

# MALAWI

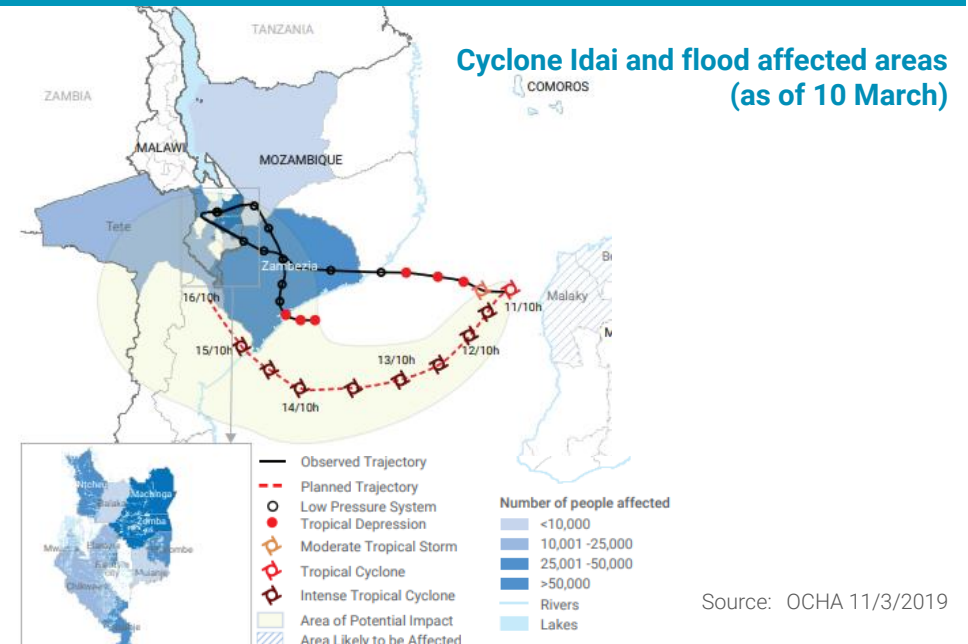
## Floods

Heavy rains over 5-8 March caused flooding in the Southern region of Malawi (Floodlist 8/3/2019; OCHA 9/3/2019). As of 10 March, at least 14 districts have been impacted, affecting approximately 468,650 people and displacing more than 31,700 people. At least 30 people have been killed and over 370 injured. Assessments are ongoing. (Xinhua 11/3/2019; Department of Disaster Management Affairs (DoDMA) 10/3/2019). On 8 March, the president declared a state of disaster in the areas affected by ongoing rain and flooding (OCHA 9/3/2019). Priority needs are shelter, WASH, food, livelihood and health assistance.

### IMPACT



### NEED FOR INTERNATIONAL ASSISTANCE



## Anticipated scope and scale

**Machinga and Zomba** districts are among the worst hit, with more than 50,000 people affected per district, followed by Ntcheu, Phalombe, Nsanje and Blantyre City district (OCHA 11/3/2019). **More rainfall and thunderstorms are expected**, which will worsen the flood situation (ECHO 10/3/2019). The coping capacity of the affected population is limited, especially among refugees, due to the impact of previous floods in 2019 and dry spells in 2018. Food shortages and anticipated reduced harvest will likely **extend the ongoing lean season** (FEWS NET 11/3/2019). There is a **high risk of cholera or diarrhoea** due to inadequate WASH facilities. A lack of mosquito nets increases the risk of widespread vector-borne diseases (Nyasa Times 11/3/2019; IRCR 11/2/2019).

## Key priorities



**+31,700**  
people displaced



**+468,650**  
people affected



**Interventions urgently needed**  
to prevent disease outbreaks

## Humanitarian constraints



Access is severely restricted in flood-affected areas, in particular along the east banks of Shire river. Helicopters and boats are used to reach many rural affected communities. Ongoing power outages will likely further affect operations.

### Limitations

Detailed information about the affected geographical areas remains limited. Most data has been obtained from the government's social media websites, as well as two OCHA flash reports. Some local newspapers provide additional details. Information about the whereabouts of the displaced population and the level of the severity of need is lacking.

## Crisis impact

Over 5-8 March heavy rains in southern and central parts of Malawi caused flooding and rivers to overflow, affecting at least 468,650 people (93,730 households) across 14 districts (OCHA 9/3/2018; Reuters 10/3/2019; Floodlist 8/3/2019; DoDMA 11/3/2019). Machinga and Zomba districts have been most impacted, accounting for more than 50,000 affected people per district. Some 25,000 - 50,000 people have also been affected in each of the districts of Ntcheu, Phalombe and Nsanje and an estimated 10,000 - 25,000 people have been affected in Mwanza, Chiwawa, Blantyre, Balaka and Mulanje districts (OCHA 11/3/2019). Affected population estimates from other districts are not available. A minimum of 31,700 people (6,341 households) are displaced. At least 30 people have lost their lives and over 370 people have been injured as a result of the floods and buildings collapsing. An unknown number of people remain missing. (DoDMA 11/3/2019; Xinhua 11/3/2019; Burunga 11/3/2019; OCHA 11/3/2019)

The number of people reported affected, injured, and dead is likely to increase over the coming days, as results from assessments are made available. The numbers are also likely to increase as heavy rain and thunderstorms following Tropical Cyclone Idai are forecast to continue. (Fewsnet 8/3/2019; Xinhua 11/3/2019; Al Jazeera 11/3/2019; ECHO 10/3/2019). People's coping capacity is limited as it has been raining heavily in the same area since the end of January. Renewed rains in March marked an increase in level of precipitation compared to previous rainfall in 2019, following tropical disturbances which fell across the northern Mozambique channel at beginning of March (Xinhua 11/3/2019; Manila Bulletin 11/3/2019; GoM 9/3/2019).

**Shelter:** An estimated 31,700 people (6,341 households), including many refugees residing in camps, are displaced. Most are estimated to need emergency shelter, however information remains unclear as an actual count did not happen (DoDMA 11/3/2019). In Blantyre, around 1,400 houses have collapsed (MANA News Agency 11/3/2019). Many displaced people have found refuge in makeshift sites in schools and churches (GoM 10/03/2019). The number of displaced people is likely to increase as more buildings are at risk of collapsing due to continuing rains and flooding. Evacuation is ongoing. The total number of people evacuated is unclear; however, they are most likely included in the total number displaced. A local newspaper reported that the local government in Mulanje district commissioned 27 evacuation camps for those affected by flooding in the district (MANA News Agency 11/3/2019).

Some dams built to prevent flooding have collapsed, leaving many communities inundated (MANA News Agency 11/3/2019; Burunga 11/3/2019).

Further information about the displaced population, and the geographical whereabouts of the affected and displaced people, as well as a gender/age-segregated breakdown, is lacking.

**WASH:** The water supply has been impacted by rain and flooding (OCHA 9/3/2019). Contamination forms a high risk. Displaced people are reported to have no or only very limited access to clean and safe drinking water nor adequate WASH facilities (GoM 11/3/2019). Chlorine to treat drinking water is lacking (Manila Bulletin 11/3/2019).

**Food:** Most of the affected families, and the displaced population in particular, need food. Local media reports food shortages in refugee camps (Burunga 11/3/2019; MANA News Agency 11/3/2019). Many households' food reserves have been destroyed or damaged, crops have been washed away and livestock lost (Nyasa Times 10/3/2019; Xinhua 11/3/2019; Burunga 11/3/2019; Manila Bulletin 11/3/2019; GoM 10/03/2019). The extent of damage and losses is unclear. However it is expected that the 2018/2019 food harvest, normally accessible in early April, will be limited due to fewer crops, and food security levels among people affected might be impacted negatively in the upcoming months. This might possibly extend the 2019 lean season (typically from November to February) (CIA Factbook 8/2/2019; FEWS NET 11/3/2019).

Currently affected districts are facing Stressed level (IPC Phase 2) and nutrition levels will further deteriorate (FEWS NET 11/3/2019). Fewer jobs in agricultural production will be available, reducing purchasing power countrywide and limited access to available and affordable food (FEWS NET 11/3/2019).

Due to dry spells in 2018, in the southern districts in particular, the maize harvest in 2017/2018 was lower than average, affecting mostly poor households, whose food stocks got depleted. Their coping strategies to respond to renewed harvest losses is severely limited as they are already relying on market purchases and humanitarian assistance to access goods. The maize price in the southern districts is already 8% higher than the 5-year average and is likely to rise further facing potentially reduced harvest 2019 (FEWS NET 11/3/2019).

**Livelihoods:** Heavy rains and floods have likely impacted agricultural activities, as fields are inundated and recently planted crops have been destroyed (planting season took place November-January). Post-flood assessments will indicate the impact on people's livelihoods. However, as agricultural production accounted for one-third of Malawi's GDP in 2017 and about 80% of its export revenue, it is likely that the potential loss of harvest, will impact their livelihoods in the medium and long-term (CIA Factbook 8/2/2019; FEWS NET 11/3/2019).

**Health:** The impact on health facilities remains unknown. The displaced population is in need of improved access to health services. Local hospitals have limited resources and high numbers of patients so are unable to meet the level of need (GoM 11/3/2019). Anti-malaria medication is short in supply according to a local government official (Manila Bulletin 11/3/2019).

Due to the floods, the risk of waterborne diseases such as cholera and diarrhoea, as well as mosquito vector illnesses is high (Nyasa Times 11/3/2019; IFRC 11/2/2019). The risks are

especially high in refugee camps due to pre-disaster conditions that were inadequate (UNHCR 11/2014; UNHCR 21/3/2017; UNHCR, accessed 11/3/2019).

**NFIs:** Displaced people are in need of mattresses, blankets, mosquito nets, and buckets. (Xinhua 11/3/2019; Manila Bulletin 11/3/2019; GoM 9/3/2019) The NFI needs of people affected by floods but not displaced are unknown.

**Education:** Information about the impact on schools' infrastructure is unavailable. However, as some displaced people are sheltering in schools, education of school children has likely been disrupted. Teachers and students have likely been displaced which may have reduced school attendance.

### Impact on critical infrastructure

Many roads and bridges have been inundated and/or damaged and are unpassable, cutting off towns and villages on the east banks of Shire River in particular (Floodlist 8/3/2019; Burunga 11/3/2019; The Mercury 9/3/2019).

Two hydroelectric power plants have been damaged due to the floods and debris which is pausing energy generation and supply countrywide. The Electricity Generation Company (Malawi) Limited (EGENCO) stated that 85%, 270 megawatts of Malawi's 320 megawatts of hydropower capacity was unavailable across Malawi (EGENCO 7/3/2019; Burunga 11/3/2019; OCHA 9/3/2019). Reparation efforts are ongoing since 8 March and power generation is likely to resume once the water level has decreased (The Mercury 9/3/2019). Malawi is highly dependent on hydro-electricity for its industrial and most domestic usage (Burunga 11/3/2019).

Further information about the impact on critical infrastructure is mostly missing. However, due to the extent of the affected areas, it is most likely that critical infrastructure, such as hospitals and schools are affected and their services limited.

### Vulnerable groups affected

Rural households are more vulnerable as their access to basic services is already limited and distribution of relief items is less likely in remote, hard to reach areas. Pregnant women, children under five, people with disabilities and the chronically ill often face higher access issues and are particularly vulnerable to waterborne diseases during and after floods. Young girls are at high risk of child marriage if their household's livelihoods have been affected. Malawi has the 12th highest prevalence of child marriage in the world, with 40% of girls married before the age of 18 and 9% before turning 15 years old (Girls not Brides 2017). Refugees are among the most vulnerable as their coping capacity is low and their housing infrastructure often less flood-resistant. As of March 2018, around 37,000

refugees reside in Malawi, originating from DRC, Rwanda, Burundi, Eritrea, Somalia and Mozambique (UNHCR, accessed 11/3/2019; There is hope Malawi, accessed 12/3/2019).

Displaced women and girls are a particularly vulnerable group affected by flooding due to the heightened risk of gender-based violence. Temporary shelter arrangements for newly displaced women, with a lack of privacy and inadequate toilets and washing facilities, further increases their vulnerability (UNFPA 08/2016; UNDP 2013).

### Humanitarian and operational constraints

Access is limited, especially in worst affected areas by the floods. Roads are inundated and/or blocked by debris and many bridges have been damaged or destroyed. Emergency relief operations are hampered and areas in lower Shire River, especially in Nsanje, Makhanga and Chikwawa districts, are hard to reach. The east banks of Shire River are inaccessible. As of 8 March Kamuzu and Mwanza bridges in Chikwawa on the Shire River are impassable (GoM 11/3/2019; Floodlist 8/3/2019; Nyasa Times 11/3/2019). Since 10 March, the road between Blantyre and Chikwawa is impassable and will need another seven days to be repaired (Nysasa Times 10/3/2019). Helicopters and boats are being used to deliver emergency relief items (GoM 11/3/2019; Floodlist 8/3/2019; Nyasa Times 11/3/2019). Road transport is generally more difficult in the rainy season, as routes are unpaved (GFDRR 2015). Shortages of power further hamper the ongoing humanitarian operations.

## Aggravating factors

### More rainfall forecast

Central and southern Malawi has had heavy rainfall since 23 January. The rains were a result of the Tropical Cyclone Desmond that developed between Mozambique and Madagascar (IFRC 11/2/2019). Following the trend of continuous heavy rain from 5-8 March, moderate to heavy rainfall and thunderstorms are forecast in southern and central Malawi over the coming days as Tropical Cyclone Idai, formed on 9 March, is moving further north, affecting Malawi and Mozambique (ERCC 11/3/2019; FEWS NET 8/3/2019; Al Jazeera 11/3/2019; ECHO 10/3/2019). Nearly all of Malawi's rain (over 95%) falls during this hot-wet rainy season that usually runs from mid-October to end of March (FEWS NET 8/3/2019; GFDRR 2016).

### Recent experiences to natural hazards limits coping capacity

#### Recent floods in 2019

The current flood situation follows a series of severe localised flooding incidents in Malawi's southern and central regions since the end of January 2019. Despite an average to below average rainfall forecast for the October 2018 to March 2019 rainy season for

southern regions of Malawi, above average rainfall affected 1,000 people Lilongwe from 10 January. More rains hit Blantyre, Chikwawa and Nsanje districts from 23- 26 January. Initial assessment reports about January flooding in Chikwawa stated that a total of 15,974 people were affected, 154 houses damaged or destroyed, and more than 5,078 people displaced to at least seven makeshift camps (IFCR 11/2/2019). More regions in central and southern Malawi were then affected following heavy rains from 3-19 February (Floodlist 8/3/2019). In central region, around 1,000 people were displaced in Nkhotakota district; and in Salima district 643 people were affected and 257 displaced. The displaced population were staying in local schools or with friends and families. In Nsanje district, Southern region, a minimum of 260 homes were damaged, displacing approximately 1,300 people (Floodlist 19/2/2019; IFCR 11/2/2019).

It is unclear if the displaced population since January had already returned to their areas of origin and rebuilt their homes. Many affected communities are still dealing with the impact of these previous floods, leaving limited coping capacity to deal with the new flood situation (Floodlist 19/2/2019; IFCR 11/2/2019; DoDMA 15/2/2019).

### **High vulnerability to natural hazards**

Malawi is very vulnerable to natural hazards, having experienced a series of severe droughts and floods in recent years that affected food security levels, livelihoods, public services and economic prospects. In 2015, unexpected flooding affected more than 1,150,000 people and displaced 336,000. Many households were not yet able to fully cope and restore their livelihoods and build up higher resilience (World Bank 29/11/2016; Burunga 11/3/2019; GFDRR 2015).

Due to a dry spell in mid-2018 and armyworm infestation, the maize production dropped by 28% to 2.7 million metric tons, affecting livelihoods countrywide and minimising people's ability to cope with additional shocks, such as floods. Droughts (1%) and floods (0.7%) in Malawi cause, on average, 1.7 per cent loss of gross domestic product (GDP) annually (GFDRR 2016).

### **Environmental degradation and climate change**

Ongoing environmental degradation such as cultivation and tree cutting for firewood (97% of Malawians depend on wood/charcoal for cooking), increase the risk of floods and makes the country more vulnerable to climate change impacts (World Resources Institute 25/7/2017). The frequency and magnitude of drought and flood events have increased since the 1990s, negatively affecting the poverty and food security situation. This increased trend is attributed to climate change, population growth and urbanisation (WMO 28/10/2015).

## **Housing and Infrastructure**

Greater impact on livelihoods and loss of assets are expected in rural areas as they mostly depend on agriculture. However, there is also a big impact in flooded urban areas due to population density (GFDRR 2015). 39.5% of the population in the Central region and 48.3% in the Southern region's population live in urban areas (CIA Factbook 2018).

Many houses in rural areas are built with limited land use planning and little compliance with safer housing construction standards (GFDRR 2015). Many houses are built with traditional, natural materials, leaving them more vulnerable to floods than concrete safe houses (CIA Factbook 2018; Floodlist 8/3/2019; Nyasa Times 11/3/2019). As dams collapsed, they need to be rebuilt and improved to prevent future floods.

## **Risk of disease outbreak following the floods**

Following the experiences of the 2015 flood event, flood affected areas in central and southern Malawi are at high risk of contracting cholera. In 2015, a total of 39 cholera cases were confirmed in Nsanje and Chikwawa within a month after the floods (OCHA 25/2/2015). In 2015, cholera spread from neighbouring Mozambique which is currently also experiencing flooding (63,000 people affected, more than 10,500 people displaced and ten deaths reported) (Floodlist 8/3/2019; OCHA 11/3/2019).

## **Levels of food insecurity in flood-affected areas**

Malawi is chronically food insecure; however, the latest food security figures estimate that no areas of the country face IPC 3 (Crisis) or worse (FEWS NET 8/3/2019).

The currently flood-affected southern districts, Chikwawa, Phalombe and Nsanje, are among the districts most affected by food insecurity (GoM, MVAC 6/2018). Currently, many poor households in Phalombe, Nsanje, Chikwawa and Blantyre districts are facing Stressed (IPC Phase 2) acute food security outcomes and would likely fall into Crisis (IPC Phase 3) without continuous food assistance. FEWS NET states that before the floods about 30% of the households across the district are receiving humanitarian food assistance in Blantyre district. However, these predictions were made without considering the impact of the floods (FEWS NET 8/3/2019).

The actual number of people facing food insecurity now and in the coming months is likely to be higher. Before harvest period in June 2018, an estimated 3.3 million people (22% of the total population) were in need of emergency food assistance countrywide. (GoM, MVAC 6/2018).

## **Increased violence ahead of general election in May 2019**

An increase in political violence in Malawi, violence against women, and attacks against persons with albinism is reportedly linked with Malawi's upcoming general elections in

May 2019. The increase, especially against women candidates facing threats, harassment and intimidation, started during the 2018 primary elections. More violence is expected in March as electoral campaigning will start. Although mostly expected in urban areas, there is an increased risk that the government will attempt to politicize the humanitarian operation efforts such as linking campaigning with ongoing operations or favouring population that supports the government when distributing relief items. This has been however not been reported yet and currently marks a low probability rate. Emerging protests and violence pose further security concerns and could further limit government commitment and emergency relief efforts. High rates of corruption are creating tensions among the population (OHCHR 25/1/2019; UN News 25/1/2019; Reuters 23/1/2019; VoA 1/2/2019; Transparency International 2/2017).

## Key characteristics

### Demographic profile:

Total Population: 18.1 million

- 0-14 years: 46.17% (male 4,560,940 /female 4,600,184)
- 15-24 years: 20.58% (male 2,023,182 /female 2,059,765)
- 25-54 years: 27.57% (male 2,717,613 /female 2,752,983)
- 55-64 years: 3% (male 284,187 /female 310,393)
- 65 years and over: 2.69% (male 234,776 /female 298,537)

(CIA Factbook 2018)

**Nutrition levels:** 1.07 million children (37 per cent) under 5 years are suffering from chronic malnutrition (stunting or low height-for-age). 12% are underweight (USAID 18/5/2018, cited after NSO & ICF 2017).

**Stunting levels:** rural 39%; urban 25 %, Northern: 35 %, Central: 38%, Southern: 37% (USAID 18/5/2018, cited after NSO & ICF 2017).

**Health statistics:** Total number of under 5 deaths reported: 39,000 (WHO 2017) Maternal mortality rate is 574 per 100,000 live births (MICS, 2014). Infant mortality is 66.5 per 1,000 live births (UN Data 2018). HIV prevalence is 9.6% (CIA Factbook 2018).

**WASH statistics:** 47.3% % of the urban population and 39.8% of the rural population has access to improved sanitation facilities. 95.1% of the population in urban areas and 89.1% of the rural population uses improved sources of drinking water (UN Data 2018).

**Literacy rates:** 62.1% of the total population (men: 69.8 % women: 55.2%) (CIA Factbook 2018)

**Poverty rates:** 51.54 % below the national poverty line; 20.1 % being ultra-poor (GoM, MVAC 07/2018). Despite economic improvement, 66 per cent of the population continues to live on less than US\$1.90 a day (Sachs et al. 2017).

## Response capacity

### Local and national response capacity

Following the floods, rapid emergency measures were taken by the government: On 8 March 2019, the president declared a state of disaster in areas hit by the heavy rains and floods, delegating the Department of Disaster Management Affairs (DoDMA) (part of the Ministry of Homeland Security) the responsibility to mobilise and coordinate all ongoing emergency relief efforts. The DoDMA initiated search and rescue teams. The Malawi Defence Force (MDF), as well as the Malawi Police Service and the Malawi Red Cross Society, are assisting evacuated and displaced people by the floods and the heavy rains (OCHA 9/3/2019).

As of 8 March, the government has dispatched at least 23 trucks of relief items to affected districts, including tents, plastic sheets, food items, blankets, and kitchen utensils. Currently, the Inter-Agency Assessment Committee coordinated by DoDMA is carrying out further needs assessments, verifying preliminary figures and severity of affected people's need for immediate humanitarian assistance. As of 12 March, the results have not been officially been published (OCHA 9/3/2019; Malawi24 10/3/2019; UN News 11/3/2019; GoM 10/3/2019; OCHA 11/3/2019).

### International response capacity

Major INGOs and UN organisations are present in Malawi, supporting ongoing emergency relief operations. WFP has deployed two boats to accompany the assessment and response; UNICEF is providing drones and WFP will support with technical expertise to do mapping using satellite imagery to get information about affected areas, obtained from the European Commission's Copernicus Emergency Management Services that was activated on 10 March. OCHA is deploying staff to support assessments (ECHO 10/3/2019; OCHA 9/3/2019; UN News 11/3/2019; Copernicus 12/3/2019).

## Information gaps and needs

A detailed geographical and gender/age-segregated breakdown of the affected population is lacking. Detailed information about sectoral needs, including gender specific needs, is missing.

Population numbers of disabled people, their whereabouts and their elevated levels of needs due to the floods is lacking.

Information about the impact on critical infrastructure, especially whether education and health services are operating, is not available. An overview of the impact on buildings is not available.

Information about refugees impacted by floods and their situation in the camps are limited.

Short, medium and long-term impact on food security levels and livelihoods remain speculative as for the level of damage by the rains and floods on agricultural productivity and livestock cannot yet be accurately assessed.

Information on whether the lessons learned from the post-disaster assessment of the 2015 floods effectively improved the government-led emergency response in Malawi remains unclear.

## Lessons learned

The development of the National Disaster Recovery Framework and its implementation helps to identify and to address gaps in national disaster risk management and response. Its implementation must be practised among several actors involved (such as different governmental ministries, national NGOs and international stakeholders). Lack of coordination among government stakeholders causes a delay in implementation (GFDRR 2015).

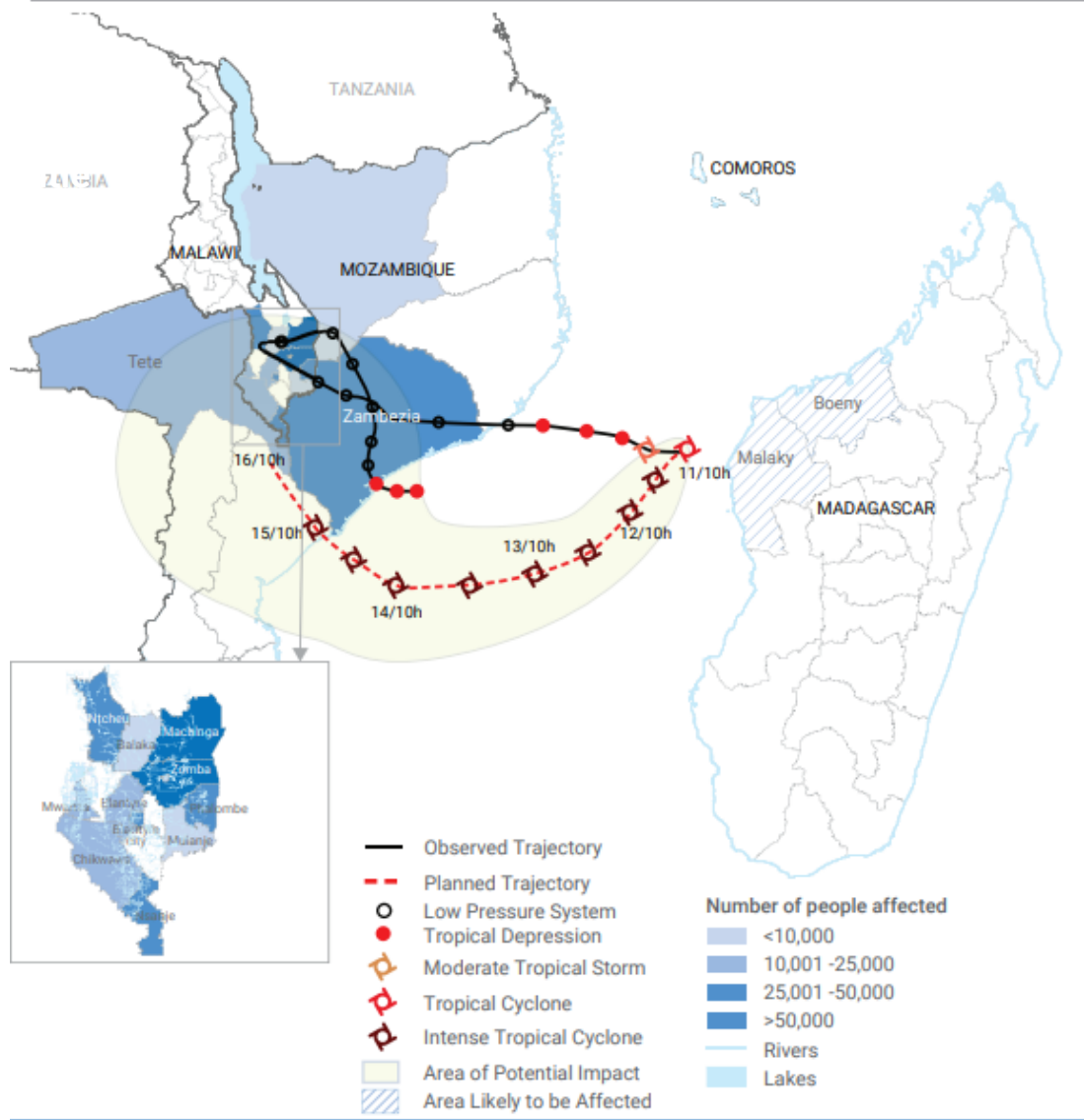
It is important to specifically target information and awareness-raising campaigns to communities at risk, as high illiteracy levels may hinder target communities from effectively utilising the information (GFDRR 2015). Gender-specific vulnerabilities, as well as those of people with disabilities, must be taken into consideration when disseminating information.

Temporary shelter arrangements for displaced women must be safe and secure, and include adequate toilets and washing facilities, in order to not further increase women's vulnerability and ensure protection (UNFPA 08/2016; UNDP 2013).

Post-disaster needs assessment to inform the recovery process, as well as monitoring and evaluation, are crucial to inform and improve preparedness measures. Political commitment is however needed for sustainable interventions (GFDRR 2015).

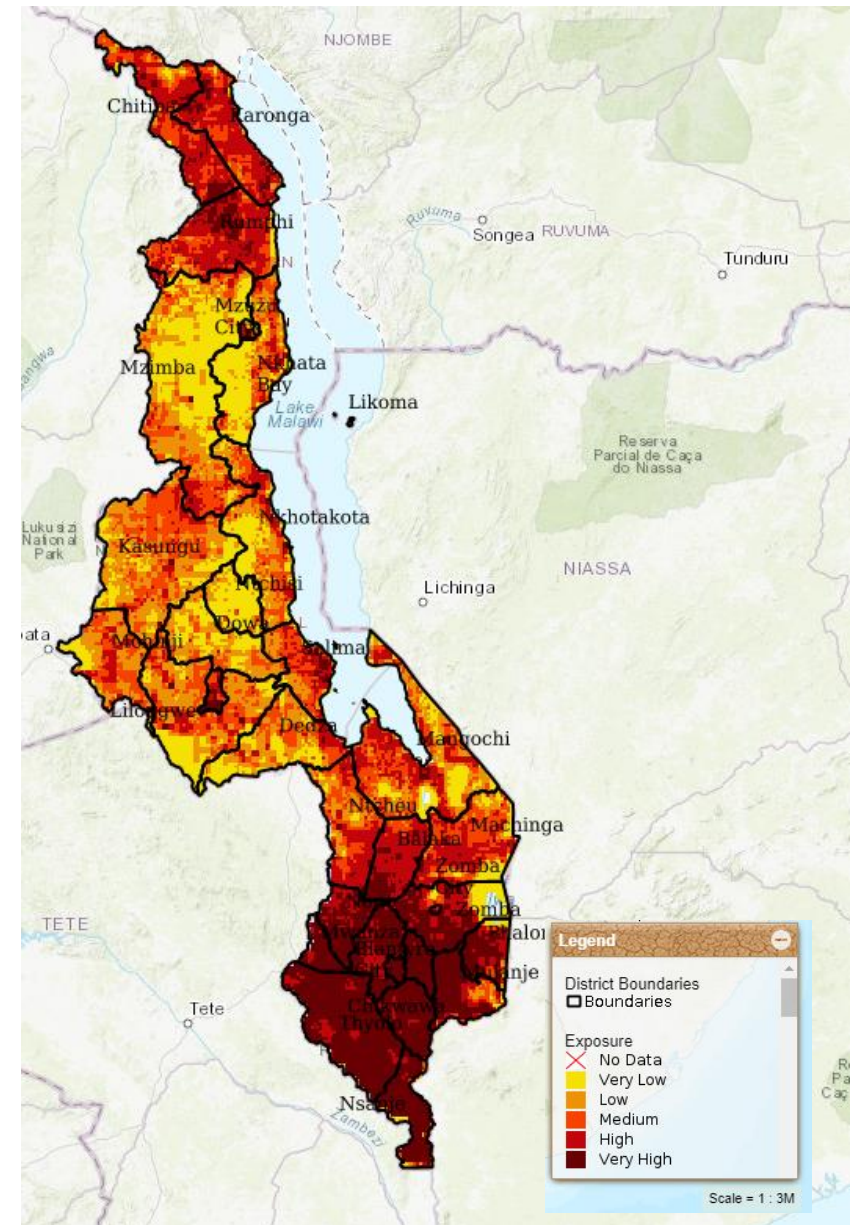
Improved road access to rural areas as well as planning and compliance with safer housing construction standards increase the resilience of many people at risk to floods. (GFDRR 2015).

Map 1: Cyclone Idai and flood-affected areas as of 10 March



Source: OCHA 11/3/2019

Map 2: Malawi's exposure and vulnerability to drought, floods, and fire hazards



Source: (RCMRD, accessed 11/3/2019)