraints due to the flooding delayed response. Furthermore, the assistance in Taita Taveta and Kwale did not meet the needs of the displaced population. (IFRC 03/04/2017).
- After the April 2016 floods, the WASH response was inadequate as water treatment chemicals were distributed without explaining to the affected population how to use them (IFRC 03/04/2017). Furthermore, affected populations were not sufficiently involved in the decision-making regarding the response. Village elders consulted during needs assessments did not necessarily represent the needs of the affected groups (IFRC 03/04/2017).

Map of total seasonal rainfall from March to April



Source: FEWS NET 01/05/2018

Reference map for Kenya



Source: Nations online 2018