

REGIONAL PROJECT PROPOSAL

PART I: PROJECT INFORMATION

Title of Project/Programme:	Building urban climate resilience in south-eastern Africa		
Countries:	Madagascar, Malawi, Mozambique and Union of Comoros		
Thematic Focal Area:	Disaster risk reduction and early warning systems		
Type of Implementing Entity:	Multilateral Implementing Entity		
Implementing Entity:	United Nations Human Settlements Programme (UN-Habitat)		
Executing Entities:	<u>For Regional coordination purposes</u> : Disaster Risk Reduction Unit of the Southern Africa Development Community (SADC), in partnership with DiMSUR: Technical Centre for Disaster Risk Management, Sustainability and Urban Resilience		
	In Madagascar: Municipality of Morondava; National Bureau for Disaster Risk Management (BNGRC)		
	In Malawi: Municipality of Zomba; Department of Disaster Management Affairs		
	In Mozambique: Municipality of Chokwe; National Institute for Disaster Management (INGC)		
In Comoros: Municipality of Moroni; Rescue and Civil Protecti Operational Centre (COSEP)			
Amount of Financing Reques	ted: US\$13,544,055		

Project Background and Context:

i. Introduction: African context of climate change, urbanisation and adaptive capacity

Africa is undergoing rapid urbanisation that will result in almost 1.33 billion people living in cities by 2050, compared to 470 million at present. Although Africa's population remains mostly rural, the continent will become predominantly urbanised in the next 20 years with an urban population of over 50% by 2036¹. With a lack in local capacity to manage this rapid urban growth much of the population expansion is taking place outside or in absence of official planning frameworks. A large part of the housing demand is being met by growing informal settlements characterised by poor living conditions, lack of access to basic services and infrastructure. These are often located in areas exposed to natural hazards.

¹ United Nations, Department of Economic and Social Affairs, Population Division (2014). World Urbanization Prospects: The 2014 Revision

Urban risks are exacerbated by the increasing severity and unpredictability of climate change effects. These impact on a range of sectors from water supply, food systems and health, and adversely affect the urban poor. Urban areas are generally more vulnerable to disasters than rural areas, due to denser populations, concentration of assets and variety of activities within comparatively smaller geographical areas. Given the critical political, social and economic roles of cities, these risk factors bear on urban settings and often become national in outreach when disasters occur. The secondary impacts - including damage to infrastructure, disruption of services, food scarcity and an increasing prevalence of vector and water-borne diseases – are likely to worsen the condition of the poorest part of the population.

This is particularly the case in developing countries with low levels of socio-economic development. There is a direct correlation between poverty and vulnerability to environmental risks. Low-income groups in African cities are relatively disenfranchised from decision-making, having the least resources at their disposal to meet lifestyle challenges, even less during times of change or disaster. Research on African cities has highlighted the lack of capacity and awareness of climate change, and often extremely high levels of vulnerability among the continent's large and rapidly growing urban poor populations.² Among the urban poor, especially women and the very young are shown to be most at risk from disease, pollution and disasters.³ At the same time, cultural biases and sensitivities often lead to the exclusion of women from decision making processes.

The impact of climate change is particularly acute in small to intermediate sized cities in Africa as they host the largest share of the urban population (54%), and are projected to be the world's fastest growing urban agglomerations in the decades to come.⁴ At the same time, they face significant lack in governance capacity and are therefore poorly equipped to plan and subsequently implement risk reduction and resilience actions. Hence, developing local governance capacity in risk management and resilience planning is a key strategy to reduce the multiple risks cities are exposed to and adapt to the adverse effects of climate change.

The Fifth IPCC Assessment Report⁵ presents strong evidences that average temperatures in Africa have increased over the last 50–100 years. In particular, the report suggests that climate change has already impacted on the magnitude and frequency of some extreme weather events in the continent, and that the health, livelihoods and food security of people have been affected. The severity of the consequences of climate change on environmental, economic and cultural systems across Africa will increase with rising temperatures, a very likely scenario.

The Report also highlights that climate change is among many drivers of rural-urban migration. Rapid urbanisation calls for significant investment to create jobs, and provide infrastructure and services. African cities, in most cases, lack those financial resources. Across the continent, most adaptation to climate variability and change is reactive, short term, at the individual or household level, and is not supported by government stakeholders and policies.

The impacts of climate change in Africa can be witnessed in disaster losses. While globally the modelled mortality risk associated with floods and tropical cyclones was estimated to have

⁴ Ibid

² Revi, A., D.E. Satterthwaite, F. Aragón-Durand, J. Corfee-Morlot, R.B.R. Kiunsi, M. Pelling, D.C. Roberts, and W. Solecki, 2014: Urban areas. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, p. 552

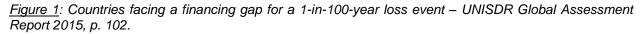
³ UN-Habitat 2014, The State of African Cities 2014 Report – Re-imagining sustainable urban transitions, p.33

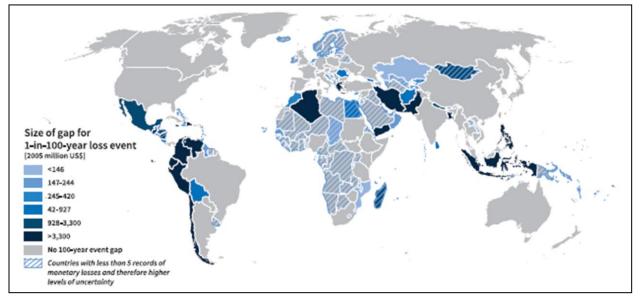
⁵ Niang, I., O.C. Ruppel, M.A. Abdrabo, A. Essel, C. Lennard, J. Padgham, and P. Urquhart, 2014: Africa. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change; p. 1202

peaked in the year 2000 before trending down, the flood mortality risk in sub-Saharan Africa has grown consistently since 1980 because increasing population exposure has not been accompanied by a commensurate reduction in vulnerability⁶, which can be attributed to low levels of adaptive capacity.

Furthermore African countries are among the ones with the biggest financing gap for addressing climate vulnerability, and are hence severely challenged by rising economic loss. Most loss is uninsured and governments do not have the financial reserves or access to contingency financing that would allow them to absorb losses, recover and rebuild.

For example, while Canada and the United States would only face challenges in absorbing the impact from a 1-in-500-year loss, Madagascar and Mozambique would face difficulties finding the resources to absorb the impact from as small as a 1 in 3-25 year loss⁷. Clearly, the financial risk to these countries is substantial. In particular, a very significant number of countries would not pass a stress test of their financial capacity to absorb the impact of a 1-in-100-year loss (see figure 1).





Multiple uncertainties in the African context mean that successful adaptation will depend upon developing resilience in the face of uncertainty.⁸

Planning for climate change adaptation requires that urban planning and development are focused on producing urban systems that have greater capacity to absorb shocks and adapt to impacts. In fact, urban planning is concerned with the way the street layout is done, including essential infrastructure such as drainage system (which is essential for flood risk reduction, for example), good connectivity for ensuring an adequate transportation system in case of emergency, proper land plotting methodologies, etc. At times of disaster, impacts and losses

⁶ UNISDR, Global Assessment Report on Disaster Risk Reduction, 2015, p. 44

⁷ UNISDR, Global Assessment Report on Disaster Risk Reduction, 2015, p. 102, and citations therein

⁸ Niang, I., O.C. Ruppel, M.A. Abdrabo, A. Essel, C. Lennard, J. Padgham, and P. Urquhart, 2014: Africa. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change; p. 1126

can be substantially reduced if authorities, individuals and communities in hazard-prone areas are resilient: well prepared, ready to act and equipped with the knowledge and capacities for effective disaster management within a longer-term development perspective.

Building adaptive capacity at the different levels is essential for ensuring future urban climate resilience. Participation and inclusivity are key elements of boosting adaptive capacity at local levels, to help identifying the key existing and potential vulnerabilities in specific communities, and to link short-term priorities to long-term plans.

Yet, despite the fact that urbanisation has progressively taken on a central role for understanding risk and its associated vulnerability, there is a noticeable lack of contextually adapted urban risk reduction and resilience initiatives in sub-Saharan Africa. Existing tools and approaches are not appropriately targeting low capacity local governments in the region, while at the same time tend to be dedicated to a narrow audience. They often heavily rely on outside technical expertise, are too technical in nature, and depend on costly data collection methods, creating a disincentive to local governments in kick-starting a process of resilience building and climate change adaptation.

In the context of this project, four countries were selected where the main activities are expected to take place, Madagascar, Malawi, Mozambique and the Union of Comoros. They are located in the south-eastern part of the African continent, which is a region very vulnerable to transboundary extreme climate-related events, in particular floods, drought and cyclones.

Four cities or towns with similar types of vulnerabilities have been selected in these countries to implement pilot adaptation projects following a participatory approach, namely: Morondava, Madagascar; Zomba, Malawi; Chokwe, Mozambique; and Moroni, Comoros. These urban settlements were selected in coordination with the national authorities, according to the following criteria: (i) high exposure to climate-related hazards (floods, cyclones, sea level rise and/or drought); (ii) low institutional and financial capacity of the municipality (typical situation of a fast growing small/intermediate city/town of sub-Saharan Africa with a population ranging between 50,000 and 100,000 inhabitants); (iii) cities/towns in which the United Nations Human Settlements Programme (UN-Habitat) has recently engage in implementing risk reduction and resilience building activities.

ii. Sub-regional and country perspective

a) Environmental context

Southern Africa is very exposed to the impacts resulting from recurrent natural hazards such as cyclones, floods and drought. More threats exist in this region that compound the effects of these natural hazards, some of natural origin (such as earthquakes, volcanic activity, among others) and others induced by anthropogenic interventions, such as land and environmental degradation and uncontrolled urbanisation. In this section, the intent is to first describe the common/transboundary natural hazards which threaten to cyclically break the economic development process of the region.

More specifically, the IPCC projections indicate that as of consequence of climate change there will be higher risk of drought, especially in south-western sub-regions, while there is uncertainty concerning projected changes in landfall of tropical cyclones originating in the southwest Indian Ocean which led to intense flooding in the last decades. As for precipitation changes in the

region, drought and heavy rainfall have been experienced more frequently during the last 30 years. An increase in extreme warm indices (hot days, hot nights, and hottest days) and a decrease in extreme cold indices (cold days and cold nights) in recent decades are consistent with the general warming. The south-western sub-regions are projected to be at a high risk to severe droughts during the 21st century and beyond. Large uncertainties surround projected changes in tropical cyclone landfall from the south-west Indian Ocean that have resulted in intense floods during the 20th century. Future precipitation projections show changes in the scale of the rainfall probability distribution, indicating that extremes of both signs may become more frequent in the future.⁹

The four selected countries where the proposed project is expected to take place, Madagascar, Malawi, Mozambique and the Union of Comoros, are annually affected by cyclones originating in the Indian Ocean and moving westwards during the period stretching from November to March, hence provoking strong winds, high precipitations and floods with devastating effects in urban areas (see figure 2).

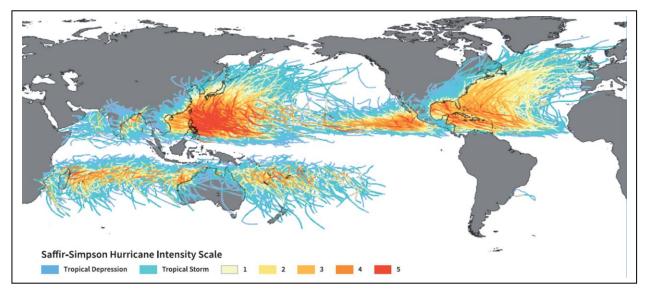


Figure 2: Worldwide historical tropical cyclone tracks – UNISDR Global Assessment Report 2015, p. 67.

According to the UNISDR Global Assessment Report 2015, with the exception of Small Island Developing States (SIDS), the Philippines and Madagascar are the two countries in the world with the largest proportion of their capital investment at risk as consequence of tropical cyclones, again highlighting the importance of prospective disaster risk management. In the sub-region targeted by the project, Mozambique and the Union of Comoros follow Madagascar as the most vulnerable to this type of natural hazard.

While Malawi is affected to a lesser extent, it is impacted through tropical cyclones in the form of severe flooding, similarly as the other three countries. In early 2015, devastating floods disrupted Malawi's economy and displaced hundreds of thousands of people. In addition, Madagascar, Comoros and Mozambique have several coastal cities which are likely to be affected by sea level rise resulting from increasingly warmer temperatures.

⁹ lbid., p.1211

The hydro-geographical profile of the region shows that nine international river basins flow to Mozambique, among which the Zambezi is the largest one, followed by the Limpopo, Rovuma and Save (see figure 3). This means that flooding is a regular seasonal phenomenon in that country, and its extent much depends on the amount of rainfall registered in the neighbouring countries located upstream. Therefore, there is a clear need to strengthen current efforts and enhance inter-country collaboration to mitigate effectively the impact of floods in this sub-region.

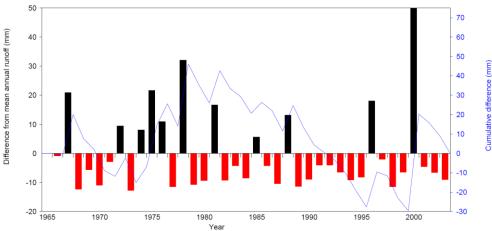
<u>Figure 3</u>: International river basins in South-East Africa - Atlas for Disaster Preparedness and Response in the Limpopo Basin, INGC, UEM & FEWSNET MIND (2003).



Drought is a chronic natural disaster in the sub-region. It increases dramatically the vulnerability of an already poor population, in particular in terms of food security and livelihoods. Urban areas are not spared by this type of natural hazard. Mozambique is currently affected by a protracted on-going drought since early 2016. Affected populations do not have sufficient time to recover from the economic and social impacts provoked by droughts between one cycle and the next. Figure 4 shows the irregular hydrological regime of an important river like the Limpopo, showing the constant alternating of flood peaks and longer drought periods.

Disaster impacts vary between these four countries, with Madagascar and Mozambique having a different disaster risk profile because of their greater geographical size. The prominent hazards of these two countries are cyclones and floods, which are much related phenomena. In addition, both countries significantly suffer from chronic drought. Mozambique is also in the unfortunate position of being downstream of major transboundary rivers and therefore is highly vulnerable to the water management strategies of its neighbours located upstream. Malawi's concerns relate to flooding, particularly in the Lower Shire Valley, while an inherent regular dryness characterises the agricultural economy. Earthquakes associated with the Rift Valley do occur and are periodically damaging. Meanwhile, the Union of Comoros is dominated by the volcano on Grand Comore Island; sea level rise, flooding and periodic drought are also of concern to this archipelago. A rapid risk profile description for each country is provided below, including of the four cities selected in this project.

<u>Figure 4</u>: Hydrological anomalies in the Limpopo basin – Extracted from the presentation made by the Ministry of Public Works and Housing, Mozambique, on 15 December 2005, titled: "Experiences of Mozambique on Disaster Management".



Madagascar

As mentioned earlier, Madagascar is extremely exposed to cyclones originating in the Indian Ocean. One-quarter of Madagascar's population - approximately five million people - lives in zones at risk of natural disasters, including tropical cyclones, storm surges, floods, drought and locust invasions. Each year, an average of three to four cyclones make landfall on Madagascar. The most impacted areas are generally the eastern and western coasts. However, as a consequence of climate change, cyclones appear to have reduced in frequency but have intensified in power in recent years; impacts are now also felt further north. In 2015, over 100,000 people were affected by flooding and the after-effects of tropical storms Chedza and Fundi. As a result, more than 70,000 people lost their homes.¹⁰

Flooding is inherently associated with cyclones, which provoke heavy and tropical rains, and represents the second major natural threat to the country. Rains and flooding also cause landslides. Its impact has been exacerbated by the effects linked with climate change as well as anthropogenic activities leading to deforestation, erosion and, more in general, to land degradation.

Another important climatic-related threat is drought. Climate change affects the regularity of rainfall and results in higher temperatures, with a major impact on agriculture. Dryer conditions are observed, especially in the south. In 2015, approximately 80,000 people were affected and food security heavily impacted.¹¹

Other natural threats that can be found in Madagascar are the risk of tsunami, fires, locust invasion and minor seismic events. There are also epidemics such as plague, Chikigunya (mosquito-borne viral disease), pandemic influenza, cholera and malaria.

The city of **Morondava**, targeted by the project, lies on the south-western coast between the Mozambique Channel and the Morondava River Delta. The land is mostly flat and below sea level, making the city particularly vulnerable to floods caused by heavy rains and cyclones, as

 ¹⁰ GFDRR country profile for Madagascar, https://www.gfdrr.org/sites/gfdrr/files/region/MG.pdf, accessed on 29 December 2016
 ¹¹ IRIN: Disaster-prone Madagascar battles flooding and drought, http://www.irinnews.org/analysis/2015/03/05/disaster-prone-madagascar-battles-flooding-and-drought, accessed on 29 December 2016

well as rising sea levels. The siliceous and sandy soil on which this old urban centre is built is unstable and affected by erosion which is further aggravated by deforestation, especially mangroves, and informal urbanisation, particularly linked to constructions in flood-prone areas. Lack of maintenance of the infrastructure (spikes, dykes, drainage and sanitation systems, road networks, etc.) and the precariousness of construction material further aggravate the vulnerability of the city.

≻ <u>Malawi</u>

The main natural hazards affecting Malawi are floods and drought. Studies indicate that climate change will continue to affect their incidence — notably, the mean annual temperature in the country has increased by an average rate of 0.21°C per decade over the last 30 years. Flooding results in sediment deposits in river channels, reservoirs and floodplains. In turn, this causes catchment degradation, loss of arable land and damage to irrigation infrastructure. Most recently in 2015, the country was impacted by unprecedented flooding which affected more than 1.2 million people and destroyed agricultural fields and damaged key infrastructure leading to a massive loss in livelihoods.¹²

As consequence of climate change there are disrupting rainfall patterns with dry periods in the middle of the rainy season while drought spells are lengthening. Regarding flooding, the lower Shire River is particularly at risk. In that area people build their houses with clay which expands with increased humidity when settling closer to the river. Communities live close to streams due to their dependency on agriculture, fishing and other subsistence activities. Meanwhile flooding events are increasing because of deforestation and silting of rivers.

The city of **Zomba** is located at the foot of the Zomba plateau, and is exposed to strong winds, flash floods, mudflows, landslides and debris flows. Environmental degradations and climate change impacts are likely to aggravate Zomba's vulnerability to natural hazards. Deforestation is a major issue, as it increases the likelihood of floods, mudflows and debris flows incidence. Poor sanitation and uncontrolled urban growth also contribute to hinder Zomba's capability to face and to recover from such events. Climate change also poses a threat on the city's development. Rainfall patterns are becoming less predictable making floods and mudflows mitigation efforts more complex. Moreover, deforestation may also increase migrations to marginal land areas prone to landslides and floods and exacerbate urban sprawl. Presently, part of the population increase in Zomba is characterised by the informality and the poor quality of housing, very often constructed without considerations for hazards that frequently affect the city.

Mozambique

Mozambique ranks third among the African countries most exposed to multiple weather-related hazards, suffering from periodic cyclones, drought, floods, and related epidemics. Drought occurs primarily in the southern region, with a frequency of seven droughts for every ten years. Floods occur every two to three years, with higher levels of risk in the central and southern regions.¹³ Major rivers flow into Mozambique so heavy rainfall in upstream countries often determines seasonal flooding, impacting on the large population living along the river banks and depending on agriculture activities. High profile events are the 2000 floods especially in the lower Limpopo River and those of 2001, 2007 and 2008 in the lower Zambezi River. Floods in

¹² GFDRR country profile for Malawi, https://www.gfdrr.org/sites/gfdrr/files/region/MW.pdf, accessed on 29 December 2016

¹³ GFDRR country profile for Mozambique, https://www.gfdrr.org/sites/gfdrr/files/region/MZ.pdf, accessed on 29 December 2016

urban areas are often caused by poor drainage, creating conditions conducive to malaria and cholera.

Due to the effects of climate change, rainy seasons have become more irregular, starting late and with an uneven distribution. As a result, cyclones are becoming more intense in recent years, the latest being in 2007 and 2008, and are affecting the population settled along the coastline of the country enduring high levels of poverty and livelihood conditions are difficult to sustain. In addition to the impact on housing and public facilities, especially affecting the roofing structures, cyclones have damaging effects on infrastructure. Storms and strong winds below cyclone strength also cause a lot of damage.

Hazards caused by anthropogenic interventions are deforestation and land degradation leading to soil erosion and desertification, mangroves depletion and bush fires. Sea level rise as potential threat linked with climate change is a great concern as Mozambique's major cities are located along the coast.

Chokwe town faces several risks due to the location of the City. The region of the lower Limpopo Basin, where the city is located, is particularly at risk. Floods are very serious threats that frequently affect Chokwe, as well as strong winds and heavy rainfalls, causing considerable damages to the population and assets. Furthermore Chowe town is located in a semi-arid climate region and faces chronic drought. Chokwe is overall extremely vulnerable to the negative effects of climate change.

Union of Comoros

The Comoros is a volcanic archipelago, with Karthala volcano dominating the Grand Comore, the main island. In 2005 an eruption of this volcano affected 245,000 people. Flooding occurs on a more regular basis and can have a serious impact, especially as a result of cyclones. The latter, as already explained, are a regional hazard which has intensified in power and reduced in frequency over recent years. Hence, as a result of climate change, stronger and irregular weather events are compounded over shorter time periods.

One of the biggest threats is seal level rise as consequence of climate change. According to projections, sea level rise within the country may increase by 0.13 to 0.56 m by the 2090s.¹⁴ This potential hazard can be highly destructive as main settlements are located along the coast, and it is not likely to be contained by dykes.

Climate risks listed in the country's National Adaptation Programme of Action (NAPA) include: both seasonal and acute drought; increased incidence of heavy rains and cyclones; and a rise in sea level. Comoros' Initial National Communication to the United Nations Framework Convention on Climate Change (UNFCCC) also discusses the potential impacts of climate change in key sectors of the country, including: an expected increase in the occurrence of malaria; a decrease in crop yields, agricultural production and fisheries; and flooding and internal displacement.¹⁵

The overall vulnerability situation is worsened by salinisation and poor water management, soil water-logging (through volcanic ash), deforestation, soil erosion and landslides. Land

¹⁴ Hilary Hove, Daniella Echeverría, Jo-Ellen Parry: Review of Current and Planned Adaptation Action: Southern Africa, p. 63 ¹⁵ Ibid

degradation and the disappearance of around 400 acres of forest per year also have had a negative effect on the country's socio-economic development.¹⁶

The **city of Moroni** is highly exposed to hydro-meteorological risks arising from tsunamis, storm surges and cyclones. Due to its location at the coast it is also prone to the effects of sea level rise. Further, heavy rains are recurrent due to the proximity to the volcano Mount Karthala (2,355 m) and related thermo-dynamic effects. The latter is active and erupts every 10 to 20 years. Earthquakes due to volcanic activity are frequent as well. The city's spatial development is limited by the sea to the west, and to the east by the slopes of the volcano. It has recently experienced rapid and anarchic urbanization. Lack of urban planning and an outdated land-use policy are likely to exacerbate vulnerability to foreseeable effects of climate change. The city management is struggling to maintain infrastructure and provide basic services. Considerable challenges exist in terms of quality of roads, drinking water and the provision of electricity. Further, there is no sewerage, drainage or wastewater treatment in Moroni. Households typically use pit latrines which can leak and contaminate groundwater and coastal and marine environments.

b) Socio-economic context

Fast paced urbanisation is a reality for the four countries in the region. They show significantly high urban annual growth rates surpassing their overall population growth, indicating the increasing importance of the urban dimension in these countries (see Table 1). At the same time, local administrations face a capacity gap and are being increasingly challenged by climate change induced risks.

	Total Population (2016 Estimate)	Urban Population (2016 Estimate)	Percentage Urban (2016 Estimate)	Urban Pop. Annual Growth Rate (2010-2015)	Total Pop. Annual Growth Rate (2010-2015)	Capital City and Population (2014)
Madagascar	24,915,000	8,905,000	35.7%	4.69%	2.79%	Antananarivo: 2,487,000
Malawi	17,802,000	2,929,000	16.5%	3.77%	2.84%	Lilongwe: 867,000
Mozambique	27,781,000	9,031,000	32.5%	3.27%	2.47%	Maputo: 1,174,000
Union of Comoros	788,000	224,000	28.4%	2.67%	2.40%	Moroni: 56,000

<u>Table 1</u>: Population and urbanisation profile of the four target countries - World Urbanization Prospects, 2016¹⁷

A rapid socio-economic profile relevant to the project is provided below, country by country.

¹⁶ Ibid

¹⁷United Nations, Department of Economic and Social Affairs, Population Division (2014). World Urbanization Prospects: The 2014 Revision, custom data acquired via website

Madagascar

In 2016, Madagascar had an estimated population of 24,915,000, an average annual population growth rate of 2.79%, an urban share of the population of 35.7% and an average annual urban growth rate of 4.69%.¹⁸

It is estimated that approximately five million people currently live in zones at high risk of natural disasters.¹⁹ According to the Global Facility for Disaster Reduction and Recovery (GFDRR), the country has a low adaptive capacity, influenced by a high poverty rate, rapid population growth, high dependency on natural resources and weak institutional capacity. Adverse effects of flooding events are significant in urban areas due to: (i) a lack of early warning systems; (ii) inadequate urban planning; and (iii) poorly maintained drainage infrastructure.²⁰

The country ranked 154th out of 188 countries in the United Nations 2015 Human Development Report and did not reach any of the United Nations Millennium Development Goals (MDG) by 2015. Between 1980 and 2014, Madagascar's life expectancy at birth increased by 16.1 years, mean years of schooling increased by 0.8 years and expected years of schooling increased by 2.5 years. Madagascar's gross domestic product (GDP) per capita decreased by about 35.5% between 1980 and 2014.²¹

The GDP was at USD 9.739 billion in 2015. The latest World Bank economic update reveals a slow economic recovery in 2015 due to a weak growth in tourism and mining sectors. Catastrophic meteorological conditions during the first half of 2015 also took a toll on the economy, resulting in higher inflation and a reduction of household purchasing power. GDP growth is estimated at 3.0% in 2015 and annual inflation rose to 7.6%. The country continues to rank poorly on the ease of doing business index: 164 out of 189 countries in the 2016 Doing Business Report.²²

≻ <u>Malawi</u>

In 2016, Malawi had an estimated population of 17,802,000, an average annual population growth rate of 2.84%, an urban share of the population of 16.5% and an average annual urban growth rate of $3.77\%^{23}$

The country ranked 173rd out of 188 countries in the United Nations 2015 Human Development Report²⁴, which put the country in the low human development category and did not reach any of the United Nations Millennium Development Goals by 2015.

Real GDP grew by 5.7% in 2014 but slowed down to 2.8% in 2015 as Malawi suffered from dual challenges of adverse weather conditions and macroeconomic instability. Flooding in southern districts followed by countrywide drought conditions saw a contraction in agricultural production.²⁵ Natural disasters have had serious impacts on Malawi's economic development.

¹⁸ Ibid

¹⁹ http://www.worldbank.org/en/country/madagascar/overview, accessed on 29 December 2016

²⁰ GFDRR country profile for Madagascar, accessed on 29 December 2016

²¹ http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/MDG.pdf, accessed on 29 December 2016

²² http://www.worldbank.org/en/country/madagascar/overview, accessed on 29 December 2016

²³ United Nations, Department of Economic and Social Affairs, Population Division (2014). World Urbanization Prospects: The 2014 Revision

²⁴ UNDP 2015: Briefing note for countries on the Human Development Report 2015,

http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/MWI.pdf, accessed on 29 December 2016

²⁵ http://www.worldbank.org/en/country/malawi/overview, accessed on 29 December 2016

Drought and dry spells in Malawi cause, on average, a 1% loss of GDP annually. Additionally, an average loss of 0.7% of the annual GDP is due to the flooding of lakes and the overflowing of rivers.²⁶

Poverty and inequality remain high in Malawi. The 2010/11 Integrated Household Survey showed that over half of the population was poor and one quarter lived in extreme poverty. These numbers are not expected to change much with the new estimates to be available in 2017. Poverty has been increasing in rural areas where 85% of the population lives, compared to urban areas where it fell significantly from 25 to 17%.²⁷

➢ <u>Mozambique</u>

In 2016, Mozambique had an estimated population of 27,781,000, an average annual population growth rate of 2.47%, an urban share of the population of 32.5% and an average annual urban growth rate of $3.27\%^{28}$

Mozambique's Human Development Index (HDI) value for 2014 is 0.416 - which puts the country in the low human development category - positioning it at 180 out of 188 countries. Between 1980 and 2014, Mozambique's gross national income per capita increased by about 106.8% between 1980 and 2014²⁹. Nevertheless, Mozambique's rapid economic expansion over the past decades has had only a moderate impact on poverty reduction, and the geographical distribution of poverty remains largely unchanged.

Mozambique also needs to improve its social indicators. For instance, the social progress index for access to improved sources of water and sanitation ranks Mozambique 128th and 119th, respectively, out of 135 countries. Indeed, Mozambique has one of the lowest levels of water consumption in the world despite being endowed with a variety of water sources.³⁰

World Bank projections place economic growth at 3.6% for 2016, with significant downward risks. The discovery in April 2016 of previously undisclosed debt worth \$1.4 billion, 10.7% of Mozambique's GDP, combined with the impact of the exchange rate depreciation have led to a substantial increase in debt ratios. As a result, the fiscal position is likely to remain under stress until the end of the decade.

In the short term, adverse climatic conditions, brought on by La Niña, are a risk. Should this materialise, the costs of flood damage and impact on food production would pose a major challenge to food security and livelihoods.

Union of Comoros

In 2016, the Union of Comoros had an estimated population of 788,000, an average annual population growth rate of 2.40%, an urban share of the population of 28.4% and an average annual urban growth rate of 2.67%³¹

²⁶ GFDRR country profile for Malawi, https://www.gfdrr.org/sites/gfdrr/files/region/MW.pdf, accessed on 29 December 2016
²⁷ Ibid

²⁸ United Nations, Department of Economic and Social Affairs, Population Division (2014). World Urbanization Prospects: The 2014 Revision

²⁹ GFDRR country profile or Mozambique, https://www.gfdrr.org/sites/gfdrr/files/region/MZ.pdf, accessed on 29 December 2016 ³⁰ http://www.worldbank.org/en/country/mozambique/overview, accessed on 29 December 2016

³¹ United Nations, Department of Economic and Social Affairs, Population Division (2014). World Urbanization Prospects: The 2014 Revision

Comoros has a dense population of about 390 inhabitants per square kilometre. More than half of the population (53%) is younger than 20 years of age.³² Its HDI rank was 159 out of 188 countries in 2015, which puts the country in the low human development category.³³ Progress has been made on several of the Millennium Development Goals. However, one of the most important challenges will be to halve the proportion of people who suffer from hunger.

According to the World Bank, citing the most recent Household Budget Survey for 2014, 42.4% of the population (around 320 thousand people) is poor, with real monthly consumption per capita below the national poverty line. Around 18% of the population lives below the international poverty line of US\$1.9 per capita per day, in 2011 Purchasing Power Parity (PPP) exchange rate. The World Bank projections indicate slow progress in poverty reduction until 2018, due to stagnant economic growth.

Recent economic developments point to a deteriorating economic situation as growth slows and the Comorian franc depreciates against the US dollar. Comoros has a small and undiversified economy. While the economy had showed signs of recovery after years of political instability, achieving an eight-year high in terms of economic growth at 3.5% in 2013, conditions since then have deteriorated with growth slowing from 2.1% in 2014 to 1% in 2015.³⁴

c) Institutional context

In the context of this project, the following institutional set up is relevant, at the different levels.

At the sub-regional level

• The Southern African Development Community (SADC) Disaster Risk reduction (DRR) Unit

SADC is a Regional Economic Community comprising fifteen Member States: Angola, Botswana, Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe. Established in 1992, SADC is committed to regional integration and poverty eradication within southern Africa through economic development and ensuring peace and security.³⁵ The Union of Comoros holds an observer status to SADC.

When unexpectedly heavy floods displaced more than a million people in southern Africa in 2007, SADC began to meet annually to prepare for future occurrences. Concrete steps were taken to ensure that DRR is effectively mainstreamed into national policies. Consequently, SADC established a Disaster Risk Reduction Unit responsible for coordinating regional preparedness and response programmes for transboundary hazards and disasters.³⁶ The Unit was established in July 2008, within the SADC Directorate of the Organ on Politics, Defense and Security Affairs. The decision was endorsed during the SADC Summit Heads of State and Governments in August 2008 and acknowledged for implementation and resource allocation in January 2009. The SADC DRR Unit, with the support of the existing SADC DRR Technical Committee, has the responsibility to coordinate and provide regional leadership on matters

³² http://www.worldbank.org/en/country/comoros/overview, accessed on 29 December 2016

³³ http://hdr.undp.org/en/countries/profiles/COM, accessed on 29 December 2016

³⁴ http://www.worldbank.org/en/country/comoros/overview, accessed on 29 December 2016

³⁵ https://www.sadc.int/about-sadc/, accessed on 6 January 2017

³⁶ http://www.sadc.int/themes/disaster-risk-management/, accessed on 6 January 2017

pertaining to disaster risk reduction, mitigation, preparedness and related management activities.

The SADC DRR Unit is a member of the DiMSUR Executive Board (see section below). The Unit Leader during DiMSUR's fourth Executive Board meeting at the sidelines of the Africa Regional Platform for Disaster Risk Reduction in Mauritius on 23 November 2016 expressed that DiMSUR's efforts such as the development of the CityRAP tool and sharing of experiences between different countries were highly appreciated. It was concurred that SADC's coordination role and DiMSUR were complementing each other and that further cooperation was urgently needed. The current proposal seems to fit adequately this purpose.

• The Technical Centre for Disaster Risk Management, Sustainability and Urban Resilience (DiMSUR)

At the request of the four countries targeted by this project, UN-Habitat has facilitated since 2010 the establishment of the Technical Centre for Disaster Risk Management, Sustainability and Urban Resilience (DiMSUR) which was launched in 2013. It was endorsed at ministerial level by the four member countries as an international non-profitable, autonomous and regional organisation through a signed Memorandum of Understanding in December 2014 (see Annex 1). The centre aims at fostering development and dissemination of knowledge and solutions as well as developing capacities for disaster risk management, climate change adaptation and urban resilience.



Figure 5: DiMSUR's key milestones

The effort to build a centre of excellence such as DiMSUR originated from the awareness of the governments of Malawi, Madagascar, Mozambique and the Union of Comoros of the need to increase coordination and collaboration between neighbouring countries to exchange information, knowledge and mutual capacity reinforcement. This need was clearly expressed at the time in key agreements and strategies of the international and regional communities. The Hyogo Framework for Action (2005-2015) defined as one of its axis of implementation for regional organizations and institutions to "Establish or strengthen existing specialised regional collaborative centres, as appropriate, to undertake research, training, education and capacity building in the field of disaster risk reduction"; while the Programme of Action (2006-2015) defines as one of its 7 objectives to "develop and maintain sustainable mechanisms of coordination at regional and sub-regional levels (...)".

DiMSUR is composed of four organs (see Charter in Annex 1):

- the Conference of Ministers of the member states, responsible for endorsing and validating the mission, vision, policies and strategies of the centre and other extraordinary items when requested;
- the Executive Board, composed by the National Directors responsible for disaster risk reduction (DRR) and/or climate change adaptation (CCA) of each Member State and other relevant stakeholders (UN system, academia, civil society) and responsible for making the key decisions and validating the guiding documents and products of the centre;
- the Consultative Group, consisting of recognised stakeholders of the DRR/CCA and urban resilience fields at various levels that have the role of advising and guiding DiMSUR when consulted;
- the Secretariat, which has the role of conducting all operational functions that are conducive to the achievement of the objectives of DiMSUR as an autonomous body.

UN-Habitat has operated since 2010 as the Centre's Secretariat ad interim. Following its establishment in 2013, UN-Habitat has been responsible for implementing all activities planned in the Biannual Action Plan with full acknowledgement and consent of the DiMSUR Executive Board. Among these activities, it is worth mentioning the organisation of four meetings of the DiMSUR Executive Board since 2014, the participation of the centre's representatives in numerous conferences and events worldwide (e.g. African Platforms for Disaster Risk Reduction, Africities Summit 2015, the Third United Nations Conference on Housing and Sustainable Urban Development – Habitat III, the 2014 World Urban Forum, among others), the development of the CityRAP tool methodology (see below) as well as the organisation of trainings and workshops on urban resilience involving more than 800 participants in various African countries.

UN-Habitat has also supported the Government of Mozambique in drafting and validating with all four members the Host Agreement for establishing the centre in Maputo. This has been a long negotiated process that successfully resulted in the clearance of different Ministries and concerned national institutions in Mozambique and is pending the final approval by Cabinet in the first quarter of 2017. In its role as secretariat ad interim, UN-Habitat has facilitated the selection process of the Executive Director and the national focal points for the centre, which will constitute the staff of the Centre's Secretariat. This is pegged to the Host Country Agreement in Mozambique as well as overall funding for the centre. These steps will lead to the full autonomy of DiMSUR as a regional institution in the coming 2-3 years.

As mentioned above, UN-Habitat and DiMSUR have recently developed the City Resilience Action Planning (CityRAP) Tool³⁷. The tool was tested in several countries and a second, revised version was developed in conjunction with London King's College under the Urban Africa Risk Knowledge Programme funded by DFID, taking into account the lessons learnt. CityRAP Tool activities have been conducted in ten different cities in eight different countries (Madagascar, Mozambique, Malawi, Union of Comoros, Ethiopia, Cape Verde, Sao Tome and Principe and Guinea Bissau) and directly involved more than 800 local participants - from city authorities and technicians to local community leaders and civil society representatives. The main objective of the tool is to enable local governments of small to intermediate sized cities to understand risks and plan practical actions to progressively build urban resilience. The CityRAP Tool targets local governments with no to limited experience in risk reduction and resilience

³⁷ For more information on DiMSUR and the CityRAP Tool, please consult the website: www.dimsur.org

planning. Its implementation helps prioritising key actions to build the city resilience. The main output of the tool is a City Resilience Framework for Action (RFA), based on local government self-assessments, participatory risk mapping exercises, and cross-sectorial action planning by the local government engaging relevant stakeholders, most importantly, communities themselves. The CityRAP Tool involves a bottom-up consultative process and has been designed as an enabling rather than prescriptive tool.

In addition, it is worth noticing that under the Nairobi Work Programme on impacts, vulnerability and adaptation to climate change, UN-Habitat has developed a number of good practices in Africa, including: (i) a tool to mainstream gender consideration into city-level climate change plans and strategies, which was applied in Kampala, Uganda; (ii) simple and low-cost pilot interventions as effective local solutions for creating climate-resilient settlements, such as school buildings built with locally available materials in Mozambique which can offer shelter to communities in case of floods or cyclones; (iii) rooting sustainable development and desert prevention in Bobo Dioulasso, Burkina Faso, through participatory sanitation improvement and afforestation; (iv) sustainable resettlement and reconstruction in flood-prone peri-urban areas in Saint Louis, Senegal; and (v) youth initiative to sustain mangroves and livelihoods in Mombasa (Kenya).

As this project falls under the DiMSUR umbrella, the following key partners of the centre are mentioned in this proposal at the sub-regional and national levels. It will be noted that they are more linked to the broader area of disaster risk reduction than to the specific area of climate change adaptation.

• Other relevant institutions in southern Africa

Regarding the UN system and the humanitarian partners such as international NGOs, a Regional Inter-Agency Coordination and Support Office (RIACSO) was established in 2002 in Johannesburg covering southern Africa, and is chaired by UNOCHA. The RIACSO provides support to strategic planning, assessment and monitoring of crisis situations and coordination for emergency response. It has a functional partnership with the SADC, in particular by playing an important role in the strengthening of networks such as the Famine Early Warning System Network (FEWSNET) and the Southern Africa Regional Climate Outlook Forum (SARCOF). Hence the standard *modus operandi* of the RIACSO is mainly on supporting preparedness and early warning across the region through annual plans which match the yearly meteorological cycles. Oxfam, a recognised Non-Governmental Organization working in southern Africa and part of the RIACSO, is a member of the DiMSUR Executive Board.

The southern African region is vibrant with initiatives from the Academic sector, which offers a choice of learning options, including professional training in the area of disaster management and increasingly on DRR. Among them, the Disaster Mitigation for Sustainable Communities and Livelihoods Programme implemented by the University of Stellenbosch, South Africa, apart from working with poor communities in projects aimed at strengthening their resilience in the face of disaster risk, also acts as a facilitator for the inter-university Peri Peri U project which supports ten universities throughout Africa to promote a DRR agenda. The latter project encourages interchange and knowledge-sharing between these academic bodies with a view to developing overall capacities in DRR on the continent. Two of these universities are in Madagascar and Mozambique. In Madagascar, the disaster management course (supported by UNDP) is taking momentum and is increasingly recognised. The Antananarivo University, Madagascar, which is part of the Peri Peri U, is a member of the DiMSUR Executive Board.

The North-West University at Potchefstroom in South Africa houses the African Centre for Disaster Studies, which focuses on the development of knowledge tools and offers postgraduate education courses and the facility for capacity development. The Centre is offering a variety of modules on disaster management and DRR and increasingly host international students. It is also a member of the DiMSUR Executive Board.

> <u>Madagascar</u>

There are two main institutions dealing with disaster management in Madagascar:

- The Emergency Prevention and Management Unit (*Cellule de Prévention et Gestion des Urgences CPGU*), which is a technical unit within the Prime Minister's office managing DRR and prevention projects with the support of the United Nations International Strategy for Disaster Reduction (UNISDR) and the World Bank. Its mandate concerns the following functions: (i) to elaborate and update the national strategy for DRR; (ii) to assess and control the implementation of national policy of disaster risk management and reduction; (iii) to support the sector for the implementation of prevention activities; (iv) to assist the Prime Minister in decision making regarding DRR. The flagship intervention of the CPGU is the work developed on building norms and codes in areas prone to cyclones. The Unit cooperates with a range of national and international actors.
- The National Disaster and Risk Management Office (Bureau National pour la Gestion des Risques et des Catastrophes BNGRC) at the Ministry of Interior which was established in 2006 in substitution of the National Security Council (Conseil NationI de Sécurité CNS). BNGRC supports the Council for National Risk and Disaster Management (CNGRC) and coordinates the organization and management of operations in case of emergency, as well as disaster-related activities in general across the country. It has a disaster risk management mandate, with clear responsibilities regarding civil protection, preparedness (including stock-piling and pre-positioning) and response. It has capillary presence on the ground in coordination with the Red Cross and a network of stakeholders at local level. BNGRC is a member of the DiMSUR Executive Board in representation of the Government of Madagascar.

Another key project partner will be the municipality of Morondava for supporting the execution of the project activities at the municipal level.

≻ <u>Malawi</u>

The Disaster Preparedness and Relief Act establishes the National Disaster Preparedness and Relief Committee (NDPRC) responsible for providing policy directions on the implementation of DRM programs. The NDPRC comprises of Principal Secretaries of all line ministries and departments. It is chaired by the Chief Secretary to the Government based in the Office of the President and Cabinet.

The Act also provides for the appointment of a head of the Department of Disaster Management Affairs (DoDMA), which is responsible for coordinating and directing all DRR and disaster risk management programs in the country. The DoDMA, which is answerable at the level of the NDPRC, is part of the Commission for Poverty and Disaster Management Affairs at the office of the Vice-President, and is represented down to district level. DoDMA is a member of the DiMSUR Executive Board in representation of the Government of Malawi.

Another key project partner will be the municipality of Zomba for supporting the execution of the project activities at the municipal level.

Mozambique

The National Council for Disaster Management Coordination (*Conselho Coordenador de Gestão das Calamidades – CCGC*), led by the Prime Minister and including several ministries, is the highest political body dealing with disaster-related issues in Mozambique. Its mandate is to ensure multi-sectoral coordination for disaster prevention, assistance to the victims and rehabilitation of damaged infrastructures.

Importantly, the CCGC as political decision-making organ receives advices from the Technical Council for Disaster Management (*Conselho Técnico de Gestão de Calamidades - CTGC*), which is constituted by technical staff from the concerned departments of the different Ministries represented in the CCGC, as well as partners from the UN system. In general, the CTGC meets twice a month both at the central and provincial levels. There are attempts to embrace civil society on this committee as well as the academic sector.

The National Institute for Disaster Management Institute (*Instituto de Gestão de Calamidades – INGC*), under the Ministry of State Administration (*Minstério da Administração Estatal – MAE*), coordinates the CTGC and reports to the CCGC. The main functions of INGC are to: (i) coordinate disaster prevention and mitigation activities; (ii) lead the government's response to emergencies; and (iii) deal with arid and semi-arid areas, reconstruction and resettlement. It works very much as a knowledge and reference centre, providing free access to its products in the web. The structures of INGC go down to the three regions (Southern, Central and Northern Mozambique) and eleven Provinces both politically and technically. The southern regional centre with drought, the central regional centre with floods and the northern regional centre with cyclones. There are inter-sectorial technical committees for disaster management organized at the provincial level. Focal points are nominated at district levels which deal with the local committees (CLGRCs). INGC is a member of the DiMSUR Executive Board in representation of the Government of Mozambique.

Another key project partner will be the municipality of Chokwe for supporting the execution of the project activities at the municipal level.

Union of Comoros

The Rescue and Civil Protection Operational Centre (*Centre des Opérations de Secours et de la Protection Civile - COSEP*) is recognised overall, with no apparent overlapping in roles and mandate, as the main governmental institution dealing with disaster management in Comoros. COSEP is a member of the DiMSUR Executive Board in representation of the Government of Comoros.

Different sectors are responsible for disaster preparedness and response depending on the type of hazard. Sectors cooperate in response once alerted by the crisis cell, and propose an action to the government. The PIROI network, strongly focusing on civil protection, supports disaster preparedness and response.

Another key project partner will be the municipality of Moroni for supporting the execution of the project activities at the municipal level.

Project Objectives:

In alignment with the Adaptation Fund Results Framework, in particular Outcome 2 (Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses), Outcome 3 (Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level) and Outcome 4 (Increased adaptive capacity within relevant development and natural resource sectors), the project has two objectives, namely:

- 1. To develop capacities and establish conditions to adapt to the adverse effects of climate change in vulnerable cities and towns of Madagascar, Malawi, Mozambique and the Union of Comoros;
- 2. To promote inter-country experience sharing and cross-fertilisation regarding the adaptation to transboundary climate-related natural hazards and disseminate lessons learned for progressively building urban climate resilience in south-eastern Africa.

Objective 1 responds to the problematic raised in the project background regarding the low capacity of local governments in sub-Saharan Africa in identifying and planning actions for effectively adapting to the negative effects triggered by climate change. This is especially true in fast growing small and intermediate cities/towns. In these urban centres, under-serviced informal settlements are sprawling in an uncontrolled manner and municipal authorities are ill-prepared to face the unwanted consequences of this dynamic process. These range from the increased risk to climate-related natural hazards such as floods and cyclones, simply due to the vulnerable location of the new settlements, to issues compounding the impact of climate change, such as the lack of solid waste management (which is hampering the efficiency of the drainage system, for example, and increasing the likelihood of water-borne disease outbreaks), or poor techniques applied in housing construction, for example.

The application of the CityRAP Tool in several countries and cities/towns of sub-Saharan Africa provided sufficient evidence to understand that strengthening the capacity of municipal authorities works as an effective entry point to start building the climate resilience in urban areas. The project offers an appropriate duration to accompany the targeted city leaders and staff through the virtuous cycle of understanding climate-associated risk, perform a critical self-assessment, consult and involve the most vulnerable populations in risk identification and prioritisation of actions, plan and organise the necessary resources (also provided by the project) for start implementing these actions, and set up an adequate monitoring and evaluation system to apply corrective measures, as necessary. The completion of these tasks will allow developing the needed capacities of this crucial intermediate governmental layer constituted by the local authorities, which are closer to the population and need to manage their city/town on a daily basis, comparing to national authorities.

Through Objective 1, the latter, the national authorities, are also targeted. The idea is to take advantage of the practical implementation of the project at the city level to further improve the CityRAP Tool, adapt it to the national context, derive the needed guidelines in alignment with existing policies and legislation, and thus create the conditions for replication in other cities and towns at the country level. For this purpose, the project will also allow delivering training activities to all the local authorities of the country, through appropriate institutions and networks and by building appropriate partnerships with on-going initiatives, and start laying the foundations for building urban climate resilience in the four participating countries.

Objective 2 represents the regional dimension of the project and will be anchored to the DRR SADC Unit, which will work in partnership with DiMSUR. As per the Memorandum of Understanding for establishing the Centre signed among the four countries concerned by this project (see Annex 1), DiMSUR is supposed to promote inter-country experience sharing and cross-fertilisation, and to work as a knowledge platform regarding urban resilience related issues that can be disseminated in the sub-region. One of the key "raison d'être" for establishing this institution (as reflected in the DiMSUR feasibility study³⁸), is the need for these countries belonging to the same geographical region to share best practices on how to address common transboundary climate-related natural hazards such as floods, drought, cyclones and sea level rise. This certainly represents a strong added-value of the project, whose impacts could even reach more countries of the southern Africa sub-region.

Therefore, there are four Project Components (which will be described in more detail in Part II), the first three contributing to Objective 1 and the fourth one contributing to Objective 2:

- 1. Climate change adaptation planning at the town/city level;
- 2. Assistance with implementation and management of priority investments at the town/city level;
- 3. Tools and guidelines development and training delivery at the national level;
- 4. Inter-country experience sharing and dissemination of lessons learned at the regional level.

³⁸ NB: the Executive Summary of the DiMSUR Feasibility Study can be shared, if requested.

Project Components and Financing:

Project Components and	Financing (<u>NB</u> : all	4 countries are concerne	d in each component):

Programme Components	Expected Outcomes	Expected Outputs	Amount (US\$)
1. Climate change adaptation planning at the town/city level	Municipal staff, communities and local stakeholders understand climate change induced risks pertaining to their city/town and have identified priority actions for climate adaptation	 4 reviewed City Resilience Action Frameworks (RFAs) identifying priority actions for climate change adaptation and mainstreaming adaptation into existing planning and legal instruments; the RFAs define responsibilities of the different municipal departments and local stakeholders in the short, medium and long term; they have a validity of 10 years and their implementation is monitored and reviewed every 2 years. 4 in-depth environmental and social risk assessment studies regarding the priority actions to be implemented in each city/town. 	400,000
2. Assistance with implementation and management of priority investments at the town/city level	Municipal staff, communities and local stakeholders have implemented the identified priority actions and have acquired the capacity to manage and maintain these	 4 detailed sub-projects designed for implementing the selected priority actions, mainly targeting informal neighbourhoods in each municipality Priority actions implemented mainly through community involvement as labour-intensive manpower in each municipality Municipal staff and community members trained and equipped for ensuring the management/ maintenance of the realised priority actions 	8,000,000
3. Tools and guidelines development and training delivery at the national level	National governments have created enabling conditions for scaling up and replicating the same approach in other urban settlements	 Further refinement of the CityRAP Tool, adapted to each country's context and with greater focus on climate adaptation National guidelines for promoting urban climate adaptation National officers trained in urban climate adaptation 	2,000,000

4. Inter-country experience sharing, cross- fertilisation and dissemination of lessons learned at the regional level	Local and national governments of the 4 countries have learned from each other good urban climate adaptation practices and are better prepared to face common transboundary climate- related natural hazards	0	Lessons learned and best practices captured and disseminated through the SADC DRR Unit in partnership with DiMSUR as regional knowledge management platform Cross-fertilisation activities among the participating countries are discussed and prepared Regional workshops for experience sharing among the different countries, and participation to global events	1,000,000
5. Project Execution Cost (9.5%)			1,083,000	
6. Total Project Cost		12,483,000		
7. Project Cycle Management Fee charged by the Implementing Entity (8.5%)			1,061,055	
Amount of Financing Requested			13,544,055	

Project Duration: *4 years (48 months)*

Projected Calendar:

Milestones	Expected Dates
Start of Project Implementation	January 2018
Mid-term Review	January 2020
Project Closing	January 2022
Terminal Evaluation	May 2022

PART II: PROJECT JUSTIFICATION

A. Describe the project components, particularly focusing on the concrete adaptation activities, how these activities would contribute to climate resilience, and how they would build added value through the regional approach, compared to implementing similar activities in each country individually.

The project consists of **four components**:

Under <u>Component 1</u>, the project intends to empower municipal staff, communities and local stakeholders of four vulnerable towns/cities in the understanding and planning process of climate change adaptation up to the identification, in a participatory manner, of priority actions that can serve as entry points to progressively build climate resilience in the targeted cities/towns. The results of the CityRAP Tool implementation in the different cities is summarised as follows:

• Morondava, Madagascar (January-March 2016): UN-Habitat and DiMSUR supported the

city of Morondava to develop, finalise and validate its Resilience Action Plan (nowadays referred as the Resilience Framework for Action – RFA) through the implementation of the first version of the CityRAP Tool. The process gave an opportunity to develop the capacity of the local government to understand and plan actions that progressively build urban resilience and reduce urban risk. After discussing the results of the different activities undertaken by the Municipality during the prioritisation Workshop, participants validated the Resilience Action Plan of Morondava during the validation workshop identifying 4 priority issues to be undertaken at the short, medium and long-term: (i) improve the drainage system; (ii) protect the coastline; (iii) plan the city of Morondava; and (iv) improve solid waste management. Coordination mechanisms and monitoring and evaluation framework have been added to complete the document.

- Zomba, Malawi (October-November 2015): The CityRAP methodology was conducted in Zomba through a participatory and comprehensive process. Based on the compilation of the municipality's assessment results and the community risk maps, a list of priority actions for reducing risks, fostering resilience and enhancing adaptive capacities, was discussed and the following five priority issues agreed and validated: (i) reduce and mitigate floods; (ii) improve the drainage system; (iii) strengthen citizen security; (iv) promote sustainable forest management; and (v) foster strategies to cope with rainstorms. Based on these five priorities, the City of Zomba has elaborated a Resilience Action Plan that details the expected results, planned activities, budget and calendar. Responsible actors for the implementation of each action were identified, and activities were geographically located.
- Chokwe, Mozambique (August-September 2015): UN-Habitat and DiMSUR selected Chokwe as the first pilot city to implement the CityRAP Tool and enable the local government to plan and undertake practical actions to strengthen the resilience of the City. The main output of the process is a City Resilience Action Plan identifying six priority issues: (i) plan neighbourhoods; (ii) improve the drainage system; (iii) improve solid waste management; (iv) strengthen public lighting; (v) develop the urban economy; and (vi) improve education and health infrastructure. The methodology allowed the city of Chokwe to adapt and quickly start implementing the City Resilience Action Plan with minimal outside intervention.
- In Moroni, Comoros, the Tool was not yet implemented but a training of trainers was organised in January 2016 and a preliminary assessment showed the following main pressing issues to be addressed: construct an urban drainage system (almost non-existent) and the implementation of protective measures for sea erosion control.

Thanks to the project funds, the produced Resilience Framework for Action (RFA) for each targeted city/town will be reviewed and a thorough environmental and social risk assessment will then be undertaken for each of the prioritised actions.

Under <u>Component 2</u>, the selected priority actions will be packaged into viable pilot climate adaptation sub-projects with focus on the effects of cyclones, rainfall, floods and sea level rise, to be funded by the project. Since, as indicated above, UN-Habitat has already carried out preliminary work in the four targeted cities/towns, it can be anticipated that the priority actions will consist of:

- (i) the improvement of drainage conditions for all four cities;
- (ii) the design, construction or retrofitting of public facilities as flood and/or cyclone shelters in Chokwe, Morondava and Zomba;
- (iii) the physical demarcation of areas at risk for limiting urban development (zoning) in

Chokwe, Morondava and Zomba; and

(iv) the implementation of protective measures for land/sea erosion control (including afforestation) for Moroni, Morondava and Zomba.

These projects will be implemented under the leadership of the target municipalities through community involvement (e.g. labour intensive activities) and the support of local civil society organisations, in a cost-effective manner. Importantly, local capacity will be developed to ensure the management/maintenance of the pilot projects' outcomes in the longer term. The implementation of physical interventions, which constitutes the major financial investment of the project, will also allow creating temporary jobs especially targeting the youth and women. Efforts will be made to mobilise additional resources.

Under <u>Component 3</u>, project activities will occur at the national level to create the conditions for scaling up and replicating the CityRAP approach in other urban settlements. Based on the experience of identifying and implementing the priority actions in the targeted cities/towns under Components 1 and 2, the CityRAP Tool will be further refined to make it more adapted to the different national contexts. Guidelines will be derived from the improved tool, in alignment with existing policies and legislation, for promoting urban climate adaptation. Based on these guidelines, training and institutional capacity development activities of government and municipal officials will be delivered, especially through the organisation of appropriate national workshops. Existing institutions and networks (e.g. associations of municipalities) will be used for such a purpose, and partnerships/synergies established with on-going initiative at the national level. This is a critical component which will ensure greater sustainability and a lasting impact of the project.

<u>Component 4</u> will focus on: (i) capturing and disseminating the lessons learned and best practices from the implementation of the project activities at the town/city and national level; (ii) discussing and preparing cross-fertilisation activities among the participating countries, and (iii) organising regional workshops for experience sharing among the different countries, and participating to global events.

The regional events will target not just the four countries involved in the project, but also other interested countries in southern Africa. This component, to be managed under the DiMSUR umbrella, highlights the added-value of this regional proposal compared to implementing projects in individual countries separately. Learning from each other lessons and best practices, in a region affected by similar/transboundary threats related to the negative consequences of climate change, and where knowledge and capacity for urban climate adaptation is still much limited, is of essential importance. In addition, the four concerned countries are geographically, morphologically, historically, politically and culturally different from each other, and thus offering a wide range of tailored and diverse solutions.

In this context, the SADC DRR Unit in partnership with DiMSUR will play a strong role as they already embody credible institutions in the region. In particular, DiMSUR will establish its physical presence and recruit the staff secretariat starting from 2017 once the Host Country Agreement has been approved by Cabinet in Mozambique. The Centre is mandated by the four countries to promote inter-country experience sharing and cross-fertilisation. It will work as a repository of the lessons learned and therefore represents the natural framework for knowledge management and sharing regarding project activities.

DiMSUR will also be able, being part of an international network of centres of excellence, to bring in high level expertise from other regions, such as Asia (through the Asian Disaster Preparedness Centre – ADPC) and Latin America. SADC will also be an important partner in

this framework, especially through its DRR Unit. Regional workshops will be organised, to bring in more SADC countries and fostering partnership building and inter-country cooperation.

B. Describe how the project /programme would promote new and innovative solutions to climate change adaptation, such as new approaches, technologies and mechanisms.

Firstly, the project promotes innovative approaches to climate change adaptation in that it involved and strengthens DiMSUR, a new non-profit and autonomous institution which is gradually consolidating in southern Africa and even in the African region. It focuses on themes which still need much development in the African region, and are not yet institutionalised, such as urban risk reduction, urban climate adaptation and resilience. The Centre provides technical assistance and serves as an exchange platform of good practices, experiences and knowledge between the participating member states³⁹.

As referred earlier when presenting DiMSUR, several important international documents and resolutions have called for the establishment of such type of a centre and this project will provide a fantastic opportunity to further strengthening DiMSUR's role and outreach.

Secondly, the project promotes the application of the CityRAP Tool as a new and ground breaking climate change adaptation planning approach that targets specifically small and medium-sized African cities with low institutional capacity. The tool uniquely enables local governments to take the lead in the process of understanding the different types of risk affecting their towns/cities, with minimum external support. Based on inter-sectorial self-assessment and participatory planning, the tool allows to coming up with priority climate resilience actions in the short, medium and long-term, including mainstreaming adaptation into existing municipal planning and legal instruments.

This is rather different from existing tools which rely heavily on outside technical expertise, are very technical in nature and data-hungry, which often creates a disincentive to local governments in kick-starting a process of resilience planning. As a result, capacity retention among urban stakeholders, from local governments to communities, tends to remain low with these tools and the produced plans are seldom understood and implemented.

The CityRAP Tool changes this paradigm, as it was observed during the testing phase carried out in 2015 and 2016. It generates enthusiasm in the local authorities and stakeholders, which are actually able to build urban resilience based on their own understanding and existing capacities. Once the city Resilience Action Frameworks are elaborated based on the tool, more detailed studies can then be outsourced. The difference, this time, is that local governments are in full control and have the confidence that the actions being designed and implemented result from their own prioritisation and decision-making.

Importantly, UN-Habitat closely collaborates with other urban resilience initiatives globally (e.g. Rockefeller Foundation, UNISDR, among others). When presenting the tool and its outcomes it international conferences it is regularly recognised by discussants from academia and development practitioners that the tool fills an important gap, especially when considering that existing tools are data-hungry and require a high level of expertise for their use, elements which are often missing in small/intermediate African cities.

Thirdly, the project privileged a bottom-up approach, i.e. local experiences are mainstreamed into guidelines and strategies at the national and regional level. This allows avoiding the

³⁹ NB: The 10-Years Strategic Plan of DiMSUR approved by the Executive Board can be provided, if requested.

prescriptive and somehow "blind" nature typical of top-down initiatives, which define intervention strategies without first duly taking into account local realities and contexts. UN-Habitat's experience in adopting this kind of approach in regional initiatives (e.g. the Global Environment Facility-funded project in the Limpopo River Basin implemented between 2004 and 2007; or the Urban Resilience Project for Lusophone Africa funded through the UN Secretariat Development Account, still on-going) tells that it creates a positive dynamic of participation of the stakeholders at the various level (local, national, regional) for ensuring successful project implementation.⁴⁰

C. Describe how the project would provide economic, social and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups within communities, including gender considerations. Describe how the project would avoid or mitigate negative impacts, in compliance with the Environmental and Social Policv of the Adaptation Fund.

The priority actions to be implemented under Component 2 in one neighbourhood of each targeted town/city are meant to increase the capacity to adapt to climate change in urban areas. especially to the benefit of vulnerable communities and groups, mainstreaming gender aspects. Compliance with the Environmental and Social Policy of the Adaptation Fund will be ensured whilst the City Resilience Frameworks for Action are produced, by incorporating the risk and impact assessments' recommendations into the design of each pilot sub-project, including appropriate mitigation strategies for implementation.

Economic benefits

The impacts of natural hazards on the economic activities of cities is widely recognised and documented. Among the targeted countries in this proposal, where urbanisation is fast-paced and the potential damages to urban economies by hazards are high, reinforcing urban resilience is imperative. Many of the cities in these countries are still heavily dependent on agricultural activities in peri-urban and urban areas, and therefore cyclones and heavy floods can be extremely prejudicial. In Chokwe town, in Mozambigue, for instance, agriculture employs around 80% of the active labour force in the district while 40% of irrigation fields of the whole country are concentrated in it⁴¹. The 2013 floods damaged not only most trade and services activities of the city but also destroyed most of the cultivated land, creating serious damages for the economy of the city. The pilot activities that will be implemented to improve adaptive capacity in Chokwe (drainage improvement, increase infrastructure resilience and demarcation of risk areas) will benefit all vulnerable population that have their livelihoods harmed by the impacts of natural disasters.

Other concrete examples of economic benefits for the population in the target cities are the benefits of coastal protection in Morondava and Moroni, where both the fishing activities and touristic potential represent important parts of the urban economy.

Social benefits

The proposed actions to enhance resilience in urban areas will benefit primarily the socially vulnerable as they tend to be the ones most exposed to risks in the four targeted countries. In

⁴⁰ A field visit carried out to the city of Chokwe in September 2016 (one year after the conclusion of the CityRAP exercise) showed that the city had make admirable progress on the implementation of key activities that were previously blocked thanks to the awareness and cooperation of the population that had participated in the planning exercise (e.g. relocation of households that were occupying areas of natural water drainage, cleaning of drainage channels, opening of roads, etc.) ⁴¹ MAE - Ministério da Administração Estatal (2005) Perfil do Distrito de Chokwe

Malawi, for example, the World Bank found that the regions most affected by the 2015 flood - which heavily impacted the target city of Zomba - have per capita poverty rates of 75% or more (measured as US\$1.25 per day) compared to an average rate in Malawi of around 40%⁴². This trend indicating that people living in flood-prone areas are the poorest is partially explained by the urbanisation dynamics in the country (see above). Similarly, in Comoros, heavy rains in 2012 affected approximately 80,000 people in the Moroni region that suffered with broken water pumps in precarious areas⁴³. The pilot actions to be implemented in the target cities/towns will necessarily take into account the most vulnerable, in particular those in informal areas that are often neglected.

The CityRAP methodology brings additional social benefits to the resilience building process, considering that inclusion and empowerment are parts of its core premise. All minorities and vulnerable population should be heard in the planning processes. This includes illiterate people, which are included in e planning process through participatory risk mapping as part of the CityRAP Tool. Importantly, gender equality is promoted in all stages of the methodology.

Finally, the proposed approach for resilience building in urban areas is comprehensive. It focuses on capacity building and considers resilience as a continuous process that once started can be the beginning of virtuous cycle with long term social benefits for the most vulnerable.

Environmental benefits

Fast paced and unplanned urbanisation in the four targeted countries resulted in the occupation of environmental sensitive areas that damages the environment and puts people at risk, as well as the exploitation of natural resources without any regard to possible negative impacts. The actions proposed involve several activities aiming at reducing the impacts of natural disasters and increasing urban adaptive capacity by improving the way human settlements interact with their territories and environment (e.g risk assessments, coastal protection, identification and demarcation of environmentally sensitive and risk areas, among other).

Compliance with the Environmental and Social Policy of the Adaptation Fund will be ensured in the process of producing the City Resilience Action Frameworks are produced, by incorporating the risk and impact assessments' recommendations into the design of each pilot sub-project, including appropriate mitigation strategies for implementation.

D. Describe or provide an analysis of the cost-effectiveness of the proposed project and explain how the regional approach would support cost-effectiveness.

The proposed project will allocate the majority of the funds to Component 2 and as such to interventions with focus on the effects of cyclones, rainfall, floods and sea level rise. It can be anticipated that the priority actions will consist of strengthening resilient infrastructure in urban settings such as drainage and protective measures for land and sea erosion control. Investment into these areas can be viewed as creating greater capacity to absorb shocks and adapt to impacts. It can further be seen as a prevention of future economic loss as well as the saving of livelihood and lives. As outlined in the project background section, African cities/towns are among the ones with the biggest financing gap for addressing climate vulnerability, and are hence severely challenged by rising economic loss, also due to the fact that most loss is uninsured and governments do not have the financial reserves or access to contingency

⁴² http://blogs.worldbank.org/voices/recent-floods-malawi-hit-poorest-areas-what-implies

⁴³ http://reliefweb.int/disaster/fl-2012-000066-com

financing that would allow them to absorb losses, recover and rebuild. This is further complicated by the fact that municipalities are legally autonomous, which limits the needed financial support from central government. This implies that taking no action will lead to incrementally increasing costs in time associated with losses due to storms, floods and landslides as well as lower economic productivity in the affected areas.

As outlined in Part 1 of the concept note, the interventions under Component 2 will be implemented under the leadership of the target municipalities through community involvement (e.g. labour intensive activities) and the support of local civil society organisations. This model of partnership will allow significant cost reduction as concerned municipalities are expected to provide in-kind support. At the same time, the labour intensive physical interventions will provide economic benefits to the communities through temporary job-creation, especially targeting women and youths. Importantly, local capacity will be developed to ensure the management/maintenance of the pilot projects' outcomes in the longer term.

The regional approach is a major aspect of ensuring the cost-effectiveness of the project, through the sharing of experience, knowledge and of other resources. The project will further ensure cost-effectiveness by relying on the SADC DRR Unit in partnership with DiMSUR. These two institutions will take the lead in the regional coordination of activities and making sure that the different actors at the various levels (municipal, sub-national, national and regional) establish platforms of collaboration and dialogue with each other. DiMSUR will enable staff sharing costs and avoid an excessive spread of financial resources to several institutions, as it will work as the umbrella for the different project components.

During further formulation of the project document, a more detailed cost effectiveness analysis will be undertaken, comparing the proposed resource allocation with measurable outcomes to other options, in order to validate costs, benefits and effectiveness of the interventions.

E. Describe how the project is consistent with national or sub-national sustainable development strategies, including, where appropriate, national or sub-national development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist. If applicable, please refer to relevant regional plans and strategies where they exist.

At the global level, the project aligns with the New Urban Agenda, the Quito Declaration on Sustainable Cities and Human Settlements for All, approved at the United Nations Habitat III conference in October 2016. It specifically refers to the vision outlined in the new Urban Agenda, being cities and human settlements that are participatory and promote civic engagement and foster social cohesion, inclusion and safety in peaceful and pluralistic societies, where the needs of all inhabitants are met, recognizing the specific needs of those in vulnerable situations; and to the vision to adopt and implement disaster risk reduction and management, reduce vulnerability, build resilience and responsiveness to natural and humanmade hazards, and foster mitigation of and adaptation to climate change. The project will contribute to the implementation and localisation of the principles and commitments outlined therein, such as to ensure environmental sustainability by building urban resilience, by reducing disaster risks and by mitigating and adapting to climate change.

The project is further consistent with the Paris Agreement adopted under the United Nations Framework Convention on Climate Change, specifically Article 2 (b) with reference to the objective of increasing the ability to adapt to the adverse impacts of climate change. Importantly, it refers to Article 7.5. of the Paris Agreement, where it is outlined that 'Parties acknowledge that adaptation action should follow a country-driven, gender-responsive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems, and should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems, with a view to integrating adaptation into relevant socioeconomic and environmental policies and actions, where appropriate'. The project design adheres to all the outlined principles as further detailed in Part I of this concept note.

Consistency is moreover ensured with the Sendai Framework for Disaster Risk Reduction for the period 2015–2030 and its four priorities for action, being: 1) Understanding disaster risk; 2) Strengthening disaster risk governance to manage disaster risk; 3) Investing in disaster risk reduction for resilience; and 4) Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction.

The project further aligns with the Sustainable Development Goals (SDGs) n.11: "Make cities and human settlements inclusive, safe, resilient and sustainable", notably target 5 ("By 2030, to significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations) and target 9 ("By 2020, to substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all level); as well as SDG target 13.1: "Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries".

At the continental level, the project is consistent with the Agenda 2063- The Africa We Want, in that it strengthens climate resilient communities, as called upon in aspiration 1, item 10. It is further consistent with the Mauritius Declaration on the Implementation of the Sendai Framework in Africa and its Programme of Action (PoA), which replaced the Africa Regional Strategy for Disaster Risk Reduction that expired in 2015. In line with the PoA, the project helps to achieve the set targets of increasing integration of DRR in regional and national sustainable development, and climate change adaptation frameworks, mechanisms and processes; as well as increasing the number of countries with, and periodically testing, risk-informed preparedness plans, and, response, and post-disaster recovery and reconstruction mechanisms.

At the southern Africa level, it takes into account the 10-year Disaster Risk Reduction Strategy of SADC, now concluding⁴⁴, which focuses on:

- Strengthening governance, legal and institutional framework at all levels of DRR;
- Facilitating the identification, assessment and monitoring of disaster risks and support enhancement of early warning systems at all levels;
- Promoting usage and management of information & knowledge, innovation & education to build a culture of safety and resilience at all levels in the SADC region;
- Ensuring that DRR becomes a national and local priority with a strong institutional basis for implementation;

⁴⁴ NB: the new 10-year DRR strategy for SADC will have to align with the recently approved DRR PoA for Africa.

 Integrating preparedness and emergency response into disaster risk reduction interventions.

With regard to the alignment to national development priorities, the project is consistent with the relevant national strategies and policies in each country.

(i) Madagascar:

In alignment with the National Strategy of Disaster Risk Management (2016-2020) and its strategic objective 5, the project reduces risks at the local and national level and contributes to vulnerability reduction. The project also contributes to the implementation of the 5th pillar of the National Development Policy that focuses on building resilience to disaster risks, as well as the National Policy for Fighting Climate Change in accordance with the National Environmental Policy.

At city level, the project will strengthen the capacity of Morondava in the city's ability to cope with the impacts of climate change and disaster risk, considering its high vulnerability to floods and cyclones as defined in the Resilience Action Plan of Morondava (2016-2026).

(ii) Malawi:

The project is consistent with the National Disaster Risk Management Policy (2015), specifically the priority areas focused on adoption of resilience enhancing intervention. The project further addresses the overall objectives of the National Climate Change Policy (2012), being the promotion of activities to increase community awareness of climate change impacts, adaptation and mitigation through empowering local stakeholders in the climate adaptation planning processes.

In the city of Zomba, the project responds to the identified priority actions developed in the Resilience Action Plan of Zomba (2016-2026) to strengthen the city's coping capacity towards the impacts of climate change.

(iii) Mozambique:

The project contributes to the implementation of the National Strategy for Climate Change Adaptation and Mitigation (2013-2025), specifically the general objective of establishing action guidelines to build resilience. It contributes to the Government's Five Year Plan (2015-2019), specifically priority five with the strategic objective of reducing risk and adapting to climate change and reducing the vulnerability of communities, economy and infrastructures to climate risks. It further addresses the crosscutting issues outlined in the 20-year National Development Strategy (2015-2035), being enabling capacity-building of municipal technicians and community members.

Chokwe town, located in the lower Limpopo River basin, and being extremely prone to floods and droughts, has made climate adaptation one of its highest municipal development priorities. The project will contribute to the implementation of the Resilience Action Plan of Chokwe (2016-2026).

(iv) Union of Comoros:

In alignment with the Strategy for Rapid Growth and Sustainable Development (2015-2019), specifically strategic areas three and four, the project will strengthen local governance, build capacity and reinforce institutional coordination to enhance urban resilience. Further, in line with the overall objective of the strategy, the project will contribute to climate risk reduction and sustainable development by providing appropriate localised solutions.

Thereby it will support Moroni city's aspirations to become more resilient to the impact of climate change. While there is no official city strategy as of yet, the initial consultative process undertaken will be extended to a comprehensive stakeholder consultation, the results of which shall be reflected the project design.

F. Describe how the project meets relevant national technical standards, where applicable, such as standards for environmental assessment, building codes, etc., and complies with the Environmental and Social Policy of the Adaptation Fund.

The project will comply with the Environmental and Social Policy of the Adaptation Fund as described in Section L. During preparation of the full proposal, a detailed risk environmental and social risk assessment of the project components and different interventions will be undertaken. If and where necessary, the project components will be adapted to ensure full compliance.

Apart from the Environmental and Social Policy of the Adaptation Fund, the project shall also adhere to UN-Habitat's Environmental and Social Safeguards System (ESSS). The latter outlines that UN-Habitat projects will comply with host country laws and obligations under international law and conventions. It serves as a framework outlining UN-Habitat's commitment, capacity and procedures to assess and manage the environmental and social risks of Projects. The ESSS is fully integrated with the Project Based Management Policy. The objectives of the ESSS are to: (i) identify and evaluate potential environmental and social risks and negative impacts of projects; (ii) apply a mitigation hierarchy to anticipate and avoid or minimize risks, and where impacts remain, compensate for risks and impacts to people, communities, and the environment; (iii) manage environmental and social safeguards throughout the project; (iv) engage the affected community through disclosure of project-related information and consultation on matters that directly affect them; and (v) ensure that grievances and external communications from stakeholders are responded to and managed appropriately. The ESSS is aligned with United Nations and bi/multilateral institutions' environmental and social safeguard policies. It has been prepared while bearing in mind the safeguard management systems of other organizations including the International Finance Corporation (IFC), the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), and the International Union for Conservation of Nature (IUCN).

Further, at project proposal stage, and in line with UN-Habitat's Project Management Cycle and Work Flow policy, the project will further be screened for its adherence to the seven thematic areas of work of UN-Habitat, and its standards for three cross-cutting issues which are: gender, human rights and climate change.

For the implementation of the project, the following national legislation in the respective countries is of relevance:

(i) Madagascar

Environmental impact assessments (EIAs) in Madagascar are carried out on the basis of Decree No. 99-954 of 15 December 1999, as amended by Decree No. 2004-167 of 03 February 2004 published on 10 July 2000 and 24 May 2004. The integration of EIAs in the project cycle is essential for providing environmental information at key stages. Early results of an EIA may indicate practical design changes that would avoid or reduce adverse environmental impacts or better benefit from environmental benefits. A screening procedure is to be carried out by the

National Office of the Environment and determines if the project must be subject to an EIA or not.

<u>Sub-project activities in Morondava related to flood and erosion control</u> would be designed and implemented on the basis of the following laws:

- Law 2001-005: Law on the Code of Management of Protected Areas and its subsequent texts (Decree No. 2005-013 and No. 2005-848);
- Regulations related to the sea, Law No. 99-028 of 3 February 2000 revising the Maritime Code;
- Regulations related to coastal management (in preparation);
- Flood Control Standard for Road Infrastructure Construction Madagascar Flood Protection Guide.

<u>Sub-project activities in Morondava related to sea erosion control through the restoration of mangroves</u> would be implemented following the forestry law of the country and more particularly the following legislation:

- Law No. 2015-003 updating the Malagasy Environment Charter;
- Law No. 2015-005 revising the Code of Management of Protected Areas;
- Law No. 97-017 of 16 July 1997 regarding forest management;
- Law No. 96-025, which transfers natural resources management responsibilities to local grassroots communities.

<u>Sub-project activities in Morondava related to buildings and infrastructure construction works</u> such as protection dykes would refer to construction and public works regulations, including:

- Infrastructure such as dam, dykes, etc., would be built according to the Malagasy Standards for the Construction of Hydro Agricultural Infrastructure Against Floods;
- Repairing and construction of roads would be done in accordance with the Flood Control Standards for the Construction of Road Infrastructure Madagascar Flood Protection Guide;
- Cyclone-resistant construction works would be done according to the related guidelines and Decree No. 2010-243 of 21 April 2010.
- Urban planning and housing related activities would comply with Law No. 2015-052.

<u>Sub-project activities in Morondava related to the rehabilitation of drainage channels</u> would be conducted in line with the regulations related to sanitation adopted in accordance with Decree No. 2008-1057 of 10 November 2008 and also taking into consideration the National Directive for Climate Resistant Infrastructure - Drinking Water Supply.

All sub-project activities in Morondava would further align with regulations related to land management:

- Law No. 2006-031 defining the legal regime for private non-titled land ownership;
- Law No. 2008-014 on the private domain of the State, Decentralised Communities and Public Entities;

• Law No. 2005-019 on the status of land tenure.

(ii) Malawi

The conduct of EIA in Malawi is guided by the 'Guidelines for Environmental Impact Assessment' of the Government of Malawi published in December 1997. Malawi's EIA process is specifically designed to integrate EIA requirements within the project cycle. This integration is essential for an EIA study to provide timely environmental information at key stages in the project cycle. Thus early results from an EIA may indicate practical design changes which would avoid or reduce negative environmental impacts, or better capture environmental benefits. As prescribed under Section 24(1) of the Environmental Management Act, Malawi has a prescribed list of projects for which an EIA is mandatory (List A) and another list (List B) of projects for which an EIA is mandatory, may be necessary or not all.

Sub-project activities on remedial flood and erosion control would be designed and implemented based on 'Standard Specification for Road and Bridge Works' of the Malawi Government (1978) with specific reference to drainage and under Series 2000: Drainage of the SATTC 'Standard Specifications for Road and Bridge Works' of 1998.

Sub-project activities on afforestation, as measure for land erosion control, would be implemented following the country's Forestry Act and specifically the 'Standards and Guidelines for Participatory Forestry in Malawi' of the Government of Malawi published in 2005. The standards and guidelines promote community participation, management and ownership of forests and forest resources.

Sub-project activities related to buildings would refer to the 'Safer House Construction Guidelines: Technical Manual', developed in 2010 and revised in 2014 to support households, communities and the Government and other partners in adaptive architecture to reduce exposure to disasters through sound construction. The city's planning standards and building bylaws also apply within the city jurisdiction.

(iii) Mozambique

In Mozambique, the Environmental Law defines the legal basis for the use and management of the environment as a means of guaranteeing the country's sustainable development. According to this law, the EIA is an instrument that supports decision making on the allocation of an environmental license. Environmental licensing shall precede any other legally required license in all public and private activities that may be directly or indirectly affected by the environment. The process of EIA is regulated by Decree No. 45/2004, while environmental auditing and environmental inspection are regulated, respectively, by Decree No. 32/2003 and 11/2006.

The EIA Process Rules define all stages of the EIA process - screening, definition of scope, content of studies, public participation process, review and approval by the environmental authority. The screening defines the type and level of detail of the environmental and social assessment study. The EIA Mozambican Regulation considers three categories to identify the appropriate level of environmental impact assessment: Category A (a full Environmental Impact Assessment - EIA, with Environmental Management Plan Category B (requires a Simplified Environmental Study - EAS, with specific Environmental Management Plan) and Category C (exempt from an EIA).

Under Component 2, the sub-project concerning Chokwe will include construction/retrofitting of public facilities (cyclone/flood shelter). The risks associated with this kind of infrastructure are generally low, hence the project is likely to be assigned to environmental category B. An EIA will be done for all sub-projects to be implemented in Chokwe. Specific Environmental Management Plans (EMP) need to be prepared as necessary once the exact locations of those facilities have been identified. The EIA is then be submitted for the Government review and publicly disclosed in the affected communities prior to appraisal.

Moreover, the sub-project activities regarding building/retrofitting of public facilities shall refer to the 'National Guidelines and Norms for Safe Constructions of Public Buildings', developed in 2015 under the Safer School Project (2012-2015) endorsed by the Government in 2016, which is currently being applied by the Ministry of Public Works and Water Resources and the Ministry of Education and Human Development. These guidelines are being disseminated to all public sectors in Mozambique through on-the-job trainings and with technical assistance from UN-Habitat.

Other relevant aspects of the Mozambique Environmental and Social Framework include legislation on: solid waste management, air emission standards, air quality and noise, water resources, water quality, pesticides, coastal management, land ownership, land use planning, cultural heritage, protected areas and conservation areas, as well as involuntary resettlement.

The project shall also adhere to the Disaster Law (No.15/2014), which defines the parameters to classify the country in high, medium and low risk areas, with specific actions identified for each risk class. For example, as concerns flood risk, prevention or restricted zoning is a measure required for high risk areas, while for medium and low risk areas public infrastructure and drainage system are expected to be constructed. Thus, the pre-identified activities for Chokwe sub-projects respond adequately to the requirements of this major legal instrument.

(iv) Union of Comoros

In Comoros, the project complies with the Environmental Law No. 94-018, which aims in Article 2 to: a) preserve the diversity and integrity of the environment of the Republic of the Comoros, as an integral part of the universal heritage, which is particularly vulnerable associated with insularity; b) create the conditions for a sustainable quantitative and qualitative use of natural resources for present and future generations; c) ensure an environmentally sound and balanced living environment for all citizens.

Further of relevance to the project components in Comoros are the Accelerated Growth and Sustainable Development Strategy (SACADD), as well as the Urban Development Code and Communal Development Plans. The project further follows the objectives of the National Environmental Policy and the Environmental Action Plan.

Concerning the protection of natural habitats, the project will be implemented in the municipality of Moroni. It will not result in unjustified conversion or degradation of critical natural habitats, including those that are: a) legally protected; b) officially recommended for protection; c) recognized by authoritative sources for their high conservation value, including as essential habitat; or d) recognised as protected by traditional or indigenous local communities.

G. Describe if there is duplication of project with other funding sources, if any.

Despite of the existence of initiatives in the four targeted countries for climate change adaptation and/or mitigation and disaster risk reduction (e.g. by the World Bank, DFID, USAID, UNDP, UNEP, among others), to UN-Habitat's knowledge, and based on a desk review, none is focusing solely on urban climate adaptation, concern the four cities/towns targeted by this project and is adopting the proposed bottom-up approach, from the local level to the national and regional level, thus mainstreaming participation in each implementation step.

It is worth mentioning the following initiative with which the project will coordinate and establish, possibly, some synergies:

- The Coastal Cities Adaptation Project (CCAP), funded by USAID in Mozambique, and concerning the cities of Nacala and Quelimane. UN-Habitat is an implementing partner of this project and is currently building demonstrative flood-resistant houses.
- The World Bank Cities and Climate Change Programme (CCCP), which concerned 20 municipalities in Mozambique and is now entering in its second phase. The World Bank is also supporting the cities of Beira in Mozambique and Antananarivo in Madagascar by funding major flood reduction infrastructure projects, mainly related to drainage conditions.
- In the Union of Comoros, a project with which synergies could be created is currently under development by UNDP through the Global Environment Facility (GEF), with a concept approved in March 2016, titled "Strengthening Comoros Resilience Against Climate Change and Variability Related Disaster".⁴⁵ Specifically, collaboration could be established regarding objective 1 of the GEF proposal: "Systemic and institutional capacities for the long-term management and adaptation planning of disaster risks caused by CC are strengthened at local, provincial and national levels". Even if no specific project activities are planned for the city of Moroni, joint training activities could be organised at the national level under Component 3 of the current proposal. This will be discussed with the UNDP country team during the development of the full project proposal.

H. If applicable, describe the learning and knowledge management component to capture and disseminate lessons learned.

The project has a dedicated component related to knowledge management (Component 4) which focuses on capturing and disseminating the lessons learned and best practices from the implementation of the project activities at the town/city and national level, as well as intercountry experience sharing.

The component hence focuses on systematically keeping track of experiences gained from the project both to enrich the local, national and global knowledge on climate change adaptation and to accelerate understanding about what kinds of interventions and processes can be seen as best practices for potential replication in the region. Knowledge exchange between the four countries affected by similar climate-related threats is at the core of the project. In this context, DiMSUR will work as the framework for knowledge management and sharing, in line with its Charter's objective to "Enable DRR, CCA and urban resilience knowledge, information and exchanges between Member States" (see Annex 1, Article 3.4 (d) of the DiMSUR Charter).

⁴⁵https://www.thegef.org/sites/default/files/project_documents/ID6912_Council_NoNotificati_Letter1.pdf

DiMSUR also has existing tools and mechanisms for information sharing on progress, lessons, plans, milestones through its website which is frequently being visited (www.dimsur.org)⁴⁶ and social media (Facebook and Twitter) but also a regular newsletter that is being distributed to a wide audience.

The project further includes systematic bottom-up dissemination of lessons learnt from local to national level under Component 3, whereby lessons learnt from the local level will be presented at the national level and translated into useful training guidelines and recommendations for evidence-based policy making.

The development of the full proposal would include a comprehensive media outreach strategy for further inclusion of local communities in project design and implementation.

I. Describe the consultative process, including the list of stakeholders consulted, undertaken during project preparation, with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy of the Adaptation Fund.

As outlined in the project background, UN-Habitat has carried out preliminary work through the CityRAP Tool in the target countries. In Madagascar, Malawi and Mozambique, the identification of priority actions for building urban resilience has been a highly participatory and comprehensive process through the implementation of the CityRAP Tool. A team of municipal technicians was trained and conducted the process of data collection and analysis, prioritisation and drafting of a preliminary city resilience action plan under the lead of the municipality, with UN-Habitat and DiMSUR providing support and strategic advice. The consultations involved local authorities, municipal technical staff and communities most affected by risks and climate change, as well as civil society organizations. The relevant validated plans at city level cited in section E can be shared if required.

The priorities set by key stakeholders consulted in each city have formed the basis of the physical interventions outlined in the pre-concept as well as the concept note. These physical interventions have been chosen as they are deemed to be the most effective for raising the adaptive capacity of the respective city/town.

As for the Union of Comoros, a training of trainers of the CityRAP Tool has taken place, but no city resilience action planning processes as of yet. Hence, a separate consultation process on the concept note's content has been undertaken as outlined below.

The consultative process for each country took place as described below. Further comprehensive consultation in all four countries will be undertaken during the development of the full project proposal.

(i) Madagascar

In Morondava, the consultation process involved local authorities (regional, district, municipal, neighbourhood level), municipal technical staff, communities most affected by risks and climate change and civil society organisations.

⁴⁶ In the second half of 2016, the website showed a total of 225,646 visitors, with monthly visitors of up to 56,000 people, highlighting the demand and interest in the region.

Overall, 124 persons have directly participated in the data collection and identification of priority actions contributing to the elaboration and adoption of the City Resilience Action Plan of Morondava. For the elaboration and adoption of the Plan two workshops were organised:

- 15 March 2016: prioritisation workshop during which the ten priority issues in the short, medium and long term have been selected with the participation of 26 representatives of local stakeholders, including communities and municipal staff;
- 15-17 March 2016: validation workshop, during which 23 participants validated priority issues and activities identified in the City Resilience Action Plan of Morondava prepared by the team of municipal focal points with the support of UN-Habitat and DiMSUR.

An assessment of the proposed project activities of the concept note in Morondava took place in stakeholder consultations on 6 December 2016 with 20 representatives from the Menabe Region, the Urban Municipality of Morondava and the fokontany (neighbourhood) level (fokontanys Ampasy, Avaradrova, Sans fil and Tanambao), the technical services of the Ministry and NGOs/CSOs among others Morondava Women and Youth Association, journalists and development and risk management committees in the neighbourhoods. The associations involved in the field of the environment were represented by the Deputy Mayor of Morondava. The participants approved the proposed activities to be carried out in the project. As important points validated are the consideration of gender and disaster risks and the participation of young people. It was further proposed that journalists should be involved in activities for transparency, and that existing studies within the municipality on environmental aspects should be taken into account. The activities foreseen in the concept note were also approved at the level of fokontany chiefs. It was found that the activities would improve the current living conditions (more decent and safe, thus offering alternative solutions to all forms of housing relocation). It was found that a further priority of Morondava would be reforestation actions with fast-growing and drought-resistant species to meet the growing need for energy.

(ii) Malawi

In Zomba, the consultation process involved the national (Department of Disaster Management Affairs, DoDMA), city (Zomba City Council) as well as the neighbourhood level (neighbourhoods Chambo, Likangala, Mbedza and Mtiya). Overall, 200 persons, among them municipal technical staff, community representatives, civil society organizations and the Zomba Polytechnic have directly participated in the data collection, risk mapping exercises and identification of priority actions.

For the elaboration and adoption of the City Resilience Action Plan of Zomba, the following workshops were organised:

- 22-24 November 2015: Data analysis workshop with the municipal focal points and the support of the UN-Habitat/DiMSUR team.
- 25 November 2015: Prioritisation workshop with representatives from the local communities of Chambo, Likangala, Mbedza and Mtiya and municipal technicians. As result, the City of Zomba came out with five priority actions for its Resilience Action Plan.
- 27 November 2015: Validation workshop with representatives from the Zomba City Council, municipal technicians and community representatives. The plan was approved and referred to the city council for further detailing of priority actions and the related budget.

Further consultations have been made with the Zomba City Council to validate the indicative provisions in the pre-concept note. Zomba City Council management and council have studied the pre-concept in December 2016 and positively commented on the planned activities targeting the city of Zomba under component 2, and transmitted that it would be appreciated if environmental enhancement projects such as tree planting and management, as well as land conservation would be reinforced under Component 2. With regard to Component 4, community exchange on the national level has been suggested in addition to the regional workshops planned. The latter could actually be integrated under Component 3.

(iii) Mozambique

The consultation process in Chokwe involved key stakeholders in the spheres of urban governance and development including city councillors, management and technical staff, as well as communities and the civil society. Overall, 116 persons have directly participated in the data collection and identification of priority actions contributing to the elaboration and adoption of the City Resilience Action Plan of Chokwe. For the elaboration and adoption of the Plan two workshops were organised:

- 1 September 2015: prioritisation workshop during which the six priority issues have been selected with the participation of around 30 representatives of local stakeholders, including communities and municipal staff;
- 3 September 2015: validation workshop, during which 40 participants validated priority issues and activities identified in the City Resilience Action Plan of Chokwe prepared by the team of municipal focal points with the support of UN-Habitat and DiMSUR.

During the consultative process, all municipal sectors were involved and two local communities were consulted.

(iv) Union of Comoros

During the concept note formulation phase, a preliminary stakeholder consultation was held on 9 December 2016 with several stakeholders concerned, including representatives from government institutions, academia and civil society, in order to elicit views and opinions on the concept note.

The participants involved representatives from the Directorate General of Civil Security, the Karthala Volcanological Observatory, the NGO Ulanga Ngazidja, the National Network for Women and Development, the Comorian Red Crescent Society, the Comoros University, the National Agency for Civil Aviation and Meteorology, the Association of Mayors. The participants appreciated the relevance of the project and especially that it will be a first in the country to choose the capital for a project of this type. There was no contradictory point of view.

J. Provide justification for funding requested, focusing on the full cost of adaptation reasoning.

The proposed project components, outcomes and outputs fully align with national and local government/institutional priorities/gaps identified, with identified community and vulnerable groups needs and, as described in the project objectives, with the Adaptation Fund outcomes as stated in the Adaptation Fund Results Framework.

The project targets four countries over four years for a total project cost of almost US\$12.5 million. Specifically, four cities/towns have been targeted for climate adaptation planning and will benefit from the implementation of pilot projects under Component 2. This concrete adaptation component will be allocated with almost two thirds of the project funds.

Funding allocation for the other, softer, components is required for preparatory purposes (Component 1), as well as producing of tools, guidelines and national scaling up (Component 3) and regional knowledge exchange and replication.

The table below provides a justification for funding requested, focusing on the full cost of adaptation reasoning, by showing the impact of AF funding compared to no funding (baseline) related to expected project outcomes.

Outcomes under Components 1-4	Baseline (without AF)	Additional (with AF)	Comment / Alternative adaptation scenario
1. Municipal staff, communities and local stakeholders understand climate change induced risks pertaining to their city/town and have identified priority actions for climate change adaptation	Municipal staff, communities and local stakeholders have limited understanding of climate change induced risks pertaining to their city/town and have not identified concrete strategies for adaptation planning, leaving them vulnerable to future negative impacts.	Municipal staff, communities and local stakeholders have used the CityRAP Tool to identify climate change vulnerabilities and disaster risks and developed Resilience Frameworks for Action to address these in their respective city/town.	Without local data/information on vulnerabilities and disaster risks, as well as public participation in the planning process, adaptation measures can be implemented but would not be as effective and/or appropriate without proper consultation and participation.
2. Municipal staff, communities and local stakeholders have implemented the identified priority actions and have acquired the capacity to manage and maintain these	Target cities/towns and their municipal staff, communities and local stakeholders are not implementing strategic physical interventions for climate change adaptation with focus on the effects of cyclones, rainfall, floods and sea level rise.	Target cities/towns have implemented strategic physical interventions for climate change adaptation, and have built the capacity to manage and maintain these, thereby increased the resilience to overall climate change vulnerability and disaster risks.	Training the local authorities and stakeholders on how to manage and maintain the physical interventions is a crucial aspect for the sustainability of the project.
3. National governments have created enabling conditions for scaling up and replicating the same approach in other urban settlements	Most municipalities in the four target countries and concerned national institutions have limited knowledge, capacity and practice for planning towards urban resilience and climate change adaptation.	The majority of the municipalities in the four countries and concerned national institutions have increased knowledge, capacity and practice for planning towards urban resilience and climate change adaptation.	Concrete experiences from local level implementation allow improving and delivering national training guidelines, thus creating the conditions for scaling up in other cities/towns.

<u>Table 2</u>: Overview of impact of AF funding compared to no funding (baseline) related to expected project outcomes

4. Local and national governments of the four countries have learned from each other good urban climate adaptation practices and are better prepared to face common transboundary climate-related natural hazards	Throughout the region, common transboundary- related hazards exist and there is lack of strategies, capacity and practice for planning towards urban resilience and climate change adaptation.	Regional knowledge exchange on the best practices and cross- fertilisation has been facilitated, strengthening the inter-country strategies, capacity and practice for planning towards urban resilience and climate change adaptation.	Regional knowledge exchange and cross- fertilization activities constitute effective mechanisms to increase inter-country cooperation for adapting to common climate-related hazards.
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K. Describe how the sustainability of the project outcomes has been taken into account when designing the project.

The sustainability of the project is inherently embedded in its design. The project is following the principle of sustainability mainly through the aspects of capacity building, bottom-up and participatory approach, knowledge sharing, national and regional replication and scaling up.

As mentioned in Part 1 under Project Background and Context, local governments in the target countries lack the financial and institutional capacity to effectively plan for climate change hazards. The project's capacity building efforts (see project Component 3 as described in Part 1) will strengthen the municipalities' management mechanisms to reduce their fragility in the face of climate impacts and natural hazards, hence per se have a sustainable influence on the future urban resilience of the target countries. Involvement of the respective countries' local governments and academic or training institutions in the implementation is thereby an important element of national capacity building and critical towards the sustainability of the project's outcomes. Importantly, local capacity will also be developed to ensure the management/ maintenance of the projects' outcomes in the longer term (see project Component 2 as described in the Part 1).

As outlined in Part 1 of the concept note, project activities under Component 3 will occur at the national level to create the conditions for scaling up and replicating the CityRAP approach in other urban settlements. The CityRAP Tool will be refined and respective guidelines will serve as basis for training workshops for government and municipal officials for replication of the tool deployment in other cities/towns in the four target countries. Existing national institutions and networks (e.g. associations of municipalities) will be involved in organising and conducting the training workshops, and partnerships/synergies established with on-going initiatives at the national level. This is a critical component which will ensure greater sustainability and a lasting impact of the project.

Furthermore, the project is designed in order to achieve enhanced communication and information exchange between cities and towns in each country and across the four countries to strengthen risk reduction and resilience practices (see project Component 4 as described in Part 1). A multiplier effect and cross fertilization at the regional level is thus embedded in the project's design that caters for sustainable future exchange on urban risk reduction tools, information, strategies and best practices. Hereby the sustainability is directly linked to the institutional level and the involvement of DiMSUR as an established organisation.

Lastly, the physical interventions and capacity building components of the project will lead to long term economic, social and environmental benefits as outlined in Sections C and D in Part 2.

The overall sustainability will be further analysed during the preparation of the full project proposal.

L. Provide an overview of the environmental and social impacts and risks identified as being relevant to the project.

The proposed project seeks to fully align with the Adaptation Fund's Environmental and Social Policy (ESP). Outlined below is a brief description of the screening process that has been carried out to evaluate environmental and social impacts of the project, and areas where steps will be taken and where further assessment is needed during the development of the full project proposal, when the proposed activities are detailed out further.

Activities under Component 1 (Climate change adaptation planning at the town/city level), Component 3 (Tools and guidelines development and training delivery at the national level) and Component 4 (Inter-country experience sharing, cross-fertilisation and dissemination of lessons learned at the regional level) are 'soft' components of which the screening process has concluded that no environmental and social negative impacts would result.

Activities under Component 2 (Assistance with implementation and management of priority investments at the town/city level) are 'hard' activities in the sense that they relate to physical implementation. As such, some activities have the potential, without an environmental and social safeguarding system, including mitigation measures, to create negative environmental and social impacts. The results of the screening process for activities proposed **under Component 2 solely** are outlined in the table below.

Overall, as outcome of the assessment, the 'hard' project activities falls under Category B of the Adaptation Fund's impact classification, because the potential adverse impacts that are limited and can be mitigated through a precautionary approach and a mitigation management system, after undertaking further detailed ESP studies in the course of developing the full project proposal.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
Compliance with the Law	Х	
Access and Equity		Х
Marginalised and Vulnerable Groups		Х
Human Rights	Х	
Gender Equity and Women's Empowerment	Х	
Core Labour Rights	Х	

Indigenous Peoples	Х	
Involuntary Resettlement	Х	
Protection of Natural Habitats		Х
Conservation of Biological		v
Diversity		~
Climate Change	Х	
Pollution Prevention and		v
Resource Efficiency		~
Public Health	Х	
Physical and Cultural Heritage		Х
Lands and Soil Conservation		Х

Compliance with the Law:

The final project design will be compliant with all relevant regional and national laws, especially those cited under Section F of Part 2. To ensure this, during the development of the full project proposal, relevant authorities in the four countries will be consulted to ensure that no legal issues arise and that all relevant legal requirements are met.

Access and Equity:

The project design will ensure that project activities will not reduce or prevent communities at project sites from accessing basic health services, clean water and sanitation, energy, education, housing, safe and decent working conditions and land rights. The project will respect all land rights and does not envisage to disposes anyone of their land. Where it may be necessary to do so (people living in frequently flooded areas, for example), due process will be followed in accordance with the national laws and guided by international conventions.

While it is considered unlikely at this stage, there is a possibility that the physical demarcation of areas at risk for limiting urban development, and/or the implementation of protective measures for land/sea erosion control might result in decreased access for marginalised and vulnerable groups. This aspect will be further examined through the environmental and social impact assessment. This aspect also refers to the principle outlined below.

Marginalised and vulnerable groups:

Marginalised and vulnerable groups in the four target cities/towns fall in the categories of women, female-headed households, children, youth, child-headed households, orphans, the elderly, the disabled, people living with HIV, and communities living in disaster-prone areas. The design and implementation of the sub-projects in the different cities/towns will seek to minimise the imposition of disproportionate adverse impacts on these groups and will instead seek to optimize the positive impacts to these groups.

While it is considered unlikely at this stage, there is a possibility that the physical demarcation of areas at risk for limiting urban development, and/or the implementation of protective measures for land/sea erosion control might result in decreased access for marginalised and vulnerable groups. This aspect will be further examined through the environmental and social impact assessment.

Human Rights:

As explained in section F of the concept note, at project proposal stage, and in line with UN-Habitat's Project Management Cycle and Work Flow policy, the project will further be screened

for its adherence to three cross-cutting issues which are: gender, human rights and climate change. The Human Rights Officer of UN-Habitat will ensure that the project is designed to respect and adhere to the requirements of all relevant conventions on human rights.

Gender Equity and Women's Empowerment:

The project design will ensure that gender considerations are included in all project interventions, with a specific focus on activities on the ground (Components 1 and 2) as well as capacity building on the national level (Component 3). During the development of the full project proposal, the Gender Officer of UN-Habitat will be consulted to ensure that the project follows best-practice guidelines (see above on UN-Habitat's Project Management Cycle and Work Flow policy).

For instance, at the community level, the project will create employment that can contribute to women's empowerment. Gender-differentiated vulnerability analysis, focused capacity building activities of the project and participatory design of products, and gender-sensitive adoption strategies will ensure that gender equality principles are adhered to in practice during project implementation.

Core Labour Rights:

The activities under Component 2 will create employment enabling some marginalised and vulnerable groups including unemployed youth and women to access employment. The relevant national labour laws guided by the ILO labour standards will be followed throughout project implementation.

Indigenous Peoples:

As Component 2 will be implemented in cities/towns with no particular incidence to any particular indigenous group living there or in surrounding areas, this particular aspect does not seem to be of relevance in terms of further assessment for ESP compliance.

Involuntary Resettlement:

Tenure security is part of UN-Habitat's core mandate. No involuntary resettlement is foreseen. However, in the event that resettlement is necessary to protect life in case of an urban area in high risk, the due process as laid out in national and international laws will be followed. UN-Habitat has a long experience in participatory planning in high risk area in the South-East Africa sub-region, avoiding systematically involuntary resettlement.

Protection of Natural Habitats and Conservation of Biological Diversity:

While damage to natural habitats and threats to biological diversity are unlikely, there is a possibility that construction work undertaken or reforestation measures may adversely impact on local biodiversity and should be investigated during the environmental impact assessment at full proposal stage.

Climate Change:

This project is inherently an adaptation project and as such no maladaptation is foreseen. The project will not provide or install infrastructure or appliances that result in increased emissions

Pollution Prevention and Resource Efficiency:

As the project involves construction of protective measures for land/sea erosion control, an environmental and social impact assessment will have to validate whether any potential risk of pollution or wasteful use of natural resources may occur.

Public Health

No public health issues are foreseen, and improving public health is a secondary impact area of this project.

Physical and Cultural Heritage

No physical or cultural heritage impacts are foreseen, however this will have to be reviewed when the activities are being developed in more detail at full proposal stage.

Lands and Soil Conservation

The physical demarcation of areas at risk for limiting urban development (zoning) will seek to protect risk areas and critical natural habitats from urban development. Soil conservation will be enhanced through afforestation components as protective measures for land erosion control.

PART III: IMPLEMENTATION ARRANGEMENTS

- **A.** Describe the arrangements for project management at the regional and national level, including coordination arrangements within countries and among them. Describe how the potential to partner with national institutions, and when possible, national implementing entities (NIEs), has been considered, and included in the management arrangements.
- **B.** Describe the measures for financial and project risk management.
- **C.** Describe the measures for environmental and social risk management, in line with the Environmental and Social Policy of the Adaptation Fund.
- **D.** Describe the monitoring and evaluation arrangements and provide a budgeted M&E plan.
- *E.* Include a results framework for the project proposal, including milestones, targets and indicators.
- F. Demonstrate how the project aligns with the Results Framework of the Adaptation Fund

Project Objective(s) ⁴⁷	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
Project Outcome(s)	Project Outcome Indicator(s)	Fund Output	Fund Output Indicator	Grant Amount (USD)

- **G.** Include a detailed budget with budget notes, broken down by country as applicable, a budget on the Implementing Entity management fee use, and an explanation and a breakdown of the execution costs.
- *H.* Include a disbursement schedule with time-bound milestones.

⁴⁷ The AF utilized OECD/DAC terminology for its results framework. Project proponents may use different terminology but the overall principle should still apply

PART IV: ENDORSEMENT BY GOVERNMENTS AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Record of endorsement on behalf of the government

Government of Malawi: Mr. Peter K. Simbani Director, Debt & Aid Management Division, Ministry of Finance	Date: 6 January 2017
Government of Madagascar: Ms. Jane Alice Laurette Razanamiharisoa Chef du Service Adaptation au Changement Climatique, Direction du Changement Climatique	Date: 13 December 2016
Government of Mozambique: Mrs. Sheila Santana Afonso Permanent Secretary Ministry of Land, Environment and Rural Development	Date: 5 December 2016
Government of the Union of Comoros: Colonel Ismael Mogne Daho Directeur Général de la Sécurité Civile	Date: 14 December 2016

B. Implementing Entity certification

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans of Madagascar, Malawi, Mozambique and the Union of Comoros and subject to the approval by the Adaptation Fund Board, <u>commit to implementing the project in compliance with the Environmental and Social Policy of the Adaptation Fund</u> and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.

Rafael Tuts, Director Programme Division, UN-Habitat Implementing Entity Coordinator

Date: 9 January 2017

Tel.nr: +254-20-7623726 email:rafael.tuts@unhabitat.org

Project Contact Person: *Mathias Spaliviero, Senior Human Settlements Officer, Regional Office for Africa, UN-Habitat*

Tel. nr: + 254-20-7624716 Email: mathias.spaliviero@unhabitat.org