

CRISIS OVERVIEW

Since the start of the March-April-May (MAM) rainy season, Kenya has experienced heavy rainfall, resulting in widespread floods and landslides in various regions. 42 of the country's 47 counties have been affected by the floods, with Homa Bay, Kajiado, Mandera, Nairobi, and Nakuru being the most severely affected as of 6 May (ECHO 06/05/2024; Nation 29/04/2024; OCHA 10/05/2024). As of 12 May, the floods had affected more than 380,00 people and displaced over 280,000 people and resulted in the loss of more than 260 lives, injuring 188 with 75 still missing. Additionally, over 9,000 livestock had been lost and at least 41,000 acres of farmland submerged (OCHA 10/05/2024; The Star 12/05/2024).

On 13 April, the Kenya Meteorological Department marked 43 of the country's 47 counties as areas at risk of continued heavy rainfall, with those living in and around riparian areas at the highest risk (KMD X 13/04/2024; The Star 15/04/2024). On 2 May, the Government instructed communities living along riverbanks in affected areas to evacuate in order to reduce the risk of injuries and fatalities (Citizen TV Youtube 05/05/2024).

Agricultural areas along many rivers have been inundated, leading to significant crop damage. The further damage to over 60 roads and the destruction of bridges have disrupted movement and business activities between towns and counties (DW 29/04/2024; OCHA 10/05/2024).

The floods have affected health facilities, prompting the Ministry of Health (MOH) to remain on high alert (The Star 30/04/2024). Widespread flooding has also affected many schools, causing damage to infrastructure and the use of some schools as temporary shelters for displaced people. As a result, the Government has indefinitely postponed the scheduled reopening of schools for the second term (The Star 26/04/2024; KBC 29/04/2024; WHO 17/04/2024).

Continuing heavy rain, floods, and flash floods across most of Kenya are having an increasing humanitarian impact. On 14 April, the Government announced the provision of emergency housing and comprehensive support services to families displaced by extensive flooding (KNA 14/04/2024). This

situation is worsened by the forecast of further heavy rains through mid-May (KMD 06/05/2024). According to projections, the five displacement sites currently active in Garissa county will need to accommodate additional displaced individuals, as over 70,000 people are expected to seek shelter at these locations (OCHA 19/04/2024).

As of 27 April, according to the National Disaster Response technical committee, floods had caused more than KES 4 billion (USD 35 million) in damage (Citizen TV Youtube 27/04/2024).

ANTICIPATED SCOPE AND SCALE

According to the Kenya Meteorological Department, however, rainfall is expected to persist throughout mid-May in all 47 counties, with heavy rains likely in various regions, including the over the Highlands East and West of the Rift Valley, the Lake Victoria Basin and the Rift Valley (KMD 13/05/2024; Citizen TV Youtube 25/04/2024; Tuko 06/05/2024).

With water levels in rivers and dams expected to remain high, there is a risk of more people being displaced by flood waters (Citizen TV Youtube 25/04/2024). With the country already grappling with a cholera outbreak, there is also heightened risk of disease spread as a result of contaminated water sources and a lack of access to clean drinking water. Makeshift shelters also lack proper sanitation infrastructure, further aggravating the threat of waterborne illnesses (WHO 17/04/2024; Citizen TV Youtube 25/04/2024; The Star 30/04/2024).

As of 29 April, the Government had taken action to initiate the controlled flow of the dams to prevent overflow, potentially leading to flooding in downstream riverine communities. As at 10 May, all the Seven Forks dams were full and overflowing (OCHA 10/05/2024; Citizen Digital 27/04/2024; KenGen 02/05/2024).

Continued heavy rains will have significant repercussions on Kenya's food system, prompting experts to warn of impending challenges and the need for proactive measures. With crop devastation, community displacement, and disruptions to agricultural activities, the need for food imports may become imperative. There is a likelihood of increased food importation in the coming months as a direct consequence of the floods (The Star 07/05/2024).



KEY FIGURES

267

PEOPLE DEAD

380,573

PEOPLE AFFECTED

281,835

DISPLACED

41,562

ACRES OF FARMLAND
DESTROYED

As of 1 May, over 120,000 residents of Narok town, Narok county, faced flooding risk as dams in the Olopito areas, located upstream of the town and typically prone to flooding, were at risk of overflowing (The Star 03/05/2024; KTN News Youtube 06/05/2024).

Following a devastating dam breach that claimed the lives of over 60 individuals a few kilometres away in Old Kijabe town, an evacuation directive was issued on 7 May to over 200 families in Ruiru village in Mai Mahiu. This action was prompted by the discovery of abandoned railway tunnels filled with water upstream, with the potential to inundate downstream communities (Nation 07/05/2024).

HUMANITARIAN CONSTRAINTS

As of 10 May, more than 60 roads had been flooded and others obstructed by debris from landslides, challenging access to affected people. Persistent heavy rainfall had also sustained elevated water levels, impeding humanitarian access to specific regions (OCHA 10/05/2024; AJ 29/04/2024). In marooned communities in Baringo, Kisumu, and Tana River counties, humanitarian teams have resorted to using boats and helicopters to access affected communities (Capital FM 06/05/2024). As of 4 May, the government was conducting an assessment of the damaged roads and mobilising resources to address critical sections (NTV 04/05/2024).

Insecurity has continued hindering humanitarian access in some areas of the country, with a spike in non-state armed group attacks reported in August 2023 in Garissa, Lamu, and Mandera counties, potentially by members of Al-Shabaab. On 29 April, a blast in Elwak town, Mandera county, killed 12 people (OCHA 07/08/2023; Crisis 24 29/04/2024). Such escalations could affect access to at-risk communities, as humanitarian teams may need additional security measures to operate effectively in these areas.

CRISIS IMPACTS

Shelter

As of 10 May the floods had submerged homes, destroyed houses, and displaced more than 280,000 people across the country (OCHA 10/05/2024). While some of the displaced have found shelter in host communities in less affected areas, many are currently sheltering in overcrowded schools, social halls, and other public buildings without proper WASH facilities, exposed to harsh weather. While the reopening of schools has been postponed indefinitely, the repair and reconstruction of destroyed houses may be further delayed, as schools could potentially reopen once rain intensity subsides. This scenario is expected to result in a considerable number of displaced individuals being left without homes. The situation is further compounded by the forecast of heavy rains through mid-May (KMD 06/05/2024; WHO 17/04/2024).

Nairobi: as of 7 May, over 40,000 people residing in informal settlements, including in Kayole, Kibera, Kware, Mukuru Kwa Njenga, Mukuru Kwa Reuben, and Viwandani, had been affected by floods caused by inadequate and obstructed drainage systems (PD 07/05/2024; OCHA 19/04/2024). The floods also submerged houses in Githurai, Imara Daima, Kahawa Wendani, and Kasarani neighbourhoods (BD Youtube 01/05/2024). While the majority of those affected have reintegrated into their communities, finding accommodation with relatives and friends, others have resorted to renting alternative accommodation (OCHA 19/04/2024). As such, the Government announced that every flood victim in Nairobi will be given KES 10,000 (USD 70) to find alternative accommodation (PD 07/05/2024). As of 4 May, thousands of Mukuru Kwa Reuben and Kiamaiko residents living near the Nairobi River had been rendered homeless after the Government initiated a demolition operation targeting houses in at-risk communities (Citizen TV Youtube 03/05/2024).

Western Kenya and Lake Victoria Basin: heavy rains in the neighbouring Rift Valley counties of Nandi and Kericho have caused riverine flooding in the Lake Victoria Basin. As of 16 April, Busia, Kisumu, Migori, and Siaya counties had been affected (OCHA 19/04/2024). In Kisumu County, affected people from Nyando constituency are currently sheltered in schools. As of 6 May, more than 600 people had been trapped in their homes after the Nyando River broke its banks, flooding communities in Ahero, Muhoroni, and Nyakach constituencies (KTN News 05/05/2024; OCHA 11/04/2024). The floods in Karachuonyo constituency, Homa Bay county, had led to the displacement of at least 1,700 families as of 17 April. Among the worst-affected areas are Chuowe, Kobuya, Osodo, and Simbi, where residents have evacuated their homes and sought refuge in temporary shelters such as Kobuya Primary, Osodo Primary, and Simbi

dispensary (The Star 17/04/2024). As of 7 May, more than 260 families had been displaced in Kakamega county and were sheltering at the Joy Baptist church after the Kapsingui River broke its banks (Citizen 07/05/2024).

Central Kenya: in Kiambu county, over 50 families were evacuated to shelter in a social hall after their houses were submerged (KNA 25/04/2024). In Kirinyaga county, heavy rains led to flooding in Kianyaga village on 15 April, affecting 375 people (75 households), with 300 individuals (60 households) displaced and now residing at Valley Road School. This adds to the 7,500 people (1,500 households) affected by floods in Mwea West after the Thiba River overflowed on 6 April. In Murang'a county, 15 people (three households) were displaced by a landslide in Kiharu constituency and advised to relocate to higher ground. On 29 April, mudslides in Kiganjo village in Mathioya constituency swept houses, killing six people and displacing an unknown number. In Kiambu county, flooding was reported in Juja, Muoko, and Ruiru, prompting residents in waterlogged areas to move to higher ground to avoid the risk of overflow from the Karimenu dam. In Meru County, 185 people (37 households) were affected, including 15 displaced individuals (three households). Finally, five people (one household) in Nyeri county were displaced by a landslide and provided with emergency shelter (OCHA 19/04/2024; Citizen TV Youtube 29/04/2024).

Rift Valley: Is the second worst hit after Nairobi County, where an estimated 256,890 people have been affected and 21,678 people displaced as of 10 May (OCHA 10/05/2024). In Narok county, as of 5 May, more than 120 displaced families from three constituencies were being hosted in St. Peters Primary School (Citizen TV Youtube 05/05/2024). In Bomet county, more than 170 people were evacuated by the Kenya Red Cross from Chebirir village, which was affected by floods on 5 May (KBC Youtube 05/05/2024). In Nakuru county, the Mai Mahiu dam broke its bank, inundating downstream communities, destroying an unknown number of houses, and killing 61, with 37 still missing as of 7 May (The Star 07/05/2024).

Northern Kenya: in Garissa County, an estimated 6,400 families (32,000 people) have been displaced due to the overflow of Tana River. The displaced were hosted in 12 camps at Hyuga Girls Primary School (OCHA 10/05/2024; K24 06/05/2024).

Coastal Kenya: As of 10 May, more than 69,000 people had been affected by the floods in Tana River County (OCHA 10/05/2024).

The Ministry of Interior and National Administration issued a warning of the risk of flooding from the Tana River, which could potentially lead to flooding in Garissa, Lamu, and Tana River counties (OCHA 19/04/2024). This risk was heightened by the filling of the Seven-Forks dams, including the Masinga dam, which was already overflowing as of 2 May. According to KenGen, which manages the Seven-Forks dams, communities at risk include in Mbondoni,

Kithecu, and Menguthe villages in Machakos county (KNBS 2019; KenGen 02/05/2024). In Tana Delta subcounty, Tana River county, there are ten displacement sites as a result of El Niño-induced floods in October–December 2023 and current flooding (OCHA 19/04/2024; The Star 23/04/2024).

Livelihoods and transportation

In 2020, more than 50% of Kenyans were employed in agriculture (Statista accessed 07/05/2024). With more than 41,000 acres of farmland submerged as of 10 May, many farmers are likely to be left without livelihoods. As of 29 April, the floods had affected trade across many counties. The destruction of roads and bridges and the precautionary closure of roads has also affected day-to-day activities between counties (OCHA 10/05/2024; OCHA 03/05/2024).

Western Kenya: in Busia county, as of 29 April, flood prone Budalangi was inundated, with floods submerging the area's markets and leaving traders without livelihoods and the wider population with less access to food (KTN News Youtube 29/04/2024).

Eastern Kenya: in Tana River county, flood waters submerged roads, affecting the transport of produce to city markets (KTN News Youtube 15/04/2024).

Northern Kenya: flood waters have submerged a 4km stretch of the Nairobi-Garissa highway, the main access road to Kenya's northern counties, including Garissa, Mandera, and Wajir, affecting the movement of goods and services (KeNHA X 29/04/2024).

Rift Valley: flood waters' destruction of the road between Lus market and Kamba Karaya has disrupted business activities between West Pokot and Turkana counties (Citizen TV Youtube 29/04/2024). In Narok county, the overflow of the Talek River affected numerous individuals, including tourists in the Maasai Mara and 12 hotels, prompting the Government to dispatch four helicopters, which successfully rescued 40 people (The Standard 03/05/2024).

As of 6 May, traders in several counties had incurred losses as a result of the destruction of stock caused by floodwaters (KTN News Youtube 05/05/2024).

Food security

Torrential rains have caused widespread devastation, inundating and making vast expanses of farmland inaccessible in critical regions, including coastal areas, around Mount Kenya, Nyanza, and the Rift Valley. As of 3 May, the floods had submerged more than 41,000 acres of farmland (KTN News Youtube 15/04/2024; OCHA 10/05/2024). The rains began a month after the

onset of the planting season, posing a threat to crops. This could adversely affect the August harvest and, consequently, aggravate food insecurity later in the year (UNCTAD accessed 30/04/2024).

Rift Valley: as of 7 May, the flooding of over 3,000 acres within the Perkerra irrigation scheme in Baringo county, caused by the overflow of the Molo, Perkerra, and Weseges rivers, had heightened concerns of an impending food insecurity crisis. This irrigation scheme serves as a crucial source of maize seed, the country's staple food, for the national seed manufacturer Kenya Seed Company (Citizen TV Youtube 07/05/2024).

Central Kenya: as of 8 May, extensive flooding had submerged over 2,000 acres of rice farms within the Mwea irrigation scheme, particularly affecting areas such as Cumbiri, Jambo village, and Thiba, resulting in the destruction of rice paddies, with estimates suggesting losses of nearly 2.7 tonnes of rice ready to harvest this year (The Standard 08/05/2024; Citizen TV Youtube 07/05/2024). As of 7 May, floodwaters in Nyandarua county had inundated an unspecified area of potato farms, resulting in losses exceeding KES 20 million (USD 170,000), as reported by the Nyandarua Potato Farmers Association (The Standard 08/05/2024).

Western Kenya: in Trans Nzoia county, known as one of the country's key food baskets, concerns about leaching caused by persistent heavy rains have led maize farmers to reapply fertilizers (The Standard 08/05/2024).

From February–March 2024, approximately 1.9 million individuals (12% of the population) were categorised as facing Crisis (IPC Phase 3) or higher levels of food insecurity in Kenya's arid and semi-arid land (ASAL) counties, including Garissa, Mandera, Marsabit, Tana River, Turkana, and Wajir. This includes around 300,000 people (15%) in Emergency (IPC Phase 4) and 1.6 million people (10%) in IPC 3 (IPC accessed 19/04/2024). The floods have affected nearly all ASAL counties and are expected to worsen the food insecurity situation in the region.

Education

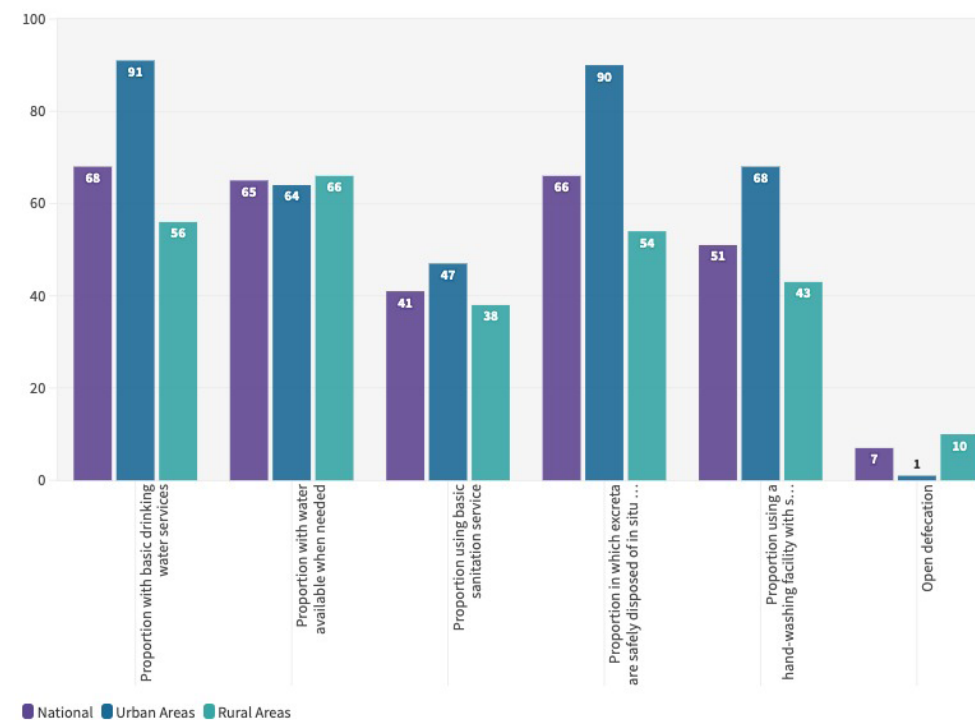
As of 6 May, over 1,967 schools had been destroyed by heavy rains since the end of March. An unknown number of schools are also being used as temporary shelters for displaced people in affected counties. As a result, President Ruto directed the Ministry of Education, during a national address on 3 May, to indefinitely postpone the reopening of schools – previously scheduled for 29 April – for the second term. On 13 May, schools were reopened, with the caveat that those schools which had sustained damage were advised to remain closed until the necessary reconstruction of damaged infrastructure had been completed (Capital News 06/05/2024; KTN 12/05/2024). Amid continued floods, many children are at risk of dropping out of school as a result of displacement, lost school supplies, and lost livelihoods. Additionally, because many schools' WASH facilities were flooded, with flood waters still yet

to subside in some schools, many children run the risk of contracting waterborne diseases (KTN 12/05/2024).

As of 7 May, the Government had set aside KES 1 billion (USD 700,000) for the reconstruction of destroyed schools (PD 07/05/2024; OCHA 10/05/2024).

WASH

Figure 1. WASH in Kenya, 2022



Source: KNBS/ICF (2023)

The WASH sector has been significantly affected, primarily because of a lack of access to sanitation infrastructure and clean water, leading to waterborne diseases. In Turkana (65%), Mandera (38%), Garissa (33%), and Marsabit (27%), the absence of latrines has forced households to resort to open defecation. In June 2023, a high proportion of households were

considered water insecure, lacking adequate, reliable, or safe water sources, even before being affected by drought or floods. These counties relied on open water sources such as rivers, unprotected wells, and springs for drinking water and hygiene practices (REACH 22/04/2024).

As of 6 May, in Kisumu County, displaced people sheltering in schools lacked proper WASH services and were at risk of waterborne diseases. As western Kenya is a malaria prone region, displaced people are at heightened risk as they lack treated mosquito nets (The Star 15/04/2024).

As of 7 May, the main water pumping station in Garissa County had been inundated, prompting water officials to shut off the main generator, leaving over 400,000 residents of Garissa town without water (Citizen TV Youtube 07/05/2024).

Health

On 30 April, the MOH activated the National Public Health Emergency Operations Centre, which is responsible for coordinating public health emergencies, in response to the devastation caused by heavy rains nationwide. Counties were urged to activate their emergency operation centres for coordinated response efforts. Isolated health facilities also raised concerns about the spread of waterborne diseases (The Star 30/04/2024).

As of 12 May, more than 60 hospitals in 11 counties had been affected with the MOH identifying Busia, Garissa, Kajiado, Kilifi, Kisumu, Kwale, Lamu, Machakos, Makueni, Mombasa, Nairobi, and Tana River counties as areas at high risk of potential disease outbreak (Capital FM 06/05/2024; The Star 12/05/2024).

Cholera: in 2023, Kenya recorded nearly 9,000 cholera cases and 145 deaths. Between January–March 2024, the country recorded 289 cases and one death (WHO 17/04/2024). Since the onset of flooding in March, 48 cholera cases have been documented in Tana River county, with Garsen West ward reporting 47 cases and Garsen Central reporting one case as of 4 May (OCHA 10/05/2024). Cholera cases are likely to rise with continued flooding, as access to clean water in affected areas is reduced. On 30 April, in response, the MOH began conducting risk communication and community engagement training in high-risk counties, alongside health worker training on surveillance, case management, WASH, and infection prevention, focusing on diarrhoeal diseases (The Star 30/04/2024).

Foodborne illnesses: on 6 May, the MOH outlined its prioritisation of food safety in order to prevent foodborne illnesses such as typhoid, dysentery, gastroenteritis, and aflatoxin poisoning (Citizen Digital 06/05/2024). As of 7 May, experts had raised concerns around the potential contamination of cereals intended for drying, a process impeded by heavy rainfall. The moisture-rich environment is leading to heightened risk of contamination, particularly

for cereals known to foster aflatoxin, such as maize. The inability to adequately dry cereals and the inclement weather's adverse effects on storage systems poses an elevated risk of aflatoxin formation. Consequently, there is a heightened poisoning risk for consumers of these cereals (The Star 07/05/2024).

Malaria: there are four epidemiological malaria zones in Kenya: a) endemic areas, stable malaria transmission around Lake Victoria and in the coastal regions; b) seasonal malaria transmission areas, ASAL zones that experience short periods of intense malaria transmission during rainy seasons; c) highland epidemic-prone areas, seasonal depending on rainy seasons and minimum temperatures around 18°C; and d) low-risk areas, central highlands, including Nairobi, where temperatures are low (KNBS/ICF 2023). The forecast of above-average rainfall in regions such as the highlands east and west of the Rift Valley, Lake Victoria Basin, Nairobi, northeastern and northwestern Kenya, Rift Valley, and the southeast lowlands — areas known for either being malaria-prone or malaria-endemic — means the displaced population in these areas faces an increased risk of contracting malaria (KMD 06/05/2024; The Star 15/04/2024). As of 6 May, the MOH had identified counties at high risk of potential malaria outbreaks and distributed over 5.9 million nets to protect 11 million people (Capital FM 06/05/2024).

As a result of flooding in September 2023, which submerged several hospitals in Garissa, Tana River, and Wajir counties, and a continuing doctors strike, 52-days long as of 6 May, the healthcare system may face challenges managing a rise in disease (ACTED 08/11/2023; USAID 29/04/2024; The Star 06/05/2024).

Protection

Displaced individuals face heightened vulnerability to poverty, exploitation, violence, and human rights abuses, as they often reside in overcrowded camps or temporary settlements with limited access to essential resources such as food, water, sanitation, and healthcare. This situation could lead to health issues and malnutrition among the affected population. Many displaced individuals have also lost their official documents, essential to accessing government services, further aggravating their situation. In response, the Government has established a temporary registration centre in Mai Mahiu to help victims recover their lost documents, collecting biometric data in order to process new IDs and birth certificates (API 21/08/2015; TV47 03/05/2024).

In crowded camps, women and girls can encounter heightened discrimination and face challenges feeling safe, particularly at night. In such environments, there is an increased risk of violence, harassment, and trafficking. Access to clean and private toilets can also be a concern, posing health risks, especially for women, as the reproductive health needs of

women and adolescent girls are often largely ignored in humanitarian settings. Displacement also aggravates tensions and violence within families and communities, with women and girls disproportionately affected by domestic violence in such periods (Brookings 10/2014; Forced Migration Review 01/12/2006).

In crowded camps, older people and people with disabilities can face mobility challenges, especially as a result of uneven surfaces or the absence of ramps, increasing the risk of falling and injuries. Limited access to healthcare facilities and medications further exposes them to sickness or mortality, particularly for those with chronic illnesses. The disruption to familiar surroundings and support networks can be particularly challenging for the elderly, while people with disabilities may struggle to find understanding and reliable caregivers in new environments, leading to heightened dependence (Help Age et al. 31/07/2018).

IMPACT ON OTHER CRITICAL INFRASTRUCTURE

Flooding has damaged power lines, submerged roads, and affected railway operations in areas across the country (Nation 16/04/2024; Kenyans 25/03/2024). Several counties have faced power outages resulting from submerged power lines, although only for short periods. In Homa Bay county, as of 17 April, the Kenya Power and Lighting Company had lost electricity poles to raging floods in Chuowe (The Star 17/04/2024).

Northern Kenya: since 22 April, flood waters had submerged a 4km stretch of the Nairobi-Garissa highway in Madogo, the main access road to Kenya's northern counties, including Garissa, Mandera, and Wajir with travellers ferried across submerged section by boats charging over 200% of normal fares (The Star 28/04/2024; KeNHA X 29/04/2024). On 28 April, an overloaded private boat ferrying more than 40 people across the submerged road capsized. It is unclear how many people were affected, as rescue efforts were still under way as of 29 April (Citizen TV Youtube 28/04/2024; Nation 29/04/2024).

Nairobi: in the capital, several roads have been submerged since the rains began at the end of March, leading to access challenges. Such submersions have severely affected movement across the city, leaving residents stranded, and the cost of public transportation has increased by over 100% (BBC 24/04/2024). On 27 April, the country's main airport, Jomo Kenyatta International Airport in Nairobi, experienced flooding, resulting in the diversion of flights, as heavy rainfall flooded runways, terminals, and cargo areas (Nation 28/04/2024; Tuko 28/04/2024).

Rift Valley: as of 26 April, damage had been reported on the Lokichar bridge between Karoge and Kasuroi on the Lodwar-Lokichar road (KeNHA X 26/04/2024). As of 29 April, the Kapenguria-Lodwar highway was rendered impassable after floods caused a partial collapse (Citizen TV Youtube 29/04/2024).

Eastern Kenya: as of 28 April, the Old Athi River bridge, which connects Nairobi and Machakos counties, had been severely damaged (Citizen TV Youtube 27/04/2024).

Central Kenya: as of 28 April, five sections of the Mugeka-Murang'a road embankment had collapsed (Citizen TV Youtube 27/04/2024). The Nairobi-Kisumu railway line, linking Nairobi to western Kenya, has also been made impassable by a landslide in Thogoto, Kiambu county, after heavy rains swept earth under the tracks, resulting in the suspension of the Kisumu, Limuru, and Ruiru commuter trains (NTV 25/04/2024).

Western Kenya: on 29 April, the Kenya National Highways Authority alerted motorists to seek alternative routes after flash floods and fallen debris inundated the Mai Mahiu-Suswa-Narok highway and the Mai Mahiu-Naivasha road, one of the main routes connecting eastern and western parts of the country (Citizen Digital 29/04/2024).

DRIVERS

El Niño and Southern Oscillation

El Niño and Southern Oscillation (ENSO) refers, with regard to El Niño, to a periodic fluctuation in sea surface temperatures and, with regard to southern oscillation, to the changes in the air pressure of the overlying atmosphere across the equatorial Pacific Ocean (NCEI accessed 08/05/2024). The ENSO cycle is a natural climate phenomenon resulting from complex interactions between the atmosphere and ocean and has been active for thousands of years. Although many processes are involved in the global climate system, ENSO is one of the main drivers of interannual climate variability (Met Office accessed 08/05/2024).

El Niño has historically brought above-normal rainfall in Kenya. Floods associated with El Niño can worsen food insecurity and increase the incidence of waterborne diseases, such as cholera (WFP 31/05/2023; Moore et al. 10/04/2017).

The Indian Ocean Dipole

The Indian Ocean Dipole (IOD) refers to temperature differences in different parts of the Indian Ocean. In a positive phase, the western Indian Ocean experiences warmer-than-normal waters, leading to increased rainfall, irrespective of El Niño conditions (KMD 30/07/2023). When both a positive IOD and El Niño coincide, however, as seen in 2023, rainfall in East Africa can become exceptionally heavy. In 1997 and 1998, one of the most intense positive IOD events aligned with a strong El Niño, resulting in severe flooding and over 6,000 deaths across five countries in the region (MacLeod et al. 28/02/2024; TNH 22/10/2019; The Guardian 29/04/2024).

COMPOUNDING/AGGRAVATING FACTORS

Drought and climate change

Floods and extended dry spells point to Kenya's susceptibility to climate impacts. On the 2024 INFORM Risk Index, Kenya scored high in hazard vulnerability (5.9/10) and lack of coping capacity (5.8/10), mainly as a result of limited institutional disaster risk reduction and response capacities (EC accessed 06/03/2024).

Since 2020, Kenya has experienced the most severe drought on record as a result of five consecutive below-average rainy seasons. The ASAL region has been the worst affected, including Garissa, Mandera, Samburu, Wajir, and other counties currently affected by above-normal rainfall and flooding (OCHA 31/01/2023; UNHCR 28/02/2023).

The MAM rainy season of 2023 was considered normal, aiding in the recovery of many ASAL counties. Despite this, as of September 2023, the lingering effects of the drought – such as loss of livelihoods – meant that 2.8 million people were still in need of humanitarian assistance. Kajiado, Samburu, and Taita Taveta counties remained in the alert phase (requiring additional monitoring), indicating continued challenges such as malnutrition (NDMA 08/2023 and 09/2023). The drought has severely diminished coping capacities in these counties, leading to widespread food insecurity, reduced livelihoods from poor harvests and livestock losses, and health challenges such as cholera outbreaks (OCHA 31/01/2023). The drought also damaged the soil, aggravating the impact of current flooding (Reuters 09/11/2023).

Insecurity in north-eastern and coastal counties

Kenya is currently facing a non-international armed conflict with Al-Shabaab, a non-state armed group that originated from Somalia but has escalated activities in Kenya's north-eastern and coastal regions (Rulac accessed 13/11/2023; WFP 13/11/2023). The potential withdrawal of the African Union's peacekeeping mission in Somalia in 2024 raises concerns about increased Al-Shabaab violence in Somalia, which could have cross-border implications (VOA 29/09/2023; France 24 22/09/2023). On 26 March, an explosion near the Kenya-Somalia border in Mandera county killed four people and injured 15, followed by another explosion on 29 April in Elwak town, Mandera county, which claimed the lives of 12 people (Crisis 24 29/04/2024; Nation 29/04/2024).

Infrastructure

Infrastructure challenges in Kenya include inadequate road networks and substandard road construction. Poorly maintained infrastructure, including deteriorating roads and bridges in Isiolo, Meru, and Samburu counties, also aggravates the risk of people being stranded or swept away by floods (Nation 09/11/2023)..

FUNDING AND RESPONSE CAPACITY

On 14 April, the Government announced that rapid response teams were being put on standby to conduct repairs, maintenance, and ensure the continuity of essential services, as substantial damage to roads, bridges, educational institutions, health facilities, and residential buildings are anticipated (KNA 14/04/2024).

On 26 April, after deploying over 150 staff and 1,000 volunteers to aid flood response efforts, the Kenya Red Cross was overwhelmed and appealed for assistance from other organisations (Citizen TV Youtube 25/04/2024).

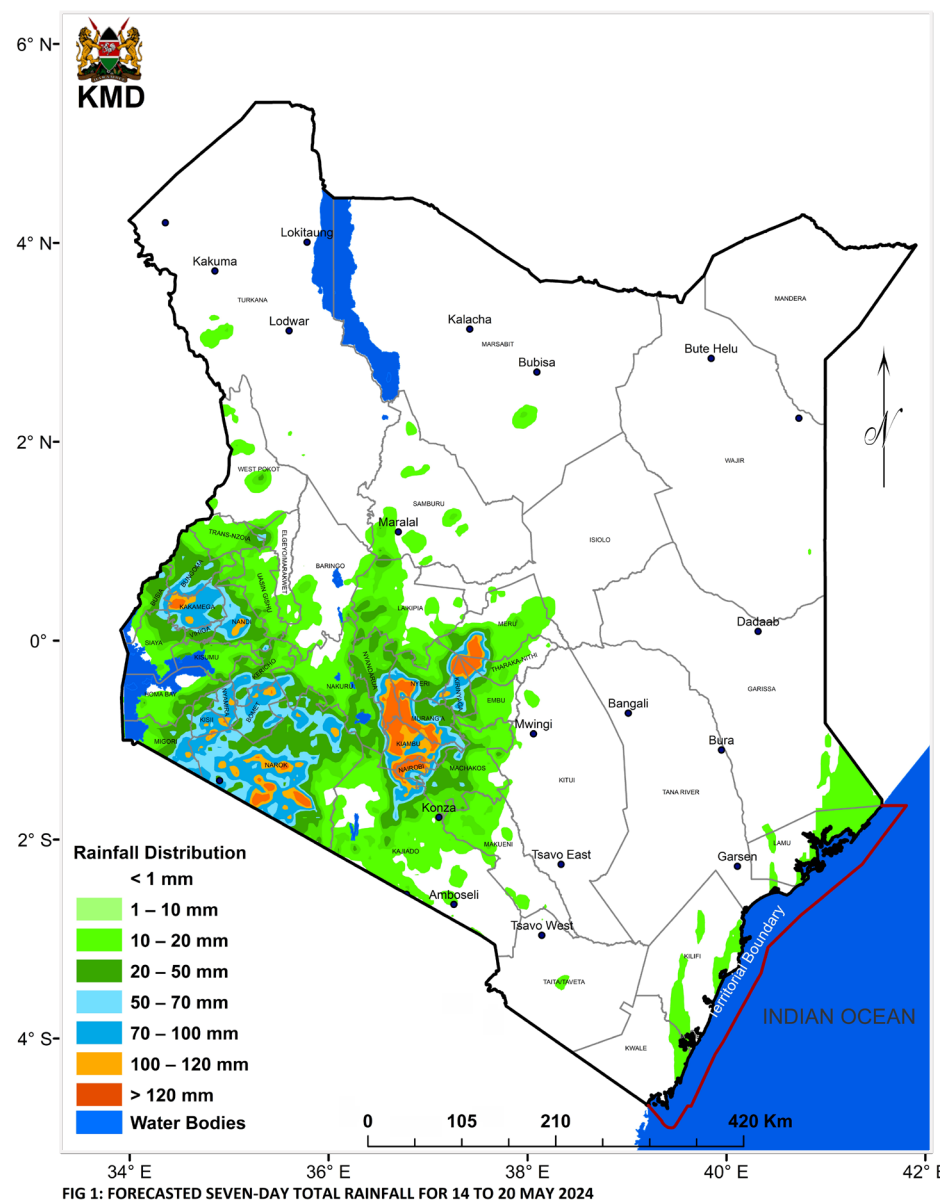
On 27 April, President Ruto instructed the National Youth Service to provide land for use as a temporary camp for displaced people (KTN News Youtube 25/04/2024).

On 2 May, the EU allocated USD 500,000 in emergency humanitarian funding to affected communities (ECHO 06/05/2024).

On 2 May, the country received 80 tonnes of food and non-food items from the United Arab Emirates to support those affected by the floods (PD 02/05/2024).

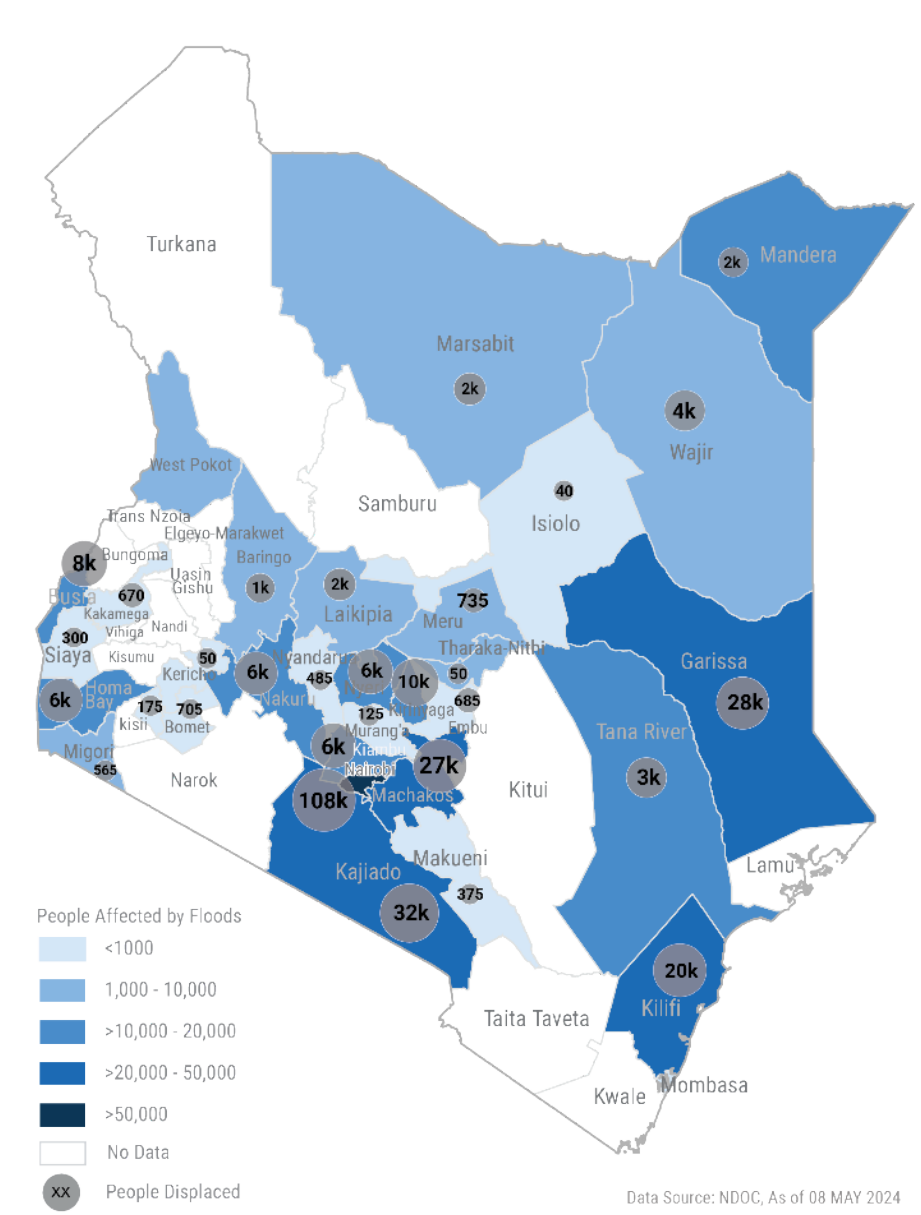
On 6 May, the British High Commission announced emergency funding of KES 140 million (USD 1 million) to support flood relief efforts in affected counties. The funds, which are to be channelled through UNICEF, aim to provide emergency cash transfers and other essential services, such as WASH, to the households most affected (The Star 06/05/2024).

Map 1. Seven-day cumulative rainfall forecast for 14–20 May 2024



Source: KMD (13/05/2024)

Map 2. People affected by floods as of 10 May 2024



Source: (OCHA 10/05/2024)