

MOZAMBIQUE

Tropical Cyclone Idai , Update I

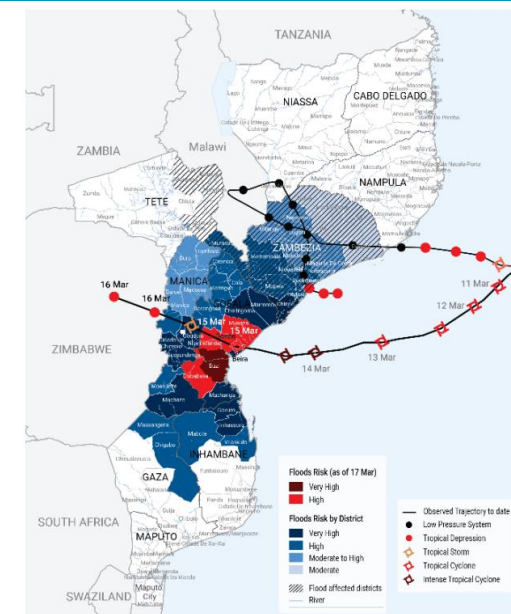
Briefing note – 19 March 2019

Tropical Cyclone Idai made landfall on the evening of 14 March, on Beira city (Sofala province) in central Mozambique. Reports estimate that 600,000 people in Sofala, Zambezia, Tete, Niassa, Manica and Inhambane provinces have been affected and are in need of humanitarian assistance. So far 150 people are reported dead (including 66 due to flooding before the cyclone impact) and more than 1,500 injured, with the toll expected to increase in the coming days. Prior cyclone-related flooding had already displaced 17,000 people and very likely thousands more were displaced after the cyclone passage. Houses, health, and education facilities have been severely damaged in the provinces affected, particularly in and around Beira. Extensive damage to livestock and planted crops has also been reported.

NEED FOR INTERNATIONAL ASSISTANCE



IMPACT



Anticipated scope and scale

Areas outside of Beira city are expected to be even more severely impacted by the cyclone. Heavy rainfall is forecast to continue in Sofala and Manica provinces between 18-21 March, leading to increased water levels likely to affect 160,000 people living along the Buzi and Pungoe river basins, for which a red alert has been already issued. Risk of urban flooding is still high for Beira and Dondo.

Key priorities



600,000
people affected by the cyclone



+17,000
displaced (9-14 March)



+12,000
homes and classrooms damaged



telecommunication
is severely hampered

Humanitarian constraints



Trees and power lines are down in many parts of Beira. Communications are hampered due to lack of electricity, expected to last until the end of March. Many roads in Zambezia and Tete are flooded and therefore impassable or only accessible by 4x4 vehicles.

Limitations

Due to flooding of roads and power and communications outages, the extent of the cyclone's impact is still unknown. Figures of casualties and displaced people are expected to rise substantially.

Crisis impact

Tropical Cyclone Idai - a Category 3 cyclone - made landfall on the city of Beira, Sofala province, over 14-15 March, with maximum sustained winds of 210 km/h, decreasing to 70 km/h while moving through Sofala and Manica provinces, towards Zimbabwe. Ninety percent of the city has been damaged or destroyed. The most affected provinces are Sofala, Manica, Zambezia, Inhambane and Tete. (Logistics Cluster 17/03/2019) Estimates indicate 600,000 people have been affected by the cyclone and need humanitarian assistance. (ECHO 18/03/2019) The full impact of the cyclone is not yet clear because of damage on roads and on the communications infrastructure; however, many parts of Beira and other districts are severely damaged. (IFRC 16/03/2019) The death toll stands at 150 people dead and more than 1,500 people injured. (ECHO 19/03/2019) The figure is likely to increase as search and rescue teams gain access to affected areas. Heavy rains are expected until 21 of March, with further risk of flooding in the affected areas. (Logistics Cluster 19/03/2019)

In the days prior to the cyclone's landfall, severe flooding related to the approaching cyclone had already impacted several districts in Sofala, Zambezia and Tete provinces, affecting over 140,000 people. Some 66 people died and more than 100 were injured as a result of the flooding. At least 17,000 people have been displaced by the floods and are sheltering in 15 transit centres. The flood-affected population have likely been additionally affected by the cyclone (OCHA 15/03/2019) (Club of Mozambique 15/03/2019).

Shelter: More than 12,000 houses have been destroyed by flooding since 9 March in Zambezia and Tete. People evacuated and displaced due to loss of property are being hosted in 15 transit centres in Tete and Zambezia. (OCHA 12/03/2019) There is no report on the current shelter situation of the population displaced. The impact of Cyclone Idai on shelters is still unknown. It is likely that thousands of homes will be damaged or destroyed.

Food and livelihoods: Extensive destruction of livestock and planted crops has been reported, with 168,000 hectares of crops destroyed in Zambezia and Tete due to flooding and cyclone impact. (UN News 15/03/2019) As this happened before the main harvest season, food insecurity in the region will be highly affected. Nampula, Tete and Niassa were among the worst affected areas by drought, also reporting high levels of food insecurity. Food distribution is being provided by local and international organisations. Needs assessment of the population in isolated areas is not available, mainly due to access constraints. In Beira city markets and businesses are not functional, no report on impact on trade, although it is likely the disruption of imports will further impact the food situation.

Health: The emergency room of the Central Hospital in Beira is non-operational due to extensive damage, while other parts of the hospital were flooded but reportedly functioning. (OCHA 18/03/2019) Local and international media also reported that 18 hospitals have been destroyed by the cyclone (Al Jazeera 14/03/2019; Club of Mozambique 13/03/2019). The roof of the Munhava District health centre collapsed. (OCHA 18/03/2019) So far, 1,500 injured people have been reported, including 400 treated by the Central Hospital. (Club of Mozambique 18/03/2019) The general health status of the Mozambican population is below-average comparing to other African countries, mainly due to high levels of poverty and poor infrastructure, resulting in predominance of infectious diseases and paediatric malnutrition. (MoH 2014-2019) There are only three doctors per 100,000 people, and half of the population has to walk an hour or more to the nearest health facility. (USAID 28/02/2019)

As of 11 March, 194 new cases of malaria and 14 cases of diarrhoea were registered in Zambezia, reportedly in relation to the floods exacerbating the spread of disease. Health authorities have stockpiled supplies to respond to the first 100 cases of cholera, should it occur. The health post of the accommodation centre in Tete has reported a combined total of 471 cases of malaria, diarrhoea, and respiratory infections. (OCHA 12/03/2019) There is a heightened risk of waterborne diseases due to the flooding. (OCHA 15/03/2019)

WASH: Damage to sanitation facilities and prevalence of unsafe water, due to water supply destruction and interruption, has been reported. (OCHA 15/03/2019) Although no information is available, wells and boreholes are likely to be contaminated by floods.

Education: School facilities have been highly damaged by the flooding. Some 340 classrooms are partially or totally damaged in Zambezia, Tete and Niassa provinces, affecting more than 45,000 students. (OCHA 12/03/2019)

Protection: Women and children face heightened protection risks, especially gender-based violence and particularly if the impact of the floods and cyclone has left them with precarious shelter conditions. (OCHA 15/03/2019) Without adequate shelter facilities children are at risk of being separated from their families.

Impact on critical infrastructure

Power, telephone and Internet outages are ongoing in Beira since the evening of 14 March and it is expected that the power grid will be non-functional until the end of March. (Logistics Cluster 17/03/2019) (Convoy of Hope 16/03/2019) There is no indication of fuel shortages so far. However, fuel trucks are stuck in Inchope on the way to Beira due to impassable roads and shortages are expected in the affected areas in the next days, especially due to a higher demand arising from the operation of power generators. (Logistics Cluster 17/03/2019)

Vulnerable groups affected

Children are particularly vulnerable during flooding, due to the higher risk of drowning as well as the risk of being separated from their parents. Among 100,000 people evacuated so far, 60% are children. (Save the Children 14/03/2019)

People with disabilities are also at risk. Physical mobility restrictions are very likely to make evacuation more difficult for them.

Among the displaced population being hosted in the accommodation centre in Tete, 170 vulnerable people have been identified including 55 people from female-headed households, 41 orphan children, 16 elderly people, and 58 people with disabilities. (OCHA 12/03/2019)

Aggravating factors

Flooding

Mozambique broadly follows a southern African weather pattern, with rains falling largely between December and March. (Expert Africa 2015) The provinces of Zambezia, Sofala and Tete have had intense flooding since 9 March causing extensive damage to houses, crops, and public infrastructure. Cyclone Idai is bringing more water to areas already flooded, increasing widespread damage and leading to more displacement. (AfricaNews 15/03/2019; Reuters 15/03/2019)

Previous disasters

Mozambique has seen a pattern of deadly floods being worsened by devastating hurricanes in the past. The strongest storm to make landfall in Mozambique was Tropical Cyclone Eline, which hit the southern parts of the country in February 2000, killing 350 people and displacing 650,000 people across Southern Africa. (Reuters 15/03/2019) Other major tropical cyclones with a Category 3 intensity happened in 2006 and 2008. The last tropical cyclone with a Category 4 hit Mozambique in mid-February 2017. (Wunderground 13/03/2019) Tropical Cyclone Desmond hit the country on 22 January 2019, making landfall in the city of Chinde (Zambezia province) as a tropical storm although the worst of the rains impacted Beira, resulting in 120,000 people displaced. (Salvation Army 21/02/2019) The recurrent impact of these hazards has likely reduced the coping capacities of the population, especially impacting food security. This has also been made worse by recurrent drought periods.

Population density and poverty

Beira is the fourth largest city in Mozambique with a population of 530,000 people. As much as three-fourths of the population in the affected areas live below the poverty line and are therefore socially vulnerable. (Direct Relief 14/03/2019) Poverty analysis conducted in Mozambique have shown that cyclone, flood and drought can lead to a drop of up to 25-30% in per capita food consumption. (HRP 2018-2019)

Location

Beira is the most vulnerable city in the country to rising sea levels and storm surges. (Wunderground 14/03/2019) A sea level rise of one metre can flood 40% of the town, including the port and the airport. Beira's port is the second busiest in the country and has long been a major trade point for exports coming in and out of Zimbabwe, Malawi, Zambia, and other Southern African nations. (Wunderground 14/03/2019)

Drought and food insecurity

The heavy rains are falling on areas usually affected by drought. In Zambezia and Nampula provinces thirty days of rainfall deficits were reported between February and March. (FEWS NET 15/03/2019) The below average rainfall in the southern region has negatively impacted the current agricultural season. The main harvest due in March will likely be severely disrupted. The likelihood of an El Niño event between November 2018 and March 2019 had been revised to at least 80%, with El Niño induced effects, in this case dryness, that have had a deteriorating impact on food insecurity in the country. Zambezia, Tete and Nampula are among the provinces most affected. (IPC 10/2018) (HRP 2018-2019) Floods will have both short- and long-term effects on food security, due to loss of harvest and impossibility of replanting.

Food security projections January-March

| Province | Total population | IPC 3 Crisis | IPC 4 Emergency |
|----------|------------------|-----------------|--------------------|
| Nampula | 6,102,867 | 183,086 | 183,086 |
| Zambezia | 5,110,787 | 255,539 | 51,108 |
| Tete | 2,764,169 | 331,700 | 27,642 |
| Sofala | 2,221,803 | 22,218 | 0 |
| Niassa | 1,789,120 | 89,456 | 35,782 |

Source: IPC January-March 2019 projections

Disease outbreaks

Cholera: Mozambique regularly suffers outbreaks of cholera and diarrhoea during the December-April rainy season. As cholera is spread through contaminated water, the most affected communities are usually those having poor access to sanitation facilities. Children, especially under five years of age, and pregnant women are particularly vulnerable. In 2015 Mozambique suffered a major outbreak of cholera in Tete, Nampula and Niassa provinces. (MSF 27/02/2015)

Malaria: Most of the country has year-round malaria transmission with a seasonal peak during the rainy season. Floods have likely contributed to an increase in malaria transmission in recent years, particularly in low-lying coastal areas and along major rivers. Between 2015 and 2016 malaria cases increased by 17%, reaching 8,520,000 cases, and 9,980,000 cases were recorded in 2017. (AllAfrica 26/04/2018) (USAID 2018) A decline of 2.6 per cent in malaria cases was recorded in the first nine of months of 2018 comparing to the same period the previous year, mainly due to the late start of the rainy season that extended the mid-season dry spell. (Club of Mozambique 02/11/2018) (HRP 2018-2019) Malaria is considered the most important public health problem in Mozambique and accounts for 29% of all deaths. Among children under five years of age, malaria accounts for 42% of deaths. (USAID 26/10/2016)

Political instability and insecurity

A violent Islamist insurgency is operating in Cabo Delgado province, northern Mozambique, however the situation is very unlikely to hamper relief distribution and humanitarian access and response in the central provinces.

Response capacity

Local and national response capacity

The National Institute for Disaster Management (INGC) has set up its centre of operations in WFP-provided unit in the airport of Beira. Multiple assessments are ongoing in the city and convoys are on the way to Beira to provide vital relief items to the affected population, despite facing challenges due to roads being flooded.

International response capacity

WFP is facilitating an inter-agency coordination together with the NGO consortium (COSACA). WFP plans to support 22,000 people in hard to reach areas with a 3-day ration of high energy biscuits. An additional 115,000 people will be assisted through pre-positioned commodities in Caia (Sofala province), Nacala (Nampula province) and accommodation centres in Zambezia. On 16 March, 6,000 flood affected people in Tete

province were reached by WFP with cash-based transfers. WFP has also funded an MI-8 transport helicopter to conduct emergency operations in remote areas inaccessible by road, as well as the mobilisation by INGC of 30 boat pilots to transport food. A flight with humanitarian supplies from the Humanitarian Response Depot in Dubai is scheduled to arrive in Maputo on 18 March. (OCHA 17/03/2019)

The Global Logistics Cluster has deployed a team of two people, a coordinator and an information management officer, to assess the needs for coordination and common logistics services. The team is expected to arrive on 18 March. (WFP 17/03/2019)

UNICEF is working in collaboration with the Government in order to ensure assistance to the people affected, especially children and women. (UNICEF 17/03/2019)

IFRC is supporting the National Society of the Red Cross in Mozambique through the release of funding from its Disaster Relief Emergency Fund. (IFRC 16/03/2019)

The Emergency Telecommunications Cluster (ETC) deployed a coordinator in order to assess the status of communications services on the ground. More experts and equipment have been deployed by the Government of Luxembourg and Ericsson to restore and manage Internet connectivity services. (ETC 17/03/2019)

OXFAM is also responding to the emergency with water, sanitation services, food and NFIs. (OXFAM 18/03/2019)

Humanitarian constraints and logistics

Access is a challenge due to damages to road infrastructure. Villages near Beira and Chinde have been cut-off from mainland by a two-metre tidal surge. (BBC 15/03/2019) Some affected communities are still not accessible, suggesting the human impact is likely to be much higher than reported to date. (IFRC 18/03/2019)

Communications

On 17 March, Télécoms Sans Frontières (TSF) installed the first satellite connection in Beira after Cyclone Idai hit the city, to allow humanitarian actors to coordinate the emergency response. From the airport area, some beneficiaries have also been able to make first calls. (TSF 18/03/2019) However, the electricity outage is hampering communications in the rest of the city, as well as making it impossible to recharge mobile phones.

Airports

At Beira airport, the runway was not affected but navigation, illumination, weather and radio communications systems were damaged. As of 19 March, Beira airport is fully operational. (Logistics Cluster 19/03/2019) The Mozambican Aviation Authority guarantees

minimum safety conditions for commercial flights to operate. Maputo International airport is fully operational. (Logistics Cluster 17/03/2019)

Sea ports

Maputo port is fully operational while Beira's sea port is seriously affected. The extent of the damage is not yet known, and communications remain non-operational. (Logistics Cluster 17/03/2019)

Roads

An assessment of the Caia-Sena road has been conducted showing that 43km have been cut off due to a flood that started in Cahora Bassa, Tete province.

As at 19 March, the Caia-Beira road is not passable, and reports indicate that it will be inaccessible for at least two weeks after the rains will stop. (Logistics Cluster 19/03/2019)

A partial collapse of the bridge to the school EPC Mazicuera in Gondola, close to Chimoio has been reported.

On the N1 road connecting Maputo to Beira, multiple access constraints have been reported:

- In Nhamatanda the road is not passable due to flooding and possible destruction due to the broken dam.
- From Pande to Madassipo the road is only accessible by 4x4 vehicle due to potholes, uneven pavement and muddy road conditions.
- Two bridges on the N1 over the Buzi and Pungoe rivers are at risk of flooding if heavy rains persist.

In Zambezia, the following roads are still impassable due to flooding:

- R640 Mopeia/Luabo
- NC Morrumbala/Megaza
- NC Kizombe/Mureremba
- NC Mandiua/Posto Chire
- R652 Derre/Alto Benfica
- R650 Milange/Molumbo
- R653 Mocuba/Lugela
- R644 Maganja/Nante
- N323/N324 Maganja/Pebane

No importation and customs constraints have been reported since the beginning of the emergency. (Logistics Cluster 17/03/2019)

Population coping mechanisms

There is a lack of information regarding coping mechanisms of the population affected, however vulnerability is high due to the impact of the previous week's heavy rains and floods.

Information gaps and needs

- Despite Mozambique being prone to natural disasters and having experienced the impact of a tropical cyclone multiple times, information on coping mechanisms of the population and how they would behave in the face of such a disaster is unavailable.
- Information on the patterns and dynamics of population movements especially in the very poor coastal areas of Mozambique is not available. (Direct Relief 14/03/2019)

Lessons learned

Heavy rainfall and floods cause annual outbreaks of cholera during the rainy season from December to June and of malaria from December to April.

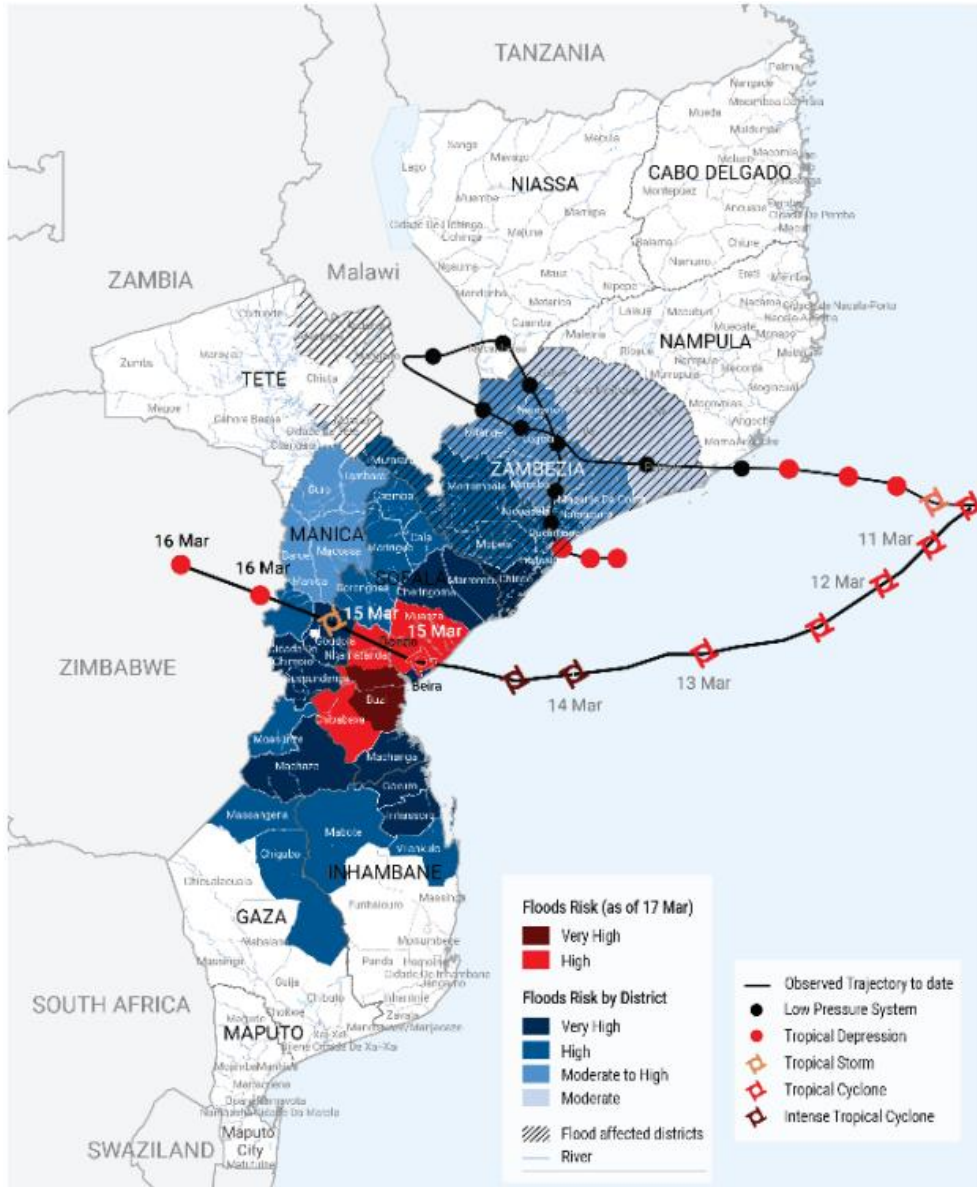
The education sector is always affected by heavy rains, cyclones and floods in Mozambique. School infrastructure is vulnerable to weather events, given its diverse construction typology: conventional, mixed, and local material. (UN 31/12/2016)

The damage inflicted on schools, hospitals, health facilities and other key infrastructure will have a long-term impact on the communities affected, increasing their vulnerability. (UNDRR 18/03/2019)

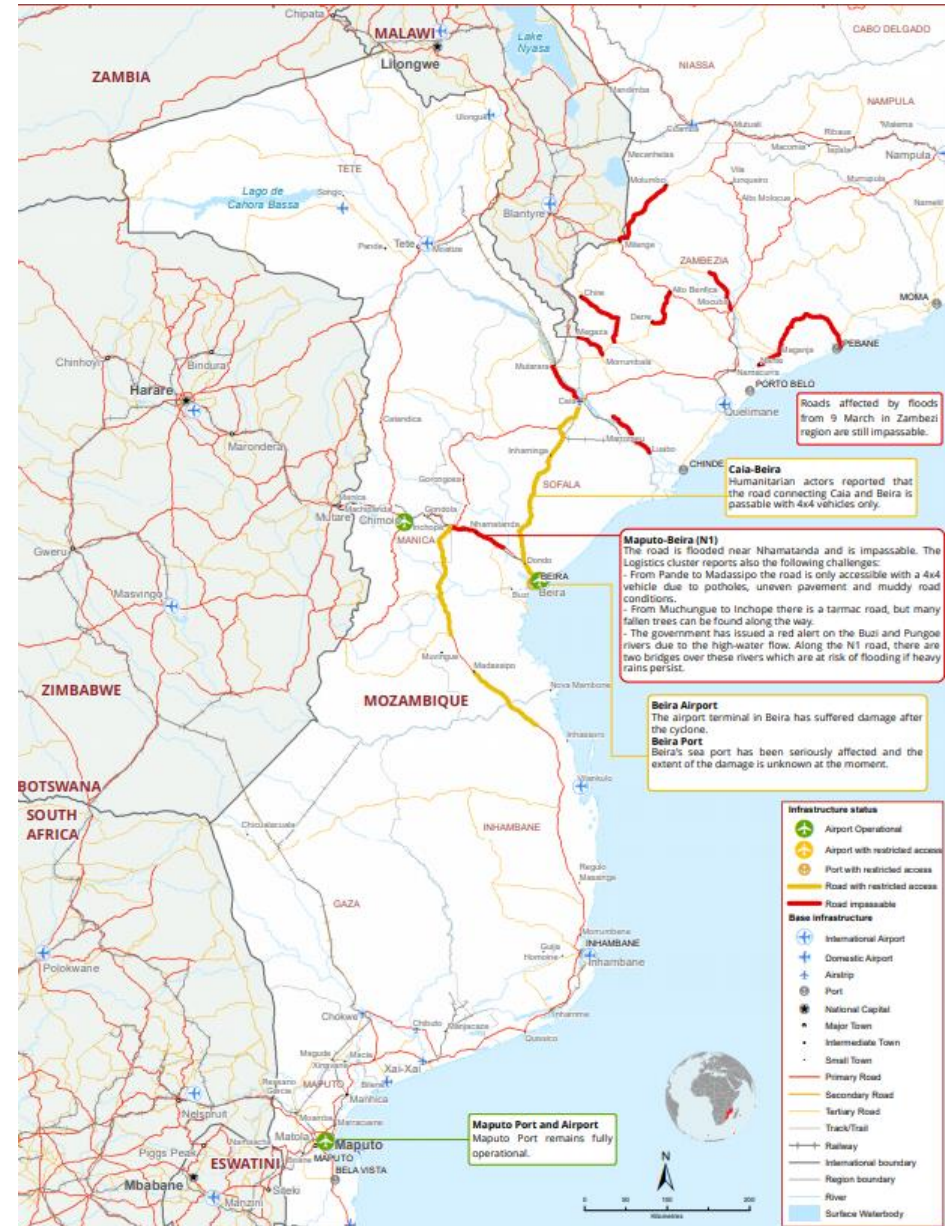
Despite the effectiveness of early warnings, the need to build more resilient infrastructure is imperative and urgent. (UNDRR 18/03/2019)

Tropical Cyclone Idai trajectory and affected areas

Access constraints in affected areas



Source: OCHA 17/03/2019



Source: Logistics Cluster 18/03/2019