



# Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 12-Nov-2019 | Report No: PIDA27576



**BASIC INFORMATION**

**A. Basic Project Data**

Country Comoros	Project ID P171361	Project Name Comoros Post-Kenneth Recovery and Resilience Project	Parent Project ID (if any)
Region AFRICA	Estimated Appraisal Date 04-Nov-2019	Estimated Board Date 18-Dec-2019	Practice Area (Lead) Urban, Resilience and Land
Financing Instrument Investment Project Financing	Borrower(s) Ministry of Finance, Budget and Banking Sector.	Implementing Agency Directorate General for Civil Security (DGSC), Ministry of Land-Use and Urban Planning, in charge of Land issues and Land Transport	

Proposed Development Objective(s)

The Project Development Objective is to support recovery and increase disaster and climate resilience of select public and private infrastructure in the areas affected by cyclone Kenneth.

Components

- Component 1: Recovery and Resilience in the Housing Sector
- Component 2: Coastal Resilience and Infrastructure Rehabilitation
- Component 3: Integrated Disaster Risk Management and CERC
- Component 4: Project Management, Risk Management, Monitoring and Evaluation

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**

<b>Total Project Cost</b>	45.00
<b>Total Financing</b>	45.00
<b>of which IBRD/IDA</b>	45.00



<b>Financing Gap</b>	0.00
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**DETAILS**

**World Bank Group Financing**

International Development Association (IDA)	45.00
IDA Credit	22.50
IDA Grant	22.50

Environmental and Social Risk Classification

Substantial

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)

**B. Introduction and Context**

Country Context

1. **The Union of Comoros (UoC) is a small volcanic archipelago in the Indian Ocean off the coasts of Mozambique and Madagascar.** The UoC has about 1,800 square kilometers of land, 340 kilometers of coastline, and a maritime Exclusive Economic Zone (EEZ) 70 times the size of its land area. The UoC is home to one of the most diverse coral reefs in the world. About half of its 800,000 population live on Ngazidja (or Grande Comore), which is the largest island where the capital city Moroni is located. The population is growing rapidly (2.9 percent a year) and is forecasted to reach 1 million by 2028 and more than double by 2050.

2. **The UoC has experienced recurrent political crises and conflict between its islands since its independence in 1975.** Although political instability decreased after the adoption of the Fomboni Agreement in 2001, socio-political tensions remain an issue. A constitutional referendum held on July 30, 2018, introduced changes to the Presidential rotation system between the country’s three main islands, shifting from a federal to a unitary system. Political instability constrained private sector-led-growth and limited fiscal capacity for infrastructure and social sector investment, contributing to low real income per capita growth. The World Bank classifies the UoC as a country affected by fragility, conflict and violence (FCV).

3. **Although economic growth remained steady at 2.8 percent in 2018, the country still faces significant impediments to sustainable economic growth and development.** The UoC gross national income was US\$1,280 per capita in 2017, and the country became a lower middle-income country (LMIC) in July 2019. The UoC achieved a reduction in poverty rates that compares well with those of other LMICs. Nevertheless, the 2018 World Bank Human Capital Index ranks the UoC 123 out of 157 countries. More than 40 percent of the population remains below the national poverty line, and more than 38 percent remains below the international poverty line, a rate



that is below the average for LMICs and Sub-Saharan African countries. The decline in poverty is due largely to an increase in diaspora remittances, as about 40 percent of households in the UoC receive remittances. Households without access to diaspora remittances are on average 11 percent more likely to be poor, which contributes to inequality – the UoC GINI index was .45 as of 2014. Other impediments to sustainable economic growth and development include: low institutional capacity and fiscal constraints, limited physical infrastructure and maintenance, a challenging business environment, geographic remoteness, a small and fragmented domestic market, and high exposure and vulnerability to recurrent natural and climate related disasters.

4. **The UoC is prone to natural disasters and one of the most vulnerable countries to climate change, which adversely affects its development and exacerbates existing social and economic vulnerabilities.** The UoC is exposed to tsunamis, cyclones, floods and droughts, and seismic and volcanic activity. The 2018 World Risk Index ranks the UoC 51 out of 172 countries in terms of risk to natural disasters, and 59 in terms of lack of adaptive capacities. In the last 40 years, the UoC was hit by eighteen adverse natural events that affected close to 500,000 individuals. Average losses due to flooding alone amount to about US\$2.0 million per year. Climatologists forecast an increase in average temperature, a decrease in annual precipitation, an increase in the number of dry years, and rising sea level in the next 30 years. A 20 centimeters rise in sea level by 2050 would displace at least 10 percent of the UoC population. The UoC is especially vulnerable to climate change because of its dependence on agriculture and natural resources – which include vanilla, clove, ylang ylang, and fisheries, a rapid and largely unregulated urban expansion, high poverty and unemployment, and rapid environmental degradation including coastal erosion. The high frequency of natural and climate-related disasters and the country's limited capacity to manage these disasters increase the population and infrastructure's vulnerability to natural and climate related disasters risks.

5. **The Government of the UoC (GoC) is committed to strengthening the country's resilience to natural and climate-related disasters.** The GoC's medium-term development strategy is outlined in the National Development Policy program for 2018-2021 adopted in 2018, which includes sustainable management of natural resources as a key objective. The GoC strengthened its commitment to strengthen the country's resilience to natural and climate-related disasters in the aftermath of tropical cyclone Kenneth and as part of its 2030 Emergency Plan.

6. **The UoC was struck by Cyclone Kenneth on April 24<sup>th</sup>, 2019, which is one of the most devastating tropical cyclones in the country's history.** Kenneth was a Category 3 cyclone with strong winds, torrential rains and high waves that destroyed houses, crops, businesses and core infrastructure. On April 24, 2019, the Government declared a Red alert in the North of Grande Comore and an Orange alert in the rest of the archipelago. These alerts activated a number of emergency procedures and measures, including a coordinated effort by the Centre for Relief and Civil Protection Operations (COSEP) and the municipalities to evacuate individuals anticipated to be on the cyclone's trajectory and a ban on trips out at sea. These initial emergency procedures and measures were effective in lowering the adverse impact of the cyclone on the population. The community associations playing an important role in the community's life and management in normal times provided community areas as temporary shelters and schools. Women groups came together to organize cleaning campaigns. Within the two days that followed the cyclone, the GoC, with the support from the UN and leadership from the General Directorate of Civil Security (DGSC) conducted a fast-track evaluation to identify the most pressing humanitarian aid needs and the sectors requiring a more in-depth assessment. The GoC's response facilitated the relatively fast distribution of kits for hygiene and sanitation, and education to some affected households. However, the post-cyclone recovery and reconstruction resources needed by the country surpass the GoC's financial, human, technical and material capacity.



7. **The GoC declared a nationwide state of emergency on May 9, 2019, and conducted an Impact evaluation with development of a Recovery and Reconstruction plan in June 2019** (henceforth the “Impact evaluation”). The GoC established an Inter-ministerial attached to the Ministry of Economy and Investment Planning committee to manage the post-disaster Kenneth situation. This Committee coordinated the Impact evaluation process with support from the Cabinet of the President in charge of Defense and the DGSC which falls under the Ministry of Interior, Decentralization and Territorial Administration in charge of relations with Institutions (MOIDTA). To conduct the Impact evaluation, the GoC also requested support from the UN – with the United Nations Development Programme (UNDP) as the lead agency, the World Bank and the International Federation of the Red Cross (IFRC). The Impact evaluation focused on the nine priority sectors identified in the fast-track evaluation.
8. **More than 40 percent of the population, or 345,131 individuals across the three islands, were affected by cyclone Kenneth.** The affected people include 185,879 that were considered in need of humanitarian aid, 153 people injured, 11,969 displaced, and 6 reported fatalities. The impact of the cyclone was concentrated in Grande Comore island, where most prefectures were classified as priority zones of intervention by the Impact evaluation with damages and needs across multiple sectors. The Southern island of Mohéli and the Southeastern island of Anjouan were also impacted with one prefecture classified as a priority zone in Mohéli.
9. **Cyclone Kenneth caused US\$185.4 million in damages and losses and disrupted key public services.** The Impact evaluation identified that damages and losses are concentrated in the housing sector (US\$67.5 million), agriculture, livestock and fisheries sector (US\$53.0 million), and infrastructure and transport sector (US\$21.1 million). This estimate reflects the damages to about 11,900 houses, 60 percent of subsistence crops (mainly banana, manioc) and 30 percent of cash crops (vanilla, ylang ylang, clove), 13,500 livestock head loss (mainly poultry), and significant disruption of schools and health facilities. In addition, the cyclone damaged a significant share of the country’s core infrastructure, including roads, ports and airports, dykes, and water and electricity networks. Moreover, the coastline was flooded because of extraordinary storm surge and lack of adequate coastal defense infrastructure.
10. **Cyclone Kenneth is affecting people’s lives and livelihoods and is likely to contribute to widening inequality in the country** – a fragile small island economy with limited response capacity from the formal institutions and governance structures. Preliminary GDP growth estimates for 2019 were revised down from 3.1 to 1.3 percent to account for the effect of the cyclone. The slower economy growth could widen inequality by amplifying increasing differences in education and employment, as well as socio-economic conditions in local communities and access to diaspora remittances. Individuals whose consumption level is just above the poverty line are vulnerable to falling back into poverty. Consumption levels among the poorest are likely to decrease which would contribute to rising poverty level. Of the 11,900 houses that were damaged by the cyclone, 4,854 houses were destroyed. In addition to losing their homes and living in fear of the next cyclone season, those households that temporarily relocated with less affected family members and neighbors tend to lose access to their regular sources of revenue and schools and impose additional expenses on their host families.
11. **The GoC responded to the humanitarian emergency with the national budget and donor support, but still faced a US\$227.2 million financing gap** to meet recovery and reconstruction needs estimated at US\$277.5 million for the 9 priority sectors. In addition to the national budget available, the GoC raised US\$650,000 in emergency funding by retaining a share of its civil servant’s monthly salary to finance first aid for the cyclone’s



victims. First, the Government activated procedures and measures to inter alia evacuate people, clear access roads, issue a ban on trips out at sea, as soon as the cyclone's category and trajectory were confirmed. After the cyclone hit, the Government continued providing first aid and response, for instance by ensuring the continuity of services in hospitals which lost power, access roads, safety vis-à-vis hanging trees or electric poles, etc. It also undertook urgent repair including on airport radiocommunication systems to reopen services. Complementarily, it got support from the UN Central Emergency Response Fund (CERF) to provide life-saving food, shelter, health water and sanitation assistance to affected people, as well as from the United Nations International Children's Emergency Fund (UNICEF), the World Food Program (WFP) and NGOs such as the IFRC. However, the cyclone highlighted the lack of capacity of the GoC to respond to the disaster and provide adequate assistance to the most affected and most vulnerable households, in terms of financial and technical resources and structured approach.

12. **The Comoros Post-Kenneth Recovery and Resilience Project is part of the overall World Bank response to address impacts from Kenneth.** Given the extraordinary level of impact, the World Bank's response combines the strategic use of IDA resources of US\$73 million and proposing: (a) using up to US\$18 million of Comoros' uncommitted IDA18 national allocation through the emergency component of the Social Safety Net Project (P150754) to channel additional financing to support recovery grants and livelihood support services for poor households in disaster affected communities, as well as the rehabilitation of selected small community-based infrastructure; (b) using up to US\$10 million from active operations of the portfolio, especially the two investment projects supporting the agriculture and fishery sectors (the Integrated Development and Competitiveness Project (PIDC, P164584) and the South West Indian Ocean Fisheries Project (SWIOFish 1, P132123)); and (c) a Crisis Response Window (CRW) allocation of US\$45 million to support this proposed project.

13. **The proposed Project complements ongoing Government operations and programs, focusing on the most heavily impacted sectors where there is no or limited donor support and where the World Bank has added value.** The proposed project and selection of sectors and activities build on (a) the results from the Impact Evaluation, (b) the analytical work supported by the Bank particularly on agriculture and transport connectivity, (c) the ongoing Government operations including World Bank-financed ones, and (d) active coordination with development partners. The multi-sectoral recovery project focuses on addressing recovery and reconstruction needs in the housing and infrastructure sectors which are the first and third most impacted sectors. The design process was done in coordination with different sectors (Urban, Transport, Housing, Social Protection, Health, Agriculture, Finance & Competitiveness and Innovation, Fishery, Energy) – and the Project includes a transversal DRM component with a cross-cutting agenda to support climate change adaptation. The proposed project complements the overall World Bank lending and technical assistance (TA) program in the UoC.

#### Sectoral and Institutional Context

##### Housing

14. **The housing sector in the UoC, in particular on the coastline, is highly exposed to natural and climate related disaster risks.** It is estimated that the residential sector alone absorbs 80 percent of the combined losses from earthquakes, floods, and tropical cyclones. The high cost of construction materials and the low quality of construction techniques are a serious threat to resilient housing whereby the construction of a house in the UoC can take many years to complete. Typically, housing construction is done by local masons (*fundi*) with help from the community in most cases. In the absence of urban planning and management tools and the challenges municipalities are facing to fulfil their urban management functions, more and more households have settled in informal settlements and in high-risk areas.



15. **The UoC has a fragile and challenging housing sector compounded by a nascent and weak institutional framework.** There is no housing policy and no land management policy in the UoC. A National Housing Agency, attached to the line Ministry of Land-Use and Urban Planning, in charge of Land issues and Land Transport (MLUUP) was established in August 2009, with the overall objective of improving the quality and affordability of housing. In recent years, recognizing bottlenecks and weaknesses in the housing and land management system, the Government started revising the agency's mandate and operating model and commissioned in 2018 a study supporting the development of a National Land Strategy. The aim was to foster policies on land management and improve associated governance. One of the key recommendations of the study was to carry out a full inventory and mapping of public land in the country. To that end, the Government created a National Committee, which however is not yet effective. The UoC has a complex land tenure system where customary, Islamic, and civil law, inspired by modern French law, coexist, but with the first two coming into play most prominently. In addition, in rural areas, most housing construction belongs to the land owners, whereas in urban areas, a significant share of households rent a piece of land, lacking basic services, to build what then becomes their own house. Land ownership can be at the state, community, religious, family and individual levels. These five modes tend to overlap; thus, a large part of public lands or large private estates are considered by certain villages to be part of customary use or occupied by individuals according to the principle of "vivification" (de-facto acquisition). Finally, there are various rights governing the transfer of land ownership most of which are governed (explicitly or implicitly) by religious or customary laws, practices and codes: e.g., inheritance, sale, donation, or de-facto acquisition.

16. **In terms of land-use planning and management,** the country relies on the two main laws: the Decentralization Law promulgated in 2011 and the Urban Planning and Construction Code promulgated in 2012. Nevertheless, the accompanying measures were not put in place to support local authorities to play their roles, and practices remain largely informal. Furthermore, key priority planning instruments such as Master Plans for the development of each island or Urban Development Plans (for each commune) do not exist or are unavailable. Urban management tools are outdated or non-existent; the legal or formal framework governing municipal own revenues is incomplete. The roles and responsibilities of the various stakeholders in the construction of public buildings (schools, agricultural / fishing infrastructure, etc.) are unclear and coordination / support to other sectors (education, agriculture, etc.) and regional directorates and municipalities is weak or missing. Finally, there is no housing finance mechanism despite the existence of four commercial banks, three micro-credit institutions and one postal bank that could potentially be used to target the low-income and vulnerable segments of the population.

17. **Cyclone Kenneth in April 2019 damaged a total of 11,867 houses** including 4,854 houses made of sheet-metal and/or straw that were destroyed and 7,013 concrete houses that were partially damaged. The impacts demonstrated that the housing sector is highly vulnerable to natural hazards, especially cyclones and floods. Vulnerability can be explained by (i) the limitations or lack of territorial/urban management and planning tools, (ii) a major number of houses made of precarious materials, and (iii) the absence of resources and mechanisms to enforce the construction-related codes. It is estimated that 50 percent of the population live in precarious houses which correlates with the poverty rate of the country. The cyclone-induced damages were caused by strong winds and flooding, to houses built with little or no safety or quality standards for construction for most. According to the post-Kenneth Impact evaluation, the share of recovery and reconstruction needs is the largest in the housing sector, amounting a total of US\$87.6 million.

18. **Without a robust institutional, regulatory and governance framework for the housing sector, it was challenging for the Government to develop a housing reconstruction strategy right away and provide immediate assistance to the families who lost their homes.** Very quickly, self-reconstruction initiatives started. Most affected households were observing Ramadan when the cyclone hit, and their priority, was to rebuild as fast as possible, regardless of cost or quality.



This was often done with second-hand material and using the same or worse building techniques, and mobilizing resources from their own savings or from the diaspora. A remarkable display of solidarity was partially a reflection of a low level of expectations for assistance from the system. It has its limitations and risks, highlighting (i) the priority need to support households who may have been left aside, living below the poverty line and/or not benefitting from any external support, (ii) the potential long-term impacts on households even if they received some help from the communities, and (iii) the need for resilient reconstruction of housing. In addition, since the social system is matriarchal (the man joins his wife's home after marriage), most of the destroyed houses belong to women, even as women may have fewer rights given the patchwork of land ownership laws under the religious, civil and customary codes.

### Critical Public Infrastructure

19. **“Infrastructure” in the UoC and according to the division of responsibilities of line ministries, refers to critical public infrastructure associated with transport and public works.** MLUUP is responsible for the construction and quality of transport infrastructure and more broadly of public works. These include public buildings, dykes and coastal protection infrastructure, in general. It is also responsible for developing and ensuring application of construction codes and norms.

20. **Cyclone Kenneth exposed the vulnerabilities of critical public infrastructure, especially that located on the coastline and exposed to sea-level rise and coastal erosion.** The infrastructure sector – one of the most vulnerable sectors in the country – was the third most-affected. Most assets and, in particular, national roads are concentrated along the coasts and are continually eroded and subject to storm surges and marine intrusion. Additionally, insufficient drainage of road surfaces and poor overall maintenance cause accelerated degradation. The risks of climate change were not always evaluated and updated to be integrated in the selection of construction materials and techniques, design and geographic location of the infrastructure in the GoC’s development programs, including for dykes. Damages and losses were estimated at US\$21.1 million and recovery and reconstruction needs at US\$34.1 million. Cyclone Kenneth raised awareness and is introducing a climate-resilient approach (which would most likely increase the reconstruction needs). Restoring and strengthening these critical infrastructures is key because of (i) the potential destruction and irreversible loss of some stretches of the coastline, which is an imminent threat that the 3 islands are facing, (ii) the UoC economic activity and population is concentrated along the coast, and (iii) the UoC economy is dependent on transport connectivity. In addition, the analytical work conducted as part of the preparation of the PIDC project highlights the need to complement PIDC localized investments on the regional and rural road network with major rehabilitation works of the primary road network to ensure the flow of agriculture produces – which is the source of employment for 38 percent of total population and represents 36 percent of GDP.

### Coastal Protection Systems

21. **The densely populated coastlines of the UoC including physical assets are threatened by storm surge and coastal erosion and the general threat of land loss due to long-term coastline retreat associated with sea level rise.** Climate change influences the return period of high swell events which is reducing and becoming more frequent, and also induces a sea level rise. As a result, coastal erosion — already an ongoing phenomenon in the UoC — is likely to increase in the coming years. In addition, the activities of coastal communities are increasing the vulnerability of the seashore to coastal erosion and its deterioration, for instance, the extraction and use of sea sand especially in Anjouan and Mohéli.

22. **Cyclone Kenneth destroyed dykes and coastal protection systems across the three islands.** The cyclone eroded and washed away various stretches of the coastline, destroying roads and dykes and flooding the inhabitants and community buildings (e.g., hospitals, schools) of those affected areas. These include Djoezi in Mohéli, Foubouni and Bandamaji in Grande Comore, and Paje in Anjouan. In some areas, the flooding caused the disruption of clean water



supply because of the contamination of the aquifers, the contamination of the rainwater tanks, and/or the damage to the pumping systems. In Anjouan, there were major traffic suspension for about a week because of the destruction of the Chiclouni's retaining wall along the Mutsamudu-Sima road (high traffic road between the two largest cities in Anjouan) over a 10 meter section. While the retaining walls and dykes started deteriorating over the last years, mainly due to storm surge as well as inadequate construction and maintenance, they were not able to withstand the intensity of Cyclone Kenneth which directly aggravated the conditions of the infrastructure. In some areas, the cyclone caused full deterioration of the infrastructure and the environment – endangering some stretches of the coastline and severely affecting in the long term, the population, economy and environment of the UoC.

**23. Rebuilding and strengthening coastal defense systems is key for the archipelago of the UoC in order to strengthen its resilience to future similar events and against continuous erosion and sea level rise.** Cyclone Kenneth raised awareness and is introducing a climate resilient approach relying on strong analytics and looking at the issue in a more systemic and multi-dimension way to provide sustainable solutions. It is fundamental for the Government to adopt this approach in any infrastructure project on or near the coastline and prevent poor construction practices and material.

### Transport Infrastructure

**24. Transport connectivity and infrastructure is critical for the UoC's social and economic growth and the main challenges are the provision of multi modal transport services and need for maintenance.** The UoC relies on a road network of 815 km including 404 km of national roads, 296 km of regional roads, 61 km of rural roads (unclassified) and 54 km of urban roads. It has three airports (one on each island), three ports (one on each island), several beaches that serve as access points for small boats. The transport responsibilities are split between MLUUP for the design and construction of the infrastructure, and the Ministry of Maritime and Air Transport (MMAT) for port and airport regulations and operations (land transportation regulations and operations responsibilities remain with MLUUP). The World Bank recently completed a "Spatial analysis of transport connectivity and economic growth potential in the Comoros" (June 2019) in collaboration with MLUUP and MMAT and concluded it was critical for the Government to integrate the different modes of transport into a unified system to increase economic efficiency and support the poo.

**25. Cyclone Kenneth in April 2019 affected all three transport subsectors, impeding commuting, freight movement and economic recovery.** The cyclone affected about 62km of the primary road network, 16km of regional roads and 12 km of rural roads, primarily in Grande Comore and Anjouan. On the coastline, parts of the roads network remain hardly accessible. Port facilities were affected in all three islands. Mohéli's "maritime access" was heavily damaged whereby the swell destroyed the concrete-block arrangement (weighing 2.5 tons each) protecting the wharf. In Moroni in Grande Comore, the concrete anchor blocks for oil tankers were dismantled and pilot boats destroyed. In Anjouan, the oil wharf of the National Oil Company was also severely damaged. Airport infrastructure and equipment were damaged due to strong winds and/or flooding, leading to the disruption of the airport communication systems and the suspension of the air traffic in Grande Comore for a few days switching to alternative, less sophisticated systems. In Anjouan the baggage control system was damaged. Recovery and reconstruction needs for the rehabilitation of transport infrastructure were estimated at US\$29 million.

**26. The road network on some key sections has been heavily disrupted by cyclone Kenneth, if not destroyed, isolating affected people from their sources of revenue and from public services such as health.** Some of the priority roads of the primary network of the National Master Plan for Road Transportation (2015-2025) suffered severe deterioration since Kenneth and now require full rehabilitation. The Government has not secured any financing for these, nor for the sections that were already under rehabilitation prior to cyclone Kenneth which now needs a top up to strengthen the design and resilience to extreme climate events. For the latter, the Government is in discussion with the



donors involved to try to secure said top up. For the former, they are short of financing for: (i) Mtsangadjou-Ouroveni in Grand Comore (approximately 26km with the Mtsangadjou-Mohoro section in critical conditions), and (ii) Mremani-Domoni in Anjouan (approximately 13km).

### Emergency Management and Disaster Risk Management

27. **Despite progress over the last ten years in strengthening the national DRM system, there are still some institutional capacity challenges that translate into a risk management approach that is more focused on emergency management rather than on an integrated risk management in the territorial and sectoral development.** DRM in the UoC is currently institutionalized under the National Platform for Disaster Risk Reduction (NPDRR) that was created in 2010. The Directorate General for Civil Security (DGSC) under MOIDTA is recognized as the main governmental body in charge of disaster management. Its operational arm is the Centre for Relief and Civil Protection Operations (COSEP) which is instrumental in the coordination and management of the emergency response down to the local level. The Technical Directorate of Meteorology (TDM) provides climatic meteorological data and the Karthala Volcanological Observatory (OVK) is responsible for monitoring volcanic activity. However, due to financial and operational capacity constraints, these institutions including the policy framework under the National Strategy for Disaster Risk Reduction (NSDRR, developed and adopted in 2015) are not fully functional or operational.

28. **DRM financing mechanisms are not providing adequate support in due time.** The annual budget allocated to DGSC is limited and cannot cover emergency response expenses across the three islands (let alone risk reduction and preparedness activities). Often, disaster response is financed using national budget available at the time of the disaster – with no pre-planning, and thus limited and to the detriment of other needs, or special budget lines or ex-post financing options. Furthermore, the disbursement procedures are found to be too rigid and not adapted to manage emergency situations, from the perspective of the authorities responsible for emergency interventions.

29. **Cyclone Kenneth in April 2019 demonstrated the strengths and weaknesses of the DRM system and the need for a comprehensive and integrated management of natural disaster and climate related risks.** The Government's actions in view of the Category 3 cyclone forecasts and associated risks were effective and key to limiting the human impacts. Information was widely circulated, and evacuation was organized in all three islands. In the aftermath, the network of Government officials and volunteers was active and supported an initial rapid impact assessment. However, these critical actions were insufficient as a basis for longer-term recovery planning. For example, the data remains limited, processes and structures described in the National multi-risk Contingency Plan were not fully followed. The Government did not use the NPDRR but rather established an Interministerial committee for disaster management associated with cyclone Kenneth. With Comoros' level of exposure and the increase of the frequency and intensity of natural disasters, the effects of the Cyclone made it clear that the country needs to address DRM in a holistic manner by establishing adequate institutional framework for DRM, proactively managing and reducing existing disaster risks as well as preventing the creation of new ones through disaster risk-informed planning and investments. The GoC is committed to improving its capacity for disaster preparedness, response and recovery.

### Institutional Framework

30. **MLUUP is responsible for the housing sector, land use and urban planning, and land management, as well as land transport and flood protection infrastructure.** The Ministry has the mandate over Housing and Infrastructure sectors which are the most and third most affected sectors according to the post-Kenneth Impact Evaluation.



31. **DGSC under MOIDTA is the key authority responsible for DRM.** DGSC and its operational arm COSEP have presence on the ground and the capacity to coordinate and mainstream DRM in the sectors. They have the most sophisticated and operational data analysis and GIS center dedicated to risk management and hazard mapping in the country, housed in the Information Analysis and Processing Center (CATI).

### C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

32. The Project Development Objective is to support recovery and increase disaster and climate resilience of select public and private infrastructure in the areas affected by cyclone Kenneth.

#### Key Results

33. The proposed key results indicators that will be used to measure the achievement of the PDO are:
- Number of people benefitting from houses rebuilt with resilient standards (of which women are heads of household)
  - Number of people benefitting from housing reconstruction assistance activities and neighborhood improvements (of which percentage of women)
  - Number of people protected with resilient coastal defense system (of which percentage of women)
  - Number of people benefitting from primary/main road rehabilitation works (of which percentage of women)

### D. Project Description

34. **The proposed Project addresses part of the reconstruction needs in the housing and infrastructure sector with the aim to strengthen long term resilience of the affected areas. In addition, the project will strengthen DRM capacities.** The proposed interventions support the priority sectors identified in the post-Kenneth Impact Evaluation that received limited pledges or that no other ongoing development programs can immediately address, and where the World Bank has added-value. It would particularly support: (1) recovery and resilience in the housing sector, (2) coastal resilience and infrastructure rehabilitation, and (3) integrated DRM. The project will support interventions in areas affected by Cyclone Kenneth across the three islands.

#### Component 1: Recovery and resilience in the housing sector

35. **This component aims to support the development and implementation of a national housing reconstruction program for the most vulnerable cyclone affected households by financing the reconstruction of 1,000 houses across the three islands.** This includes: a transparent beneficiary selection and prioritization process; large training and dissemination programs promoting safe building standards and practices including resilient habitat construction techniques across the three islands, development of resilient housing typology designs, supply of construction materials, TA in construction, supervision, quality control ensured through an inspection/certification process at each stage, securing permits and land titles, and incentives for contributions from households (e.g. unskilled labor). These activities require identifying short-term solutions such as development of technical guidelines for resilient housing construction and creation of Habitat Committees who will play a critical role in land title certification. In parallel, the component will also support institutional strengthening (e.g. preparation of urban development and habitat policies, legislation and regulations) to develop longer term resilience in the housing sector. Under this programmatic approach, the Government would be able to continue implementing the housing reconstruction program for more vulnerable households affected



by cyclone Kenneth as additional sources of financing are secured (beyond WB project funds).

36. **The construction would be implemented through a hybrid approach involving community-based construction as well as technical support from a Delegated Project Management entity or “Maîtrise D’Ouvrage Délégée” (MOD or DPM),** NGOs, UN agencies, and/or consultants. The MOD would be in charge of the coordination and implementation of reconstruction subprojects and associated contract supervision and management, communication and outreach, quality control including compliance with environmental and social (E&S) management framework, support to beneficiaries and community planning, Housing assistance packages delivery to beneficiaries.

37. **This component will also provide support for the rehabilitation or construction of community infrastructure** within the selected communes supporting neighborhood improvements including inter alia small roads/walkways and associated drainage, public spaces (e.g. parks), small recreational infrastructure (e.g. sport), and solar panels. They will be selected based on the community development planning work supported by the MOD.

38. **To ensure beneficiary ownership in the reconstruction process,** beneficiaries will provide in-kind contributions either in cash or labor or materials, post-construction maintenance, etc. (to be defined). Where a vulnerable household may not have financial means nor the physical capacity for manual work, the Housing Committee would work with the community to support these members. Where non-beneficiary households have the resources to build their own core safe house, and where beneficiary households have the resources to build beyond the core safe house during project implementation, they could have access to TA to do so using resilient construction techniques.

39. **The approach for the selection of beneficiaries will be done in coordination with** the Social Safety Net Project (P150754) additional financing project which has a database of socioeconomic information on households.

## **Component 2: Coastal resilience and infrastructure rehabilitation**

40. **This subcomponent will finance resilient coastal defense works in areas affected by the cyclone.** Various stretches of the coastline were eroded and washed away by the cyclone, putting at risk the local residents, their houses, and critical public infrastructure including hospitals and national roads. These include for instance Foubouni in Grande Comore; Djoezi, Fomboni and Nioumachoua in Mohéli; and Pajé in Anjouan. These sites are highly populated, economically active and located along national roads which in some cases such as in Anjouan, are built against the mountains, leaving no room to be shifted inland. The objective is to identify the most affected stretches of the coastline that are subject to potential irreversible loss of land and where there are engineering solutions that can protect efficiently and in the long term the population and infrastructure. The project will finance: (a) a comprehensive detailed diagnostic study to better understand the flood risks and erosion phenomenon on the three islands, assess the feasibility and cost for undertaking coastal defense works, propose resilient and efficient solutions including nature-based solutions (more adapted to Moheli most likely), and provide cost estimates. In order to prioritize the investment needs on each island, and because the project cannot cover them all, the diagnostic will provide decision-making tools combining multi-criteria and cost-benefit analyses for MATU to be able to select the investments to be financed under the project. Preliminary estimates indicate that the project could finance coastal protection works for up to 2.5-3km total of linear of coastline (about 1km in Grande Comore around Foubouni, about 1km in Anjouan, and about 0.5km in Mohéli) and about 25,800 direct beneficiaries; (b) detailed design studies for the selected 2.5-3km; (c) works and associated supervision services. The works could include a mix of infrastructure combining rehabilitation or construction of retaining structures, barriers, drainage systems, breakwaters, hydraulic structures such as groins, etc. and other nature-based techniques such as beach reprofiling.



41. **This sub-component will also support the rehabilitation of selected sections of the primary road between Mtsangadjou and Ouroveni going through Foubouni in Grande Comore.** This 26km road, stretching across the two national roads RN2 and RN3, was damaged by the cyclone with the most severe impact and deteriorated conditions on the RN2 section between Mtsangadjou and Mohoro (about 13km). The project will finance the rehabilitation works on this RN2 section, but it will provide technical studies for the 26km road with proposals to prioritize and do rehabilitation works on the most deteriorated sections between Mohoro and Ouroveni within the budget available. Preliminary estimates indicate that about 14km total of road could be rehabilitated, benefiting over 6,800 residents. All road works will be designed and done in a climate resilient manner to take the increasing frequency and severity of cyclones and rainfall conditions into account. Interventions will include, inter alia, resilient rehabilitation or reconstruction of hydraulic structures, rehabilitation of pavement, drainage system, and road safety measures.

42. **This component will also provide technical assistance** aimed at strengthening resilience in planning and building of infrastructure, including for integrated coastal management, capacity building activities, awareness raising and educational campaigns to promote good practices contribution to making coastlines more resilient to disasters and climate change, road safety.

### **Component 3: Integrated DRM and CERC**

43. **This component aims to support the Government's response to the cyclone,** financing expenditures incurred as preparation and response to the cyclone. These could be supported by retroactive financing.

44. **This component also aims at strengthening the capacity of the Government to manage disasters** through improving governance in disaster risk reduction, improving emergency preparedness capacity, improving understanding of hazards and risks.

45. **Finally, it includes a contingent emergency response subcomponent as well.** The CERC is a zero-dollar subcomponent that can provide immediate response to an eligible crisis or emergency. It remains dormant until formal activation. Once activated, this component will allow redistribution of uncommitted and undisbursed funds from one of the project components to this subcomponent to finance emergency/recovery needs in case of an eligible crisis or emergency.

### **Component 4: Project management, risk management and monitoring and evaluation**

46. **This component will support the implementation of all project activities.** It will finance the establishment and capacity building of the Project Implementing Unit (PIU) within the implementing agency, covering project management, technical, fiduciary (procurement and financial management), E&S capacities. It will support consulting and non-consulting service costs, training, operational costs, limited goods and small works, as well as resettlement planning and implementation, and community development initiatives. Project management, M&E entails inter alia preparation of project reports, including for project mid-term review and project completion, baseline studies, audits (financial and technical, environmental, social as needed). This Component will support tailored training and capacity building activities in order to strengthen the implementation of all components.



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

47. In line with the WB Environmental and Social Framework (ESF), the environmental and social risk classification for the project is expected to be Substantial as the project activities entail construction or rehabilitation of public infrastructure (for instance, roads, dikes, houses, or riverbank protection) and strengthening of institutional and regulatory capacities on land-use planning and disaster risk management. More specifically, the project will consist of four (4) components: (1) Recovery and Resilience in the housing sector, this will include (i) the repair and reconstruction of housing for select vulnerable communities affected by Cyclone Kenneth; and (ii) support to enhance the urban planning and management system as well as construction standards to improve the resilience of the sector; (2) Coastal Resilience and Infrastructure Rehabilitation, this will include the rehabilitation of an estimated 14 km of existing national roads and construction of about 3 km of coastal defense systems; (3) Integrated disaster risk management and CERC, this component will mainly include (i) updating the Government’s DRM framework, (ii) improving emergency preparedness capacity, (iii) strengthening the understanding of hazards and risks across the islands and; (4) Project management, Environmental and Social Risk Management, Monitoring and Evaluation, this component will mainly support the implementation of all project activities. Component 1 and 2 are considered to be activities that may induce large to medium E&S risk and impact by scale, however, it is expected that there is medium to low probability of serious adverse effects to human health and/or the environment as a result of the project activities, some risks and impacts may be significant. In fact, the selected activities are mainly site-specific risks and impacts on the rehabilitation/ reconstruction of housing, rehabilitation of primary national roads in their existing right-of-way (ROW) and reconstruction of protection coastal infrastructures. Component 3 and 4 are considered to induce medium to low adverse E&S impact due to the technical nature of the component.

48. Risks and impacts that have been identified during the preliminary environmental and social risk screening conducted by the Bank team during the appraisal mission are: weak capacity of the client to assess and manage environmental and social risks and impacts, labor influx and increased employment expectations; possible risks of excluding marginalized groups in project design, beneficiary selection criteria and consultations, and undertaking of consultations that result in manipulated or one sided outcomes; poor labor conditions generated by roads and other infrastructure construction or rehabilitation likely to be substantial due to the size of the civil works (approx. 200 workers per site); community health and safety such as potential risks of Gender Based Violence (GBV) and Sexual Exploitation and Abuse (SEA), spread of infectious diseases, road safety and accidents induced by works; the project will likely involve temporary and possibly permanent relocation impacts as well as impacts on livelihoods through the road rehabilitation and coastal protection activities; risks and impacts related to biodiversity may be expected as the project comprises diverse infrastructure construction works that may interfere with natural habitats. Similarly, risks and impacts related to cultural heritage may be expected as the civil works may result in chance find discoveries through excavation works. ESS7 and ESS9 have been assessed as currently not relevant. The identified risks and impacts will be mitigated through the Environmental and Social Management Framework (ESMF), Resettlement Framework (RF), Environmental and Social Management Plans (ESMPs) and other relevant Plans.



49. From the preliminary review carried out during the appraisal mission, it can be concluded that the Clients' environmental and social management system will need to be established in order to comply with ESS1 requirements. The project will address the gaps through the preparation and implementation of an Environmental and Social Commitment Plan (ESCP) prepared by the Bank together with the Ministry of Territorial and Urban Planning, Land Issues and Land Transport. The ESCP will be based on the Bank's Environmental and Social Risk Screening (ESRS) findings as well as on the draft Stakeholder Engagement Plan (SEP). The ESRS screening involved the review of relevant national policies and regulations, secondary literature; sites and household visits; Key Informant Interviews (KIIs) with Government officers, civil society organizations, and development partners (DPs); and focus group discussions with women's groups.

## E. Implementation

### Institutional and Implementation Arrangements

50. **The project will be implemented by the Ministry of Land-Use and Urban Planning, in charge of Land issues and Land Transport (MLUUP)**, through a dedicated Project Implementation Unit (PIU) to be established within the Directorate General of Equipment and Land Use (DGEAT) in charge of project management, coordination, fiduciary, safeguards management and M&E, as well as coordination among the key stakeholders involved in project implementation. For Component 1, the PIU will work closely with the Directorate for Land Use Planning, Urbanism and Housing (DATUH). As part of this component, a Delegated Project Management entity will be hired to facilitate the implementation of the housing reconstruction program (transfer of some management responsibilities under sub-component 1.1). For Component 2, the PIU will work closely with DGEAT and the Directorate General for Roads and Land Transportation (DGRTR). For Component 3, the PIU will work in close collaboration with DGSC/COSEP under the Ministry of Interior, Decentralization and Territorial Administration in charge of relations with Institutions (MOIDTA) who will provide technical inputs and contribute to the implementation, M&E of the DRM component. This will require the signing of a Memorandum of Understanding between MLUUP and MOIDTA (subject to the Bank non-objection). There will be standard coordination with the Ministry of Agriculture, Fishery and Environment (MAFE) for consultation on environmental issues and on coastal management issues and climate change data. The PCU's minimum staffing will consist of a project coordinator, an environmental specialist, a social specialist, a financial management specialist, an accountant, a procurement specialist, an M&E and an internal auditor. They will be recruited or assigned on a competitive basis and report to MLUUP. Additional staff will be hired as need be. The component will finance consulting services (which may include consulting firms, individual consultants, NGOs, UN-Agencies, architecture firms, etc.), non-consulting services, goods, small works, training, operational costs.

51. **Project activities will be implemented across the three islands.** The Regional Directorates of MLUUP will be involved in the implementation of the project to achieve the objectives of the project. Mechanisms to facilitate project execution on the three islands will be established.

52. **A project steering committee** will be set up ensure consultation and coordination between the different project stakeholders. It will be chaired by MLUUP and composed of inter alia representatives of MOIDTA and DGSC, MAFE, the Ministry of Health, Solidarity, Social Protection and Gender Promotion, municipalities, associations and women's groups, key stakeholders involved in the construction sector. The Steering Committee will have a core body and can extend invitations to other parties depending on the agenda of the meeting. The Project Steering Committee will meet twice a year and organize extraordinary sessions if necessary, to provide overall strategic, oversight and guidance on project implementation, facilitate adequate coordination with relevant stakeholders, review annual work plans, monitor the progress of project implementation on the basis of supervision and audit reports, validate or make recommendations to



improve the implementation and take measures to this effect – in compliance with the Project Operations Manual (POM).

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