



Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 08-Sep-2019 | Report No: PIDA26977



BASIC INFORMATION

A. Basic Project Data

Country Mozambique	Project ID P171040	Project Name Mozambique: Cyclone Idai & Kenneth Emergency Recovery and Resilience Project	Parent Project ID (if any)
Region AFRICA	Estimated Appraisal Date 14-Aug-2019	Estimated Board Date 30-Sep-2019	Practice Area (Lead) Urban, Resilience and Land
Financing Instrument Investment Project Financing	Borrower(s) Ministry of Economy and Finance	Implementing Agency Water and Sanitation Infrastructure Administration (AIAS), Post-Cyclone Idai Reconstruction Office (GREPOC)	

Proposed Development Objective(s)

The Project Development Objective is to support the recovery of public and private infrastructure and livelihoods while strengthening climate resilience in the areas most affected by Cyclones Idai and Kenneth.

Components

Recovery and Reconstruction of cyclone-affected areas
Building Climate Resilience of Beira
Project Implementation, Monitoring and Evaluation
Contingent Emergency Response Component (CERC)

The processing of this project is applying the policy requirements exceptions for situations of urgent need of assistance or capacity constraints that are outlined in OP 10.00, paragraph 12.

Yes

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	210.00
Total Financing	190.00
of which IBRD/IDA	130.00



Financing Gap	20.00
----------------------	-------

DETAILS

World Bank Group Financing

International Development Association (IDA)	130.00
IDA Grant	130.00

Non-World Bank Group Financing

Other Sources	60.00
NETHERLANDS: Min. of Foreign Affairs / Min. of Dev. Coop.	60.00

Environmental and Social Risk Classification

High

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)

B. Introduction and Context

Country Context

1. **Mozambique has achieved significant economic development since the end of the civil war in 1992, but important challenges remain that have been aggravated by the recent hidden debt crisis.** Real annual growth of the Gross Domestic Product (GDP) averaged around eight percent over the past two decades. Robust growth was made possible by several large-scale foreign-investment projects in the extractives sector, political stability, and significant donor support. However, falling commodity prices, climate shocks, fiscal tightening, and slowdown in foreign direct investments in the aftermath of the US\$1.4 billion hidden-debt disclosure caused economic growth to drop to 4.3 percent and inflation to peak at 26 percent in 2016. While inflation decreased to five percent by August 2018, growth dipped to an average of 3.8 percent in 2016 and 2017. External debt remained at an unsustainably high level (estimated 85 percent of GDP¹) and the economy remains exposed to external shocks given its dependence on a few commodities for foreign exchange earnings. Potential large revenues from liquefied natural gas (LNG) projects may increase government earnings in the coming years. Moreover, upcoming general elections (planned for 2019) could amplify political tensions between the main

¹ IMF, 2018. Republic of Mozambique: Debt Sustainability Analysis. USL: <https://www.imf.org/external/pubs/ft/dsa/pdf/2018/dsacr1865.pdf>



parties to control resources, which have been compounded by the changing political economy with the discovery of LNG reserves. To date, the International Monetary Fund (IMF) has not resumed its program in Mozambique and, in 2017, the country was classified as being in a “fragile situation” by the World Bank.

2. **While the country has achieved growth over the past years, the number of poor people is growing as is the level of inequality.** According to the latest official figures, poverty has fallen from 54 percent in 2002 to 46 percent in 2014. International comparison data (using the US\$1.9/day 2011 Purchasing Power Parity (PPP) poverty line) show a similar trend with poverty in Mozambique falling from 79.3 percent to 62.9 percent over the same period. However, the number of people living in poverty using the US\$1.9/day 2011 PPP poverty line has increased from 13.26 million in 1996 to 17.12 million in 2014. The population share of the poor (using the US\$1.9/day 2011 PPP poverty line) is projected to decline by less than 1 percentage point from 60.8 percent to 59.9 percent between 2017 and 2020. Such stagnation of poverty is expected because GDP growth in per capita terms is anemic and is dominated by extractive industries and urban areas, where poverty is less concentrated. Due to high population growth and the absence of adequate safety nets, the number of poor is expected to increase. Growth has become less inclusive in recent years, raising the levels of inequality. The Gini index fell from 0.54 in 1996 to 0.47 in 2002, then slid to 0.46 in 2008, and reached the level recorded in the late 1990s of 0.54 again in 2014. The relationship between growth and poverty reduction has weakened due to a transition towards capital-intensive public and private investment projects and fewer people have been benefitting. The recent economic downturn may also have had a negative effective on poverty reduction. Whilst inflationary pressures have subsided, relative food price levels are high and household consumption remains strained.

3. **The limited fiscal space and social vulnerabilities in Mozambique are exacerbated by climate and disaster shocks impacting growth and development on a regular basis.** Disaster and climate shocks are frequent in the country. A catastrophe risk modeling study estimates that Mozambique faces an Average Annual Losses of US\$ 440 million due to floods alone². Emerging international evidence shows that disasters have disproportional impacts on poor and vulnerable populations, such as women, with limited capacity to cope with shocks, further driving inequality and poverty in exposed regions.³ Recent poverty analysis⁴ conducted in Mozambique shows that cyclone, flood or drought can lead to a drop of up to 25-30 percent in per capita food consumption and that affected households also cut back on expenditures in basic non-food items. The negative effects on consumption resulted in a poverty increase of 12 and 17.5 percentage points in two of the three events analyzed. Also, the provinces cyclically most affected by disasters tend to show higher levels of poverty compared to those least affected. In addition, the public resources allocated ex-ante for emergency response and recovery have systematically been significantly lower than the funds needed to cope with catastrophic events. These financial constraints and the resulting need to mobilize ex-post resources lead to inefficient response operations and prolonged and uncertain recovery processes, which further exacerbates the negative economic impacts of disasters. Without changes in climate and disaster risk management and financing policy, climate change is expected to cause economic damages of between US\$2.3 billion and US\$7.4 billion during the period 2003–50

² World Bank (2018) *Financial Protection Against Disaster in Mozambique*.

³ World Bank (2017) *Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters*. Hallegatte et al.

⁴ World Bank (2018) *Extreme Weather and Household Well-being: Evidence from Multiple Shocks in Mozambique*. Baez et al.



(discounted and in 2003 prices).⁵ Mozambique's development process therefore needs to address poverty goals in an inclusive and resilient manner.

4. **The effects of climate change are already evident in Mozambique and are expected to lead to further rises in disaster losses.** The mean annual temperature in Mozambique has increased by 0.6°C between 1960 and 2009, while average rainfall totals have declined over the same period¹. Sea-level rise is likely to exceed half a meter by the 2090s, with significant consequences for the 60 percent of Mozambicans who are living in low-lying areas. A national study showed that, if no further adaptation actions are undertaken, sea-level rise could increase economic flood losses in Mozambique's major coastal cities by a factor five between 2012 and 2030¹¹. Intensification of droughts is expected to reduce crop yields by an average of 11 percent (up to 30 – 40 percent in some provinces) and reduce general water availability; and river floods may become more intense across the main basins due to increases in extreme precipitation during the rainy seasons.

Situations of Urgent Need of Assistance or Capacity Constraints

5. **In March and April 2019, Mozambique was struck by two consecutive major cyclones with significant impacts on local populations, business and core infrastructure.** More than 1.7 million people were affected, with damages and losses amounting to US\$ 3 billion, and an estimated US\$ 3.4 billion of total cost for recovery and reconstruction⁶. The first event, Cyclone Idai, affected more than 1.5 million people (5.4 percent of Mozambique population) causing 603 fatalities and 1,600 injuries. Cyclone Idai also had significant impacts in neighboring countries Malawi and Zimbabwe. The second event, Cyclone Kenneth, affected around 250,000 people and caused 45 casualties. Both events destroyed and damaged houses, business and core infrastructure. Given the severity of the impacts of the two cyclones in Mozambique, the World Bank's proposed response combines the strategic use of IDA resources on multiple fronts to enable a response at scale, drawing from resources under ongoing projects where possible; activation of CERC/IRM components; and a proposed CRW allocation.

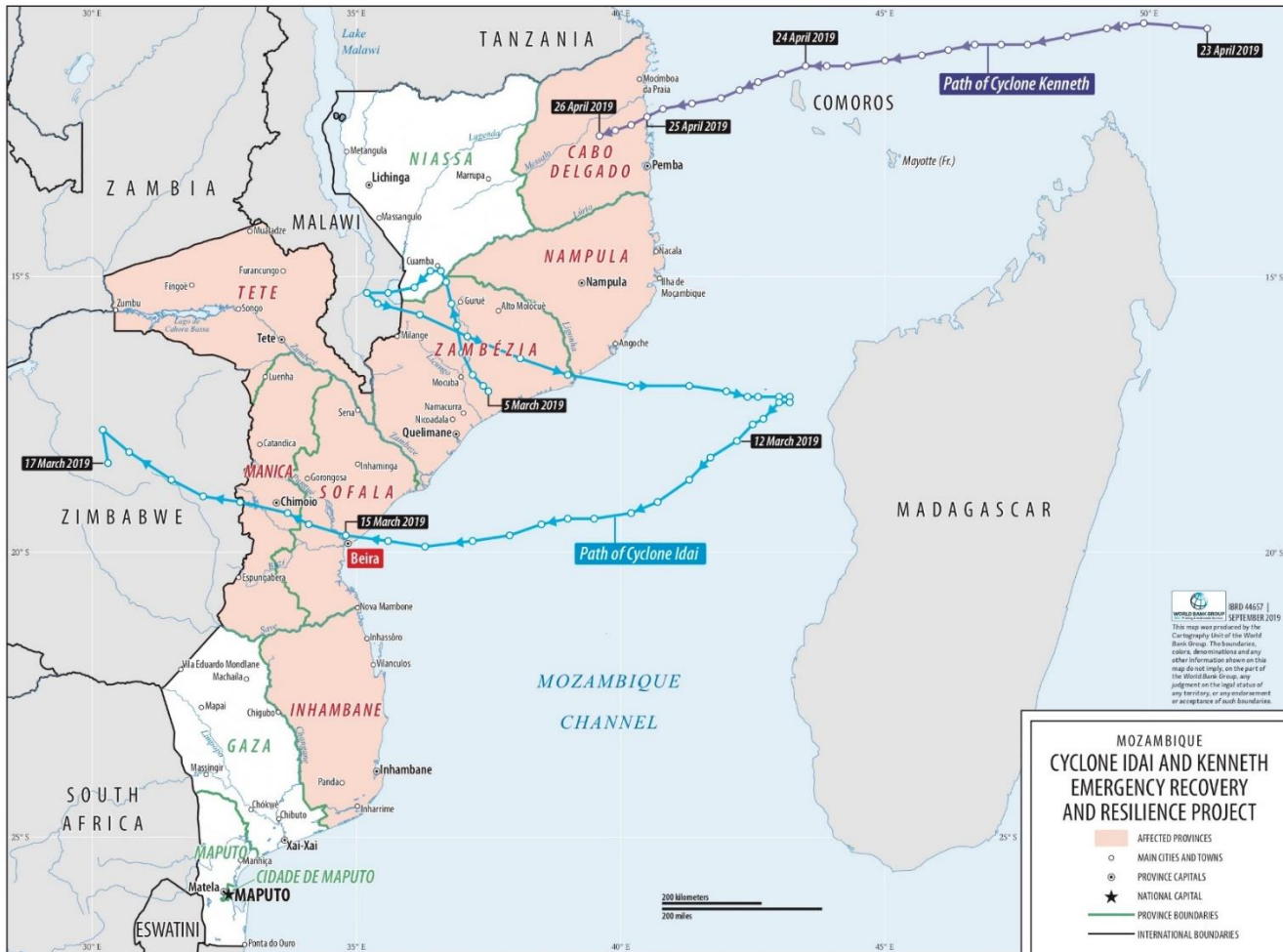
6. **The impacts of Cyclones Idai and Kenneth are concentrated in the provinces of Sofala, Zambezia, Manica, Nampula, Tete and Cabo Delgado.** Cyclone Idai caused extraordinary levels of impact in Sofala, Zambezia and Manica. Idai's U-shaped path passed over Zambezia, Nampula and Tete provinces in the first week of March. It then came back through Sofala, Manica and Tete during the end of the second week making landfall near the city of Beira, in the Sofala province. The city, Mozambique's 5th largest with a population of over 530,000, was hit hard by both cyclone-level wind speeds (>175km/h) as well as torrential rainfall and storm surge. The cyclone caused massive destruction from both flooding and very strong winds, resulting in severe economic and social impacts for affected populations. Six weeks after, cyclone Kenneth, a category 4 cyclone considered the strongest cyclone to ever hit the African continent, brought winds of up to 220 km/h causing massive destruction to homes and infrastructure in the districts of Ibo, Macomia and Quissanga. Kenneth slowly moved south towards the city of Pemba, population 200,000, causing major flooding in its path.

⁵ World Bank (2010). *The Economics of Adaptation to Climate Change – Mozambique*. Arndt, C., Paul Chinowsky, Kenneth Strzepek, and James Thurlow (2012) *Climate Change, Growth and Infrastructure Investment: The Case of Mozambique - Review of Development Economics*, 16(3), 463–475, 2012.

⁶ Government of Mozambique (2019) Post Disaster Needs Assessment.



Figure 1. Project Map



7. A Post Disaster Needs Assessment (PDNA) was conducted in April and May 2018 in partnership with Government and non-Government actors, quantifying the damages, losses and negative repercussions on poverty and economic growth. The PDNA was carried out in collaboration with the Government of Mozambique (GoM), United Nations (UN), African Development Bank (AfDB), European Union (EU) and the World Bank, covering the entire affected areas, including those impacted by Cyclone Kenneth. In addition, the World Bank conducted a remote “GRADE” impact assessment, and the Municipality of Beira conducted a city-wide assessment process with support from the Dutch Government and other international partners. The PDNA shows the highest damages and losses in the productive (US\$ 1,191 million), infrastructure (US\$ 797 million) and social (US\$ 693 million) sectors. These impacts will lead to an increase in poverty rate and inflation, and a decrease in economic growth, likely worsening the food insecurity. It is estimated that the poverty rate may rise to 79 percent in affected areas, up from 64 percent. Preliminary forecasts for GDP point to a decrease in real GDP from 4.7 percent to 2.4 percent.



8. **Both cyclones caused serious damage to housing and public buildings leading to displacement and disruption of key public sector services, including markets, schools and health facilities with possible long-term negative impacts on people's lives.** An estimated 240,000 houses were damaged or destroyed by Cyclone Idai, with an estimated cost of US\$ 410 million and an additional 50,000 houses by Cyclone Kenneth. Both cyclones cause mass displacement with 230,000 people displaced post-Idai and 20,000 people displaced post-Kenneth. Months after cyclone Idai, people were still living in camp sites around the affected areas increasing the risk of water-borne diseases and epidemics. The cyclones and subsequent flooding wiped out or damaged a large share of the core infrastructure, including roads and bridges, electricity and water networks, hospitals, schools, and telecommunication. An estimated 29 percent of the national road network was damaged and 20 bridges were damaged or destroyed by cyclone Idai. In Cabo Delgado, 14 roads were cut off and 5 bridges collapsed due to cyclone Kenneth. Across areas affected by cyclone Idai and Kenneth, public sector buildings have been damaged, affecting service delivery in health and education, among other sectors. In total, over 340,000 students were affected as 4,700 classrooms were damaged by the cyclone. Cyclone Idai caused damages on 92 health facilities, including the emergency room of the Beira Central Hospital, which was rendered non-functional. Cyclone Kenneth caused damages in 50 percent of the health facilities in Cabo Delgado. Finally, many municipal markets were also damaged, affecting economic activity, especially for small-scale enterprises.

9. **Impacts of Cyclone Idai and Cyclone Kenneth will exacerbate existing vulnerability in the provinces that were most affected, namely Sofala, Zambezia, Manica and Cabo Delgado.** The four provinces have a total population of 11 million people, which represents 36.5 percent of the country's total population, accounting for 27 percent of national GDP. The province of Sofala, where the city of Beira is located, has about 2.1 million inhabitants and represents 10 percent of national GDP. It was the hardest hit province by Cyclone Idai with damages and losses close to US\$2 billion, representing over 150 percent of provincial GDP. The province of Cabo Delgado, worse hit by cyclone Kenneth, experienced losses and damages representing 34 percent of provincial GDP. Poverty rates in Sofala and Cabo Delgado are at 50 percent in both provinces, which is slightly above the national average of 46 percent. Estimates combining exposure and population data in areas affected by cyclone Idai suggest that about 60% of the affected were poor, which indicates that primarily poor people were affected. Consequently, levels of poverty and vulnerability are likely to increase in affected areas due to the cyclone.

10. **Due to the strategic importance of the Beira corridor for international trade, the damages to critical infrastructure and logistics in and around Beira are expected to have ripple effects on neighboring countries, in addition to the negative effects on the local economy.** The Beira corridor is a trading route for countries including Malawi, Zambia and Zimbabwe that links hinterland countries to the ocean through the port of Beira. Cyclone winds and floods destroyed or damaged critical infrastructure, such as roads and bridges, as well as buildings in Beira used to facilitate trade, such as warehouses. Thus, the capacity of the region to facilitate trade is expected to decrease as a consequence of Cyclone Idai. This will have long term impacts, as businesses search for alternative trading routes during the disruption. Some may not return when services have recovered. Local businesses have suffered major damages and losses. In addition to the direct costs associated with damages to facilities and equipment, local enterprises suffered from the indirect effects of infrastructure disruptions, as well as demand and supply shocks.

11. **In 2017, Mozambique was classified as being in a "fragile situation" by the World Bank due to the ongoing situation in the affected province of Cabo Delgado.** Cabo Delgado is the fourth poorest province in



Mozambique in terms of GDP per capita and poverty rate. The province will also be the location for considerable investments in infrastructure to support extraction of petroleum, natural gas, and mining. The gas investments in particular— estimated at around US\$50 billion in the next 15 to –20 years— have been anticipated for the last 10 years but have only started recently, with therefore limited current impact on the existing population, fueling perceptions that the local population is excluded from reaping the benefits of extraction industries. Such grievances, poverty and widespread youth unemployment have led to the rise of extremism. Mocimboa da Praia, one of the areas affected by Cyclone Kenneth, has been at the center of Islamist radicalization, which has resulted in violent attacks in Cabo Delgado over the past two years. Since October 2017, attacks by unidentified armed groups have caused at least 200 deaths in Cabo Delgado, with one of the bloodiest attacks which killed 16 people on May 31, 2019. The wave of violence is also causing mass displacement due to arson and destruction of property across three districts in Cabo Delgado. If not adequately and promptly addressed, the impact of Cyclone Kenneth, could fuel the narrative that the province of Cabo Delgado has been forgotten. Should such a narrative gain further traction, the province could become a fertile territory for further destabilization.

12. **The GoM activated mechanisms to respond to the emergency of both cyclones with an extensive support of donors.** Following the landfall of Cyclone Idai, the government launched a major rescue operation while providing humanitarian aid to affected population and on March 19, the government declared a State of National Emergency. On April 24, before the landfall of cyclone Kenneth, the government declared red alert in the Northern region, which triggered additional allocation of funds and resources from the government and partners. The post-disaster response was carried out by the National Institute for Disaster Management (INGC), a Government agency, with support from the UN system and multi and bilateral organizations. The UN launched flash appeals after Idai and Kenneth of US\$282 and US\$103.7 million, respectively, which were only partly funded. The Government completed a PDNA supported by the EU, UN, AfDB and World Bank covering the entire affected areas, including areas affected by Cyclone Kenneth. The PDNA was coordinated by the Ministry of Public Works, housing and Water Resources and the outcomes were presented at the Donor Conference on June 1, 2019. To support the government response, pledges of US\$1.08 billion were made by the donor community during the June 1st Donor Conference, of which US\$470 million of World Bank resources and US\$609.7 million from other donors. The World Bank support primarily includes restructuring of existing projects (US\$60 million), activation of the IRM/CERC⁷ (US\$55 million) of on-going projects and additional support through the CRW (US\$140 million).

13. **The Cyclone Idai and Kenneth Emergency Recovery and Resilience Project (CERRP) focuses on delivering support to most impacted sectors while complementing the ongoing projects aligned with the government’s program to timely address recovery and reconstruction.** Despite generous contributions from donors, the funding gap remains at US\$2.3 billion. In some affected areas, including Beira, the immediate response is now transitioning to longer-term recovery and reconstruction. The rapid recovery of roads, water, sanitation, electricity, health and education infrastructure is needed to limit the long-term effects of the disaster on humanitarian and poverty outcomes. The government faces a substantial financing gap to fulfill these reconstruction needs across sectors. This emergency project is critically needed in order to help restore basic productive capacities, rehabilitate public services and build back better to strengthen resilience of affected

⁷ US\$35 million from the Integrated Feeder Road Development Project (P158231), US\$10 million from the Water Services and Institutional Support (WASIS II) Project (P149377) and US\$10 million from the Agriculture and Natural Resources Landscapes Management (SUSTENTA) Project (P149620).



communities. The proposed Cyclone Idai and Kenneth Emergency Recovery and Resilience Project is designed to provide a response across those priority areas. Project interventions were selected based on a prioritization of emergency needs in sectors that were hardest hit and that have so far not been covered by other projects.

Sectoral and Institutional Context

Public buildings and infrastructure

14. **Cyclones Idai and Kenneth had significant impacts on public infrastructure, including public administration, markets and water and sanitation.** Cyclone Idai and Kenneth damaged public buildings where technical and administrative services operate rendering them non-functional. Damages and losses to public buildings add up to US\$16.6 million in Sofala province alone. Other government buildings that were damaged include public markets, which are critical for the local economy. Public buildings are often used as shelters in case of disasters. This was observed during and after cyclone Idai and Kenneth as well. Rapid and resilient recovery of public assets is therefore important not only for the functioning of the community and for the delivery of fundamental public services, but also to mitigate impacts of future disasters. Disruption to water and sanitation services have large human impacts and damages caused by cyclone Idai and Kenneth will have longer-term effects on the levels of poverty in the country. About 190,000 sanitation units were damaged in cyclone Idai and 211,000 people were left with restricted water access. Unless safe water and sanitation options are provided or restored, the lack of access will have negative impacts on health and wellbeing for affected populations.

Housing

15. **An estimated 240,000 houses were damaged or destroyed by Cyclone Idai and an additional 50,000 by Cyclone Kenneth.** It is estimated that about 8,000 families are living in temporary accommodation camps and will need support in reallocating into new resettlements. Additionally, 225,000 households will need support to rebuild their homes. The impacts demonstrate that the majority of houses in Mozambique are built with inadequate materials and not to resilient standards. Indeed, data of the 2017 household census shows that more than the 64 percent of people in the country live in houses with adobe, wooden sticks and bamboo as predominant materials⁸. Most of the cyclone damage to housing was caused by wind. In addition, flooding of rivers and coastal storm surge damaged houses in low-lying flood zones. Even without major disasters, the gap of adequate housing in Mozambique is estimated to be more than 400,000 units per year⁹. The largest needs for recovery and reconstruction are allocated in the housing sector with a total of US\$688 million, of those are estimated that the 97 percent is needed in the short-term. Currently, housing construction is done on an individual and municipal level, and there is no appropriate institutional set-up for the reconstruction of cyclone-affected housing. However, the rapid and resilient reconstruction of housing is of high importance to poverty outcomes, especially for families living below the poverty line in informal housing. In addition, families in temporary accommodation camps or in non-adequate houses are at risk of water borne diseases and epidemics, with long lasting negative effects specially to children and pregnant women.

⁸ Government of Mozambique (2019). IV Recenseamento Geral da População e Habitação 2017. Resultados definitivos Moçambique.

⁹ Government of Mozambique (2019). Post Disaster Needs Assessment.



Private sector

16. **Cyclone Idai alone caused an estimated US\$115 million damage to the private sector, with at least 356 companies facing significant disaster impacts¹⁰.** Private sector recovery is critical to sustain or increase employment in a post-disaster context and ensure livelihoods are restored. Enterprises in areas affected by the cyclones suffered damages to warehouses, offices, manufacturing facilities and equipment. In the province of Sofala, it was found that 90 percent of the warehouses in the industrial park were partially damaged. The most affected sectors overall were industry, agro-business, commerce and transport and logistics. The disaster also caused a sudden inflation on the prices of construction materials (including roofing materials) due to increased demand, scarcity, and rent seeking. In the agriculture sector, firms reported the need to replace stock (cattle) that was decimated by disaster. Inputs for production in other sectors likely face similar constraints. Firms with a government contracts have also expressed concern that there would be delays in payments given fiscal constraints and disaster recovery needs. Liquidity needed to finance emergency investment and working capital can be difficult to obtain by smaller firms, as access to finance is a major constraint in the country. According to the WB Enterprise Survey for more than 50 percent of firms access to finance is a 'major' to 'very severe' obstacle to doing business.

Financial sector response to the cyclones

Banks and microfinance institutes active in areas affected by cyclone Idai acted in response to the disaster. Commercial banks responded to the disaster by extending loan maturities and providing grace periods, but none provided refinancing at a lower interest rate. One bank operating in the area has provided fresh credit lines equivalent to 1 billion meticaís (US\$15.7 million) to 24 clients in the period immediately following the disaster. Some banks have observed an increase in their ratio of non-performing loans and have responded by offering their clients payment moratoriums and term extensions. The microfinance sector responded by extending their portfolio of micro credits to low-income clients affected by the cyclone to facilitate reconstruction and recovery. One microbank identified an existing loan book of 50m meticaís (US\$775k) to 1,200 mostly low-income clients in Beira.

Flood protection

17. **Flooding has been a primary hazard in areas affected by Cyclones Idai and Kenneth, resulting in loss of life, damage to infrastructure, housing and productive sectors.** The city of Beira is particularly exposed to flooding due to its low-lying setting in a delta area. Beira was affected by widespread rainfall-induced flooding in January 2019 and faced both fluvial and coastal flood hazard during Cyclone Idai. Urban flood events are frequently associated with cholera outbreaks; this problem is most chronic and grave in the city of Beira where large populous informal settlements are located in low lying flood prone neighborhoods. The city has a vulnerable coastal protection system due to lack of maintenance and insufficient investment, as well as an inadequate drainage system, which is poorly maintained and in urgent need of expansion due to rapid urbanization.

18. **Strengthening coastal protection and drainage are a priority in Beira in order to strengthen its resilience to future shocks.** Beira is expected to double in size in the next 10-15 years and has been suffering from coastal

¹⁰ Government of Mozambique (2019). Post Disaster Needs Assessment.



erosion since the 1950s. The coastal protection system that was put in place in the 1960 has degraded gradually and is currently not providing enough support to protect the city from storm surge. Cyclone Idai exposed vulnerabilities of the rapidly growing city of Beira and caused damage to the coastal protection system and coastal roads. According to the Beira Municipal Recovery and Resilience Plan, coastal protection and drainage are priorities to the city with estimated investment needs of US\$ 284 million. Expert assessments indicate that damages to both the coastal protection and the city of Beira would have been much higher had Idai struck Beira during spring tide conditions. A significant improvement of the coastal protection scheme is needed to provide sufficient protection for Beira against coastal hazards in the future.

19. **Cyclone Idai highlighted the severe drainage problems of the city of Beira.** Vast areas of Beira suffered from delayed runoff of storm water, resulting in urban flooding and waterlogging. Satellite information combined with population data shows that 36.2 percent of the city was flooded due to Cyclone Idai, affecting 217,000 people many of whom had been affected by the January 2019 flooding. Cyclone Idai also showed that investing in drainage pays off. The areas that had benefited from drainage rehabilitation investments under the Cities and Climate Change Project¹¹ suffered little to no flood damage compared to areas not serviced by rehabilitated drainage systems.

Institutional Framework

20. **Reconstruction Office.** On April 11, 2019 the Council of Ministers established a dedicated Post-Cyclone Idai Reconstruction Office (*Gabinete de Reconstrução Pós Ciclone Idai*) under the Ministry of Public Works, Housing and Water Resources to coordinate the reconstruction in areas affected by Cyclones Idai and Kenneth. It coordinated the PDNA and organization of the Beira Donors' Conference on May 31st and June 1st, 2019, as well as development of a four-year recovery and reconstruction strategy, including monitoring of program implementation.

21. **The Ministry of Public Works, Housing and Water Resources (MOPHRH) is responsible for the strategic management of water resources in Mozambique.** A specialized central agency, the Administration for Water and Sanitation Infrastructure (AIAS), was created in 2009 under the authority of MOPHRH to manage urban water and sanitation investments, including drainage. This agency implemented recent investments in the drainage system financed by the World Bank.

22. **Emergency Management and Risk Reduction.** Recognizing the magnitude of climate and disaster risks, the GoM has made disaster prevention and mitigation a policy priority and achieved considerable improvements in its DRM policy and institutional framework, ranging from its first Disaster Management Policy in 1999 to a more comprehensive Disaster Management Law in 2014 complemented by regulations in 2016. The Law also recognizes the need for dedicated financial protection instruments. The GoM's Five-Year Development Program 2015-2019 (*Programa Quinquenal do Governo 2015-2019*) recognizes that climate resilience not only mitigates the negative impact of disasters but is also inextricably linked to poverty reduction of populations who are most exposed to such disasters.

¹¹ Project Appraisal Document found [here](#)



23. **In an effort to support the GoM's efforts in DRM and climate change, the following Bank initiatives are also being implemented:** (a) Mozambique Disaster Risk Management and Resilience Program (P166437) that strengthens the GoM's program to finance and prepare for disaster response, (b) the Climate Change Technical Assistance Project (P131195) that strengthens the institutional and technical capacity of the GoM to mainstream climate resilience into key economic sectors; (b) the Maputo Peri-urban Sanitation Project (P132551) that pilots improvements of the sanitation conditions and practices; (c) the Cities and Climate Change Project (P123201) that strengthens municipal capacity for sustainable, climate resilient urban infrastructure and environmental management; (d) the Transforming Hydro- Meteorological Services Project (P131049), which reinforces hydrological and meteorological information services to deliver reliable and timely climate information to local communities; and (e) the Enhancing Spatial Data for Flood Risk Management Project (P149629) that supports flood risk assessment in the Limpopo and Zambezi basins.

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

The Project Development Objective is to support the recovery of public and private infrastructure and livelihoods while strengthening climate resilience in the areas most affected by Cyclones Idai and Kenneth.

Key Results

Rapid and inclusive recovery of cyclone-affected areas
Strengthening the climate resilience of affected areas

D. Project Description

24. **The proposed project addresses short- and medium-term reconstruction needs while strengthening long-term resilience of the affected areas.** The proposed reconstruction interventions follow the priorities as identified in the PDNA, focusing on: (1) reconstruction of resilient housing and selected public infrastructure assets and recovery of the private sector; and (2) investments in the recovery and strengthening of climate resilience infrastructure.

25. **The project will address recovery needs in the coastal provinces most affected by Cyclone Idai and Kenneth, and will support climate resilience investments in the city of Beira.** The coastal provinces of Sofala and Cabo Delgado have borne the brunt of Cyclone Idai and Kenneth; thus, the project will prioritize recovery of housing and public and climate resilience infrastructure across these two provinces. Being one of the most important and fastest growing centers of economic activity in Mozambique, the city of Beira in the province of Sofala accounts for a large share of the economic impact of Cyclone Idai.

Component 1 – Recovery and reconstruction of cyclone-affected areas (US\$80 million IDA)

26. The activities to be financed under this component include (1) the repair and reconstruction of housing for selected vulnerable communities; (2) the repair and reconstruction of key public infrastructure; (3) the recovery of the private sector and economic activities.



Sub-component 1.1 – Housing (US\$42 million IDA)

27. The sub-component will finance the partial or complete reconstruction of approximately 15,000 housing units for an estimated 75,000 cyclone-affected beneficiaries through a community-based and owner-driven resilient reconstruction approach, as well as relevant technical assistance activities. The housing reconstruction activities will prioritize affected areas in Sofala and Cabo Delgado.

28. Technical assistance activities financed under this sub-component are designed to ensure that the housing reconstruction process follows a transparent, fair and community-based approach. Therefore, capacity building and training exercises will happen both at the level of the Reconstruction Office as well as at a community level. An important component of the technical assistance will be the establishment of a well-managed integrated data system that will keep track of reconstruction needs and progress, which will inform the targeting and result tracking of the reconstruction process. The development of the system will be informed by similar data tracking systems developed in other post-disaster housing reconstruction programs, including in the Nepal Earthquake Housing Reconstruction Project (P155969).

29. The need for housing reconstruction support in affected areas far exceeds the resources available. Targeting will therefore be critical to make sure impact is optimized. The objective is to target vulnerable populations, such as female-headed households. The targeting of activities under this sub-component will be based on a housing reconstruction strategy that will be completed by the Reconstruction Office in the first months after project effectiveness which will include: (1) a *housing assessment* to identify the typologies of affected houses and appropriate reconstruction options; (2) a *social assessment* of affected households that will cover the households' economic situation, composition, gender roles and reconstruction investments to date; and (3) a *value chain analysis* to assess the market conditions for the housing reconstruction and flag any possible labor or material limitations. The targeting and implementation of the housing reconstruction activities under this sub-component will also inform operational modalities for the Government's wider reconstruction program that will address the needs identified in the PDNA.

30. The implementation arrangements, including financing flows, will be based on the specifics of the reconstruction strategy. Likely, the construction will be implemented through a hybrid approach involving community-level construction, technical support from NGOs and UN organizations and a system of grants for home-owners through the Reconstruction Office.

31. The system that will be set up under this component will allow for the further upscaling of housing reconstruction beyond the funding available in this project. In this regard, the World Bank will work with partners and government on a potential upscaling of housing reconstruction following a harmonized approach.

Sub-component 1.2 – Public Infrastructure (US\$16 million IDA)

32. This sub-component will finance the recovery and reconstruction of key public infrastructure damaged by Cyclones Idai and Kenneth, and the construction of new public resilience infrastructure. Specific activities financed may include the repair and reconstruction of markets, government buildings, public water and



sanitation units; and the construction of multi-functional elevated flood evacuation sites and cyclone wind shelters.

33. A designated recovery strategy including a list of public infrastructure priorities will be developed in the first months after project effectiveness, based on the PDNA and further data collection. The strategy will inform the interventions to be financed under this sub-component.

34. The activities financed under this sub-component will be constructed in climate-resilient and gender-informed fashion, by using resilient design standards, incorporating female-friendly aspects in shelter design and prioritizing public infrastructure that offers services and employment to women, such as markets. A technical support program will be established to build capacity for Building Back Better approaches across government and non-government agencies. To make sure implementation of the project follows a transparent, fair and community-based approach, the sub-component will benefit from technical assistance activities planned under sub-component 1.1.

Sub-component 1.3 - Private Sector Recovery (US\$22 million IDA)

35. This sub-component will have the following four activities: (a) matching grant to support MSME recovery; (b) credit line to enhance access to finance; and (c) technical assistance. This component will target informal, micro and small-sized firms impacted by the disaster. This would complement the US\$[110] million IFC Mozambique and Malawi Emergency Facility (“IMMEF”) under preparation, however the component is not dependent on IFC operation.

(a) Matching Grant to Support the recovery of Micro, Small and Medium Sized Enterprises (MSMEs).

Under this activity, the proposed project will finance activities to support the private sector to recover from natural disaster by supporting the purchase of equipment and materials to support MSMEs to restore operating capacity/equipment as part of their overall recovery effort and provide technical assistance to eligible micro, small and medium sized enterprises. To maximize the impact of the grants, eligibility will be designed in a way that supports vulnerable populations, such as women owned businesses.

(b) Credit Line to Enhance Access to Finance. To facilitate access to liquidity for small to medium enterprises in the aftermath of the disaster, this activity focuses on enabling participating financial institutions to offer beneficial credit options to firms affected by the disaster. The activity allows selected financial institutions to access credit with beneficial interest rates, such as the rate commercial banks pay to access the central bank’s Permanent Deposit Facility (10.25% as of June 24, 2019) or another benchmark. As a result, the financial institutions can then offer cheaper credits to firms. Selected institutions must have a strong track record of working with small and medium enterprises - eligibility criteria outlined in Annex 2¹². The financing would provide temporary liquidity for working capital and

¹² No disbursements will be made under this sub-component until the appropriate due diligence of the participating financial institution has been conducted.



investment financing during the emergency recovery phase (defined as 6-24 months following the disaster).

(c) Technical Assistance on Implementation Design. Technical assistance will be provided to support the effective implementation of the matching grants and credit lines. On the matching grants, technical assistance will focus on participating firms to verify eligibility and provide support to beneficiaries from the point of matching grant application to implementation of their project. On credit lines, the technical assistance will assist participating financial institutions to tailor emergency response and recovery products to the specific needs of eligible firms. The TA will draw from relevant FCI experiences including the Mozambique Integrated Growth Poles Project (P127303) and Madagascar Financial Inclusion Project (P161491).

36. In terms of sequencing, the matching grant could move relatively quickly. The TA to support participating financial institutions would be undertaken in parallel and support the development of a menu of financial services tailored to the needs of firms impacted by the natural disaster. The goal would be to have a credit line supporting private sector recovery within 6 months of initiation.

Component 2 – Building Climate Resilience (US\$63 million IDA plus US\$60 million co-financing from DRIVE Program)

37. The proposed project presents a holistic and strategic approach to reconstruction aimed at reducing the vulnerability of the city of Beira, an important economic hub that suffered large losses due to cyclone Idai, to climate-related hazards. Building on existing Bank engagements in climate change adaptation in Beira through the Cities and Climate Change Project (P123201), this component will strengthen the resilience of the city of Beira to future climate hazards, by (1) repairing and significantly strengthening coastal protection; and (2) expanding the rehabilitated drainage system to reduce flooding in vulnerable parts of the city. As part of these investments in climate resilience, the component also includes building capacity of the city administration in operation and maintenance. The preparation of the resilience investments in Beira included in this component was closely coordinated with the Dutch (RVO) and Germans (KfW).

38. The geographical scope of this component is limited to vulnerable parts of Beira, due to the increasing priority of the city as a regional economic hub and the fact that Beira suffered the major share of the combined economic losses from the two cyclones.

Sub-component 2.1 – Coastal Resilience (US\$30 million IDA, plus US\$30 million co-financing)

39. **Beira's coastline remains vulnerable to storm events and continuous erosion.** The main flood protection system that protects the city from coastal hazards was constructed more than 50 years ago and has deteriorated with limited maintenance since its construction. Cyclone Idai damaged this already weakened coastal protection infrastructure and caused US\$2 millions in damage to coastal infrastructure. However, due to the fact that the landfall occurred at low tide, the city escaped widespread coastal flooding. Cyclone Idai was therefore a strong wake-up call for the repair and rehabilitation of the coastal protection system.



40. **In the aftermath of Cyclone Idai, the Government, with support from the Government of the Netherlands, conducted a comprehensive assessment of the vulnerabilities in the coastal protection system.** The assessment quantified damages, losses and needs and concluded that the coastal protection system urgently needs rehabilitation and strengthening to protect the city from coastal flooding. The total needs for repairs and upgrades to the coastal protection system are estimated at US\$90.9 million, which includes the repair and reconstruction of existing groynes, flood walls and dunes, and the rehabilitation of degraded beaches.

41. **This sub-component will address key gaps in Beira's coastal protection system,** by (1) repairing damage to the coastal protection and coastal road caused by Cyclone Idai; (2) rehabilitating and strengthening the groynes, dunes and flood walls; and (3) conducting strategic sand nourishment to replenish the sand balance across the target area.

42. **The works under this sub-component will be co-financed on a 50/50 basis by the Government of the Netherlands, through the DRIVE program.** The Government of the Netherlands will finance half of the firm contract under this sub-component to a maximum of US\$30 million. The World Bank has already experience working with the DRIVE program in Mozambique. It was agreed with the Netherland that all Bank procedures (procurement, environmental and social) will be applicable. A Letter of Intent has been sent and a separate grant agreement will be signed between the Government of the Netherlands and the GoM. Since both sources of funds will be necessary to achievement of the objectives of sub-component 2.1 and to avoid implementation delays, the signing of the co-financing agreement will be included as a condition of disbursement for the works.

Sub-component 2.2 – Drainage Rehabilitation (US\$30 million IDA, plus US\$30 million co-financing)

43. **This sub-component will repair cyclone-induced damages to the drainage works and implement Phase 2 of the drainage rehabilitation.** Cyclone Idai caused minor damages to the current drainage system that will be repaired under this sub-component. The works completed to date only covered Phase 1 of the drainage rehabilitation needs of Beira. It was recognized in 2015, upon completion of the detailed design of the Phase 1 works, that this investment needed urgent follow-up with the study and implementation of Phase 2. This will focus on Chota and Estoril and deal with the rehabilitation of canals A1 and A3, including an additional retention basin and outlet to the eastern coast. AIAS has already commissioned a study to demonstrate the feasibility of these Phase 2 drainage works, prior to the availability of funding and prior to the passage of Cyclone Idai.

44. **The works under this sub-component will be co-financed on a 50/50 basis by the Government of the Netherlands through the DRIVE program.** The DRIVE Program will finance 50% of the firm contract under this sub-component with a maximum of €30 million (US\$34 million). A Letter of Intent has been sent and a separate Grant Agreement will be signed between the Government of the Netherlands and the GoM.

Component 2.3 – Design, Implementation and Supervision Support (US\$3 million)

45. **This sub-component will finance the feasibility studies and design for the drainage works (sub-component 2.2) and the implementation and technical assistance required for the overall Component 2.** The feasibility studies and design for the coastal protection investments (sub-component 2.1) will be covered by the Government of the Netherlands. The activities under this component will be implemented by AIAS.



46. **Technical assistance will be provided to AIAS to strengthen their capacity on sustainable coastal management and the implementation of coastal resilience interventions.** Since coastal management is a relatively new area of activity in Mozambique, the TA will strengthen AIAS technical capacity in this field. The activity will also review and identify ways to improve existing regulations for sediment management and to introduce concepts such as building with nature (dune management, seagrass and natural habitat management). Regulating sand mining, requiring sand by-pass as part of environmental management of coastal infrastructure, and targeted dump of sediment from dredging to areas needing sediment, are measures that prevent coastal erosion. To promote long-term resilience of the targeted coastal areas, investments in coastal protection need to be accompanied by sound regulation and adequate environmental management procedures.

47. **Technical assistance will be provided to Beira's Autonomous Sanitation Services (SASB) to strengthen their capacity in drainage operation and maintenance.** The project will continue building the O&M capacity of SASB, which was initiated under the Cities and Climate Change project and phase I of the drainage rehabilitation project.

Component 3 – Project Implementation, Monitoring and Evaluation (US\$7 million)

48. **This Component will support the implementation of all project activities, through establishing and strengthening the capacity of GREPOC and AIAS** (responsible for implementing Component 1 and 2, respectively), covering technical, fiduciary, safeguard, project management and citizen engagement capacities.

Component 3.1 – Project Implementation, Monitoring and Evaluation – AIAS (US\$3 million)

49. This sub-component will support the implementation of project activities under the responsibility of AIAS (Component 2), through (a) technical capacity for the implementation of climate resilience interventions; (b) fiduciary (i.e. financial and procurement management); (c) environmental and social safeguards; (d) preparation of project reports; and (e) monitoring and evaluation.

Component 3.2 – Project Implementation, Monitoring and Evaluation – GREPOC (US\$4 million)

50. This sub-component will support the implementation of project activities under the responsibility of GREPOC (Component 1), through (a) technical capacity for the implementation of reconstruction and building-back-better interventions; (b) fiduciary (i.e. financial and procurement management); (c) environmental and social safeguards; (d) preparation of project reports; and (e) monitoring and evaluation.

51. This sub-component will also support tailored training and capacity building activities related to the best practices in post-disaster reconstruction following the Building Back Better approach, in order to strengthen the implementation of all components.

Component 4 – Contingent Emergency Response Component – CERC (US\$0 million)



52. This component will provide immediate response to an Eligible Crisis or Emergency, as needed. This would finance emergency works in the case of another disaster event by including a "zero-dollar" Contingency Emergency Response Component (CERC). This would help recover damage to infrastructure, ensure business continuity, and enable early rehabilitation. In parallel, following an adverse event that causes a major disaster, the GoM may request the Bank to channel resources from this component into an Immediate Response Mechanism (IRM). The IRM would enable the use of up to 5 percent of uncommitted funds from the overall IDA portfolio to respond to emergencies. This IRM has already been established for Mozambique and already activated twice, including in response to Cyclone Idai. Specific details around this component (including activation criteria, eligible expenditures, and specific implementation arrangements as well as required staffing for the Coordinating Authority) are defined in greater detail in the IRM Operations Manual

Legal Operational Policies	
	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Assessment of Environmental and Social Risks and Impacts

E. Implementation

Institutional and Implementation Arrangements

53. The project will be implemented by the MOPHRH through AIAS and by the Post-cyclone Idai Reconstruction Office (GREPOC). The GREPOC was created in the aftermath of cyclone Idai as a response by the government to the need to coordinate the reconstruction process and donor relations. GREPOC will lead the implementation of Component 1 for the recovery and reconstruction of affected areas, including the technical assistance sub-component on "Building Back Better". It will also be the agency responsible for overall project coordination, planning and monitoring. Since the activities under Component 1, plus overall coordination of the post-disaster reconstruction support fall under the mandate of the GREPOC, it is an opportunity to include them in this project to build their capacity as a newly created agency, while drawing from the experience of AIAS. AIAS will be responsible for the implementation of all climate resilience investments (stormwater drainage and coastal protection) under Component 2. AIAS has a strong PIU with proven capacity to manage large contracts (\$50m+). AIAS's comparative advantage is in large infrastructure projects in drainage and coastal protection. Implementation costs for both PIUs, including project coordination, procurement, financial management, environmental and social safeguards, will be financed by Component 3.

54. A new PIU will be established at the GREPOC to manage Component 1, reporting directly to the Executive Director. It will be composed of at least a Project coordinator, a deputy project coordinator, a procurement specialist, an FM specialist, an M&E specialist, an environmental specialist and a social specialist. The PIU will be established at the GREPOC offices in Beira and will have a liaison office located in Maputo, as well as in Pemba



to support the implementation of the recovery and reconstruction activities in Cabo Delgado and Nampula Provinces. An infrastructure specialist and a housing reconstruction specialist will be contracted for both the Beira and Pemba offices.

55. For the private sector interventions (Component 1.3), a financial sector specialist will be recruited by GREPOC to administer the matching grant. He will be responsible for drafting the matching grants manual which is important to strengthen the capacity of the PIU, ensure project ownership, and guarantee that processes are flexible. The manual will detail the process for grant application, evaluation, disbursement, and monitoring. It will also outline the procurement rules for contracting of good and services under matching grants. The manual will be a working document that can be adjusted during project implementation according to circumstances. The matching grant manual will outline the selection mechanism for the matching grant beneficiaries. While there is no clear evidence of the best way to select projects and investments for matching grants, a competitive mechanism with specific time-bound windows for applications is useful for limiting availability and for enabling choice among several competing projects. The due diligence on potential PFIs based on clear eligibility criteria would need to be undertaken, which would likely be a condition for disbursement (not effectiveness).

56. AIAS will maintain the PIU that was established to implement the Cities and Climate Change Project, which closes in December 2019. AIAS has acquired considerable experience with Bank projects; the World Bank has carried out an assessment of the capacity of the existing PIU and concluded that it meets the minimum requirements for implementing the project. The PIU is comprised of at least a Project coordinator, a Deputy Project coordinator, a Procurement specialist, an FM specialist, and an Environmental and Social Specialist. Given the nature of the works and the health and safety risk, AIAS PIU will be reinforced with a social safeguards specialist to be based in Beira.

57. All project implementation arrangements will be detailed in the Project Operations Manual (POM) to be approved before project effectiveness.

CONTACT POINT

World Bank

Michel Matera
Sr Urban Spec.

Brenden Jongman
Disaster Risk Management Specialist

Borrower/Client/Recipient

Ministry of Economy and Finance
Adriano Ubisse



Director of Treasury
adriano.ubisse@mef.gov.mz

Implementing Agencies

Water and Sanitation Infrastructure Administration (AIAS)
Rute Nhamucho
Executive Director
rumamucho@yahoo.com.br

Post-Cyclone Idai Reconstruction Office (GREPOC)
Francisco Pereira
Executive Director
fpereira@tv cabo.co.mz

FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: <http://www.worldbank.org/projects>

APPROVAL

Task Team Leader(s):	Michel Matera Brenden Jongman
----------------------	----------------------------------

Approved By

Environmental and Social Standards Advisor:		
Practice Manager/Manager:		
Country Director:	Raymond Bourdeaux	09-Sep-2019