

Country programme

Maldives

March 2020





Ministry of
Environment

National Strategic Framework to Mobilize International Climate Finance to Address Climate Change in the Maldives 2020-2024



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Designed by Yey Studio, Maldives

Printed by Novelty Printers & Publishers Pvt Ltd, Maldives

ISBN: 978-99915-59-88-9

This document was produced with support from the Green Climate Fund and United Nations Environment Programme under the project, Readiness and Preparatory Support for Establishing and Strengthening National Designated Authority (NDA), and Developing Strategic Framework for Engagement with the GCF in Maldives.

An aerial photograph of a tropical island. The foreground shows a clear, turquoise lagoon with a wooden pier extending into the water. A blue and white boat with a yellow canopy is docked at the pier. The middle ground is dominated by a dense forest of palm trees. In the background, a residential area with colorful buildings is visible. The text is centered over the palm tree area.

**National Strategic Framework to Mobilize
International Climate Finance to Address
Climate Change in the Maldives 2020- 2024**



Foreword by His Excellency Dr. Hussain Rasheed Hassan, Minister of Environment

One of the core guiding principles of His Excellency President Ibrahim Mohamed Solih's government is to preserve and promote Jazeera dhiriulhun, the island way of life. At the heart of Jazeera dhiriulhun is sustainability, in which people live in harmony with the island and its reef environment. The policies outlined in the government's Strategic Action Plan 2019- 2023 embodies Jazeera dhiriulhun, which elaborates on sustainably deriving livelihoods, economies, cultural identity and well-being of Maldivians.

Yet it disheartens us that climate change already poses a grave threat to achieving Jazeera dhiriulhun. Climate induced coastal erosion, water and food insecurity, and impacts to coral reef ecosystems are now an everyday reality that the Maldivian people face. Addressing these issues are costly, and significant public resources are now expended to address climate change, while the needs keep growing each year.

Maldives has also been working on identifying and utilizing innovative sources of funding to complement public resources. From January 2019, the Green Tax paid by tourists has been exclusively allocated to the Maldives Green Fund to finance environmental initiatives. In addition, we have established Trust Funds in partnership with the tourism sector to support conservation. We have also set up revolving funds to promote renewable energy in the country. Yet the resources available are still insufficient to meet our needs.

Climate change necessitates support from our development partners and the international community to address our growing needs to finance our climate actions. While we are grateful to the donors we collaborate with, we call on the international community to step up efforts and raise ambition on climate finance. In this respect, we emphasize the importance of support for adaptation being grant based. By 2019 our disbursed outstanding national debt has risen to over 70% of our GDP and borrowing to pay for adaptation is no longer an option.

The total needs from the GCF alone identified under this National Strategic Framework to Mobilize International Climate Finance to Address Climate Change in the Maldives 2020-2024 amounts to half a billion US dollars. I am pleased that this pipeline is the result of extensive stakeholder consultations representing government, civil society and private sector actors. I sincerely appreciate the UN Environment Programme and the Green Climate Fund Secretariat for their support to this process.

I look forward to working with our partners to transform this pipeline into ambitious GCF projects and to their successful implementation, so that we may achieve the Jazeera dhiriulhun we aim for.

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Acronyms & Abbreviations

AE	Accredited Entity
AOSIS	Alliance of Small Island States
BAU	Business as usual
CC	Climate change
CN	Concept Note
CSA	Climate Smart Agriculture
EAF	Ecosystem Approach to Fisheries
EE	Energy Efficiency
ENSO	El-Nino Southern Oscillations
ESIA	Environmental and Social Impact Assessment
FAO	Food and Agriculture Organization of the United Nations
FP	Funding Proposals
FRESA	Fund for Renewable Energy System Applications
FYNSF	Five Year National Strategic Framework to Mobilize International Climate Finance to address Climate Change in the Maldives
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse gas
GNI	Gross National Income
HDI	Human Development Index
IW	International Waters
JICA	Japan International Cooperation Agency
LED	Low Emission Development
MCCPF	Maldives Climate Change Policy Framework, 2015
ME	Ministry of Environment
MFMRA	Ministry of Fisheries Marine Resources and Agriculture
MoT	Ministry of Tourism
NDA	National Designated Authority
NDC	Nationally Determined Contribution to the Paris Agreement
NGO	Non-government organization
NIE	National Implementing Entity
PPF	Project Preparation Facility
PSIP	Public Sector Investment Programme
PV	Photovoltaic
RE	Renewable Energy
RED	Renewable Energy Development
RO	Reverse Osmosis
SAARC	South Asian Association for Regional Cooperation
SACEP	South Asia Cooperative Environment Programme
SAP	Strategic Action Plan 2019-2023

SIDS	Small Island Developing States
SMART	Specific, Measurable, Achievable, Relevant and Time-bound
SME	Small and Medium Enterprises
SNC	Second National Communication of the Maldives to UNFCCC
SST	Sea Surface Temperature
STELCO	State Electric Company Ltd
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WB	The World Bank
WHO	World Health Organization
WMO	World Meteorological Organization



1. COUNTRY PROFILE

Geographical location	South Asia
Land area	298 km ² ; including sea 115,300 km ² ; Exclusive Economic Zone 859,000 km ² ^a
Population	491,589 persons of which 359,608 Maldivians and 131,981 foreign residents (2017)
Types of climate	Tropical equatorial monsoon climate. Maldives has one of the lowest elevation of any country in the world, therefore the temperature is constantly hot and often humid. The southwest monsoon (wet-season) normally extends from mid-May to November. The north-east monsoon (dry-season) extends from January to March. The month of December and April are considered as the monsoon transitional periods. ^b
Greenhouse Gas emissions profile	The total emission in 2011 is 1225.6 Gg CO ₂ e, of which 1152.9 Gg CO ₂ e and 72.7 Gg CO ₂ e are from the energy and waste sectors respectively. CO ₂ comprises about 95% of the total Greenhouse gas (GHG) emissions for the Maldives. GHG emissions have increased from 152.98 Gg CO ₂ e in 1994 to 1225.6 Gg CO ₂ e in 2011 which yields an average annual growth rate of 16%.
Key emitter sectors	Energy sector: 94.1% of GHG emissions Waste sector: 5.9% of GHG emissions
Key climate risks	Fragile ecological profile, low elevation, combined with its economic dependence on limited sectors makes Maldives highly vulnerable to natural disasters and extreme climatic events. Key risks include: land loss (sea level rise), coastal floods, intrusion of saline water into aquifers, coastal erosion, ocean acidification, coral bleaching, increased frequency of extreme rainfall events (heavy rain, droughts), increased frequency of cyclones, heat waves, longer dry seasons, shorter rainy seasons, increased average temperature.
Vulnerable sectors	Tourism, fishery, ecosystems (incl. marine), infrastructure (water and sewage, energy generation/distribution, communication, buildings, roads, etc.), transport, agriculture, construction, health, education, social protection, financial services (insurance)
National Designated Authority/ Focal Point	Ministry of Environment Mr. Amjad Abdulla Director General, Climate Change Department Climate Change Department Green Building, Handhuvaree Hingu, Maafannu Malé, 20392, Male, Maldives
National/Regional Accredited Entities	n.a.
International Accredited Entities	United Nations Environment Programme, United Nations Development Programme, Japan International Cooperation Agency, Asian Development Bank, Food and Agriculture Organization, The World Bank, International Union for Conservation of Nature.
Potential Accredited Entities	Ministry of Environment Bank of Maldives Plc

Sources:

a) National Bureau of Statistics

b) Second National Communication of Maldives to the United Nations Framework Convention on Climate Change (UNFCCC), October 2016

1.1 Climate Change Profile

The Maldives is an archipelago of islands in a double chain of coral atolls scattered between 7° 6' 35" N to 0° 42' 24" S, lying in a narrow band of 72° 32' 19" E to 73° 46' 13" E. The Maldives consists of about 1,192 small, low-lying coral islands which are grouped into 26 natural atolls, stretching over 860 km from north to south and 80 to 120 km from east to west. The total reef area of approximately 4,513 km² is the seventh largest reef system in the world and the largest in the Indian Ocean.



Climate Scenarios

Data from the Maldives Meteorological Services for the stations in the north (Hanimaadhoo), central (Malé) and south (Gan) were used in the analysis of current and future climate trends. Future climate projections are based on globally available climate projections which have been downscaled onto the Maldivian domain. Some of the key findings of current trends as reported in the 2016 Second National Communication of the Maldives to UNFCCC (SNC) are:

- an overall decreasing trend is observed for annual rainfall over the 3 regions. (9.5mm, 0.02 mm and 2.21 mm per year over Hanimaadhoo, Malé and Gan respectively).
- number of rainfall days per year is decreasing.
- mean average temperature increases for Malé (0.267 °C/decade) and Gan (0.168 °C/decade) while a decrease is observed in the northern station in Hanimaadhoo (0.086°C/decade).
- maximum temperature shows an increasing trend in the northern part of the country (0.21°C per decade) and a decreasing trend (-0.06 °C/decade) in the southern part of the country.
- rising sea level trend with 3.753 and 2.933 mm per year in Malé and Gan respectively
- an increasing trend, of 0.11 to 0.15 °C/decade, in Sea surface temperature (SST) throughout the country

Key findings of future climate projections from the downscaled models are:

- increase in rainfall over northern and central regions and a decrease in the southern region for the years 2021-2050, while an overall increase in rainfall is shown from 2082-2100 years
- temperature projected to increase over different zones for the different time periods.
- Mean temperature increases by 1.8°C from baseline (1981-2000) by mid- (2021-2050).
- maximum sea surface height is projected to increase between 0.40 to 0.48m by 2100.
- Sea surface temperature has a rising trend in all four geographic zones in all selected Special Report on Emissions Scenarios.



Vulnerability Profile

The small size and low-lying nature of the Maldivian islands make the island nation system highly exposed and sensitive to climate change impacts. The vulnerability assessment for the SNC identified eight areas of vulnerability as summarized below.



Land loss, Beach Erosion and Human Settlements: With about 80% of islands being lower than one meter above the mean sea level, the islands of the Maldives are extremely vulnerable to climate change and its associated impacts, particularly sea level rise. The severity and frequency of observed erosion incidents have increased. The case study islands for the assessment show an overall land loss between 0.81-3.66 ha during the observation periods. Both climate change and anthropogenic modification of coastal environments are attributed as causes of this erosion. Inundation analysis of case study islands showed there is high risk of flooding with significant damage to human settlements and infrastructure.

Critical Infrastructure: Critical Infrastructures such as utility services, hospitals, transport and communication Infrastructures and waste management centers are located within very close proximity to coastline. These infrastructures are exposed to coastal hazards such as sea swells, storm surges and related coastal flooding. This vulnerability was highlighted in 2004 Indian Ocean Tsunami where one of the most significant impacts of the tsunami was the complete shutdown of the only international airport for several days.

Water Resources: Groundwater and rainwater are the main sources of freshwater in the Maldives. Climatic and non-climatic factors such as population growth, population concentration and pollution impact freshwater resources in the Maldives. Conductivity measurements in sample islands show that the groundwater is relatively fresh and below the maximum allowable limit of the World Health Organization drinking water guideline. However, contamination of groundwater makes it unusable for potable uses. Inundation models further identified the increased risk of salinizing of the groundwater. Desalinated water using reverse osmosis (RO) technology is increasingly being utilized as a means to provide clean and safe water to the communities. The percentage of the population with access to desalinated water has increased from 25% in 2001 to

over 48% in 2012. Future climate projections show that the Maldives would experience issues with adequate availability of rainwater. The northern and central islands are currently more vulnerable to elongated dry periods with the need for emergency water supplied during dry periods. The vulnerability assessment showed that the quality of rainwater was also an issue.

Coral Reefs: The Maldivian atolls are the seventh largest reef system in the world and the largest in the Indian Ocean. The most critical impact on coral reefs are due to the increase in SST. The 1998 coral bleaching event was the most severe on record causing whole or partial bleaching of more than 90% of corals. Since then, coral cover has been increasing with the northern atolls showing increases from 1 % in year 2000 to over 36% in 2012. This recovery is hindered by consecutive bleaching events related to El-Nino Southern Oscillations (ENSO) events. The severity of bleaching events will increase significantly with projected climate change. Ocean acidification is also identified as a growing threat to the coral reef communities. International studies show that calcification rates may decrease by up to 60% with a doubling of atmospheric CO₂ concentrations by end of 21st century. This poses threats of net erosion of reef structures with long-term implications for coastal protection and degradation of reef framework that provides habitats for several organisms that form part of the overall ecosystem.

Agriculture and Food Security: Limited agricultural production, heavy import dependency, limitations in storage and challenges in the distribution of food across the nation are major threats to national food security. The small size of islands and limited freshwater availability limit local agricultural production. Extreme weather events further exacerbate this vulnerability, especially when flooding due to surges or sea swells and high waves impact the freshwater lens. About 90% of the food consumed in the country is imported and any impact on food production in the source countries/regions will directly affect Maldivian food security. In addition, any disruptions to transportation of food due to extreme climate events would put a halt to food supplies into the country. Extreme events would also impact food distribution within the country as inter island transport is mainly by sea. The vulnerability assessment identified the need to increase food storage in local islands.



Human Health: Climate change will have direct and indirect impact on human health. In Maldives heat and extreme weather events, especially floods due to heavy rainfall have direct health impacts. Indirect health effects of climate change include secondary effects caused by changes in ecology and social systems. Vector borne diseases are the most prominent indirect impacts on the human health for the Maldives. Vector borne diseases such as Malaria and Filaria has been eradicated in Maldives but Dengue, Chikungunya and Scrub typhus are vector borne diseases of immediate concern due to changing climate. Accessibility to health care is also a concern for the Maldives, especially due to the dispersed nature of the islands. Primary health facilities are available at each inhabited island but access to higher tiered facilities are limited to atoll capitals and population centers. At the event of extreme weather events, access to higher tiered health care facilities becomes a challenge.

Fisheries: Changes in sea surface temperature and ocean pH are the main factors likely to affect fisheries in the Maldives. The Maldives fisheries is predominantly dependent on tuna fisheries. Tuna fishery of the Maldives is affected by the seasonal monsoon and other oceanographic variations. Analysis of catch rates shows that ENSO variations influence that tuna fisheries in Maldives. During the El Nino years the skipjack catch rates noticeably decreased, while the yellow fin and other tuna species increased. During La Niña years, this trend is seen to reverse. Further research is needed to understand the severity of such impacts on tuna and related species. As over 90% of export is marine products, especially tuna, any significant change in the abundance and catch-ability of tuna will have economic consequences.

Tourism: As the sea, sand and sun is a major pull factor for tourists to visit the Maldives, the tourism product is highly vulnerable to effects of climate change. The major climate change impacts on the Maldives tourism sector include impacts due to increased temperatures, increased extreme events, sea level and SST rise and changes to marine biodiversity. Tourism being the main contributor to the Maldivian economy, any negative impacts on the tourism sector would have dire economic consequences.



Key Emitter Sectors and Related Mitigation Challenge

Electricity generation, transport, fisheries and domestic or commercial food preparation and waste are the key categories considered for the 2011 GHG inventory prepared as part of the SNC. The main GHG emissions reported in the inventory are CO₂, CH₄ and N₂O.

The total emission in 2011 is 1225.6 Gg CO₂e, of which 1152.9 Gg CO₂e (94% of total) and 72.7 Gg CO₂e (6% of total) are from the energy and waste sectors respectively. CO₂ comprises about 94.8% of the total GHG emissions for the Maldives. The total emissions for energy sector using the reference approach was 1146.5 Gg CO₂e. GHG emissions have increased from 152.98 Gg CO₂e in 1994 to 1225.6 Gg CO₂e in 2011 which yields an annual average growth rate of 16%. The specific emissions increased from 625 kg CO₂e per capita to 3697 kg CO₂e per capita in the same period. Maldives emission in 2011 makes up less than 0.0035% of the total global emissions.

Maldives intends to reduce its emissions by 24 % from business as usual (BAU) by 2030 with international support. Various policy measures as well as programmes, with assistance from development partners, are being implemented by the government to realize this goal. Mitigation actions in electricity generation can be broadly classified to renewable energy (RE) and energy efficiency (EE) interventions while increasing efficiency in transport systems are the main mitigation measures in the transport sector. Finally, for the waste sector improvement on waste management practices are considered key to reducing methane emissions. Mitigation measures undertaken/planned in Maldives include:

- A policy decision to meet 30% of peak day-time demand by solar photovoltaic (PV) for inhabited islands by 2018.
- Accelerating Sustainable Private Investments in Renewable Energy programme was initiated in 2014 to reduce risks for private sector investment in renewable energy.
- Preparing Outer Islands for Sustainable Energy Development was initiated to transform the existing energy grids in the Maldives into a hybrid solar-diesel renewable energy system.
- Removal of import duty from all renewable energy equipment.
- Introducing RE investments conducive regulations like feed-in tariff, net metering and IPP.
- Piloting financing mechanism through the commercial banks to facilitate RE.
- Promoting energy efficient practices and technologies at public buildings and incorporation of EE measures to the building code.
- Regulations to improve standards of vehicles on street using emission standards as well as age restrictions on vehicles.

1.2 Development Profile

The Maldives is known to have the highest Gross Domestic Product (GDP) per capita within the South Asian region with 3,846 US dollars for 2013. Tourism, comprising of 28.2%, is the main contributor to the GDP. Though the contribution of fisheries and agriculture to the GDP has declined to 3.5% and 1.7% respectively, these sectors are main source of income for rural communities. Other important contributors to the economy include communication, construction and real estate.



Key development indicators for Maldives, the World and South Asia are listed below:

Key Development Indicators	Maldives	World	South Asia
Gross National Income (GNI), USD billions, Atlas method, 2017	4.3	78,101	3,092
GNI per capita, Atlas method, current USD, 2017	9,760	10,371	1,729
GNI per capita at purchasing power parity, USD, 2017	15,130	16,902	6,483
GDP growth, annual %, 2017	6.9	3.1	6.5
Population density, people per sq. km 2017	1'454	59	375
Urban population, % of total population, 2017	39	55	34
Ease of doing business rank, 2017, out of 190 countries, (1=most business-friendly regulations)	139	1-190	-
Unemployment, total, 2018 (% of total labor force) (modeled ILO estimate)	5.0	5.4	3.8
Human Development Index (HDI), 2017 value/rank out of 189 countries	0.717 / 101	0.728	0.638
Domestic credit provided by financial sector (as % of GDP, 2017)	64	181	70

Source: World Bank, UNDP, Strategic Action Plan 2019-2023.

(SAP) serves as the central national development plan with the following priorities:

Table 1: Priorities of the Strategic Action Plan 2019-2023

Blue Economy	Caring State	Dignified Families	Jazeera Dhiriulhun	Good Governance
Fisheries and Marine Resources Agriculture Tourism SMEs Labor, Employment, Migration Economic Diversification	Health Education Higher Education Social Protection Abuse Prevention and Drug Rehabilitation	Family Housing Youth Community Empowerment Sports Islamic Faith	Decentralization Transport Network Environmental Protection and Preservation Clean Energy Waste as a Resource Water and Sanitation Resilient Communities Information and Communications Technology Arts, Culture and Heritage	Rule of Law and Judicial Reform National Security and Public Safety Eliminating Corruption Accountable State Independent Institutions and Public Service Reform Gender Equality Foreign Affairs



The present Five Year National Strategic Framework to Mobilize International Climate Finance to address Climate Change in the Maldives (FYNSF) aims to contribute to the objectives of the SAP and in particular its project pipeline directly contributes to implementing the following climate relevant SAP priorities:

Fisheries and agriculture: improved coral reef monitoring and conservation; gender and environment sensitive financial support to the growth and professionalization of smaller scale fisheries and agricultural production

Tourism: Extension of tourism in locally inhabited islands; implementation of Tourism Training program and Fund

Small and Medium Enterprises (SMEs): Targeted support to green SME initiatives

Health: Significantly improved health services overall, including regional hospitals and treatment centers; community health workers on all islands; better access to health services

Housing: climate proofing, e.g., in the context of new housing units for 20,000 families and support to tsunami affected families;

Transport: By 2023, 30% vehicle congestion reduction and 60% of population using public transport in Male; 90% of population with access to air and speed boat connectivity; operationalization of a public ferry service covering all islands

Environment: introduction of user pays principle in biodiversity and ecosystem use; increase of protection and management of coral reefs, wetlands and mangroves; introduction of a comprehensive reef restoration and protection mechanism

Clean energy: introduction of green energy label; 20% increase of renewable energy in the national energy mix; reduction of 40 million liters of fuel used for electricity generation in 2018-2023

Waste: 50% less waste burned openly on all islands; phase out of single use plastic; 30% of waste management centers using solar energy for operation; new guidelines for chemical waste enforced throughout the country

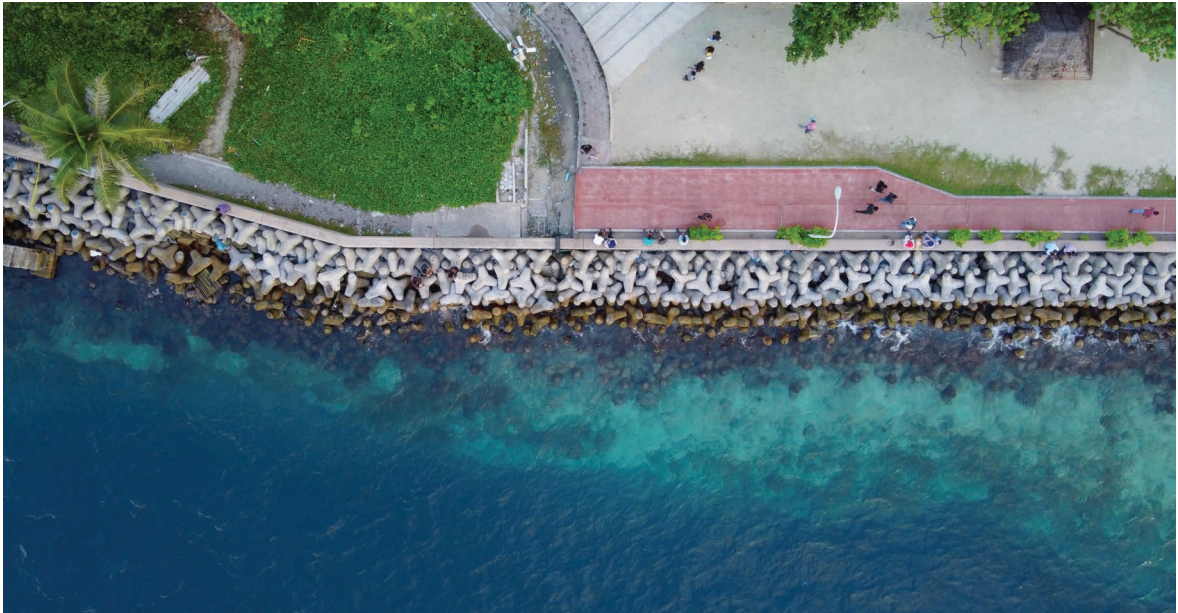
Water and sanitation: provision to safe water supply and sanitation to all inhabited islands; 30% of water management facilities across the country using solar energy for operation

Resilience: 80% of local development plans are risk based; operationalization of emergency response teams on all inhabited islands; operationalization of an end to end early warning and emergency communication system; mobilization of USD 50 million climate finance through direct access and leveraging of at least USD 10 million private investment

Each Funding Proposal (FP) submitted to the Green Climate Fund (GCF) will ensure full compatibility with the SAP and other relevant domestic policy.

1.3 Climate Change Response

National Frameworks



Climate Change Policy

The Government of Maldives adopted the following climate change policies and legislation as discussed further below:

- Maldives Climate Change Policy Framework, 2015 (MCCPF)
- Maldives Climate Change Bill (in elaboration)
- National Adaptation Programme of Action (2007)
- Nationally Determined Contribution (NDC) of Maldives

A number of additional policies and legislation are relevant in the context of climate change policy as follows:

- Strategic Action Plan 2019- 2023
- Maldives Energy Policy and Strategy, 2016
- National Action Plan on Air Pollutants 2019
- National Water and Sewerage Policy 2017
- Environmental Protection and Preservation Act 4/1993 and its Amendments 12/2014
- Gender Equality Act, 2016
- Maldives Tourism Act 2/1999
- Fifth Tourism Master Plan
- Maldives Fisheries Act 14/2019
- Coastal Protection Guidelines (2011)

The Maldives contributed to the UNFCCC process right from the very beginning. The Convention was ratified 12 June 1992 and entered into force in the Maldives on 21 March 1994. In this regard, Maldives was amongst the first countries to sign and ratify the UNFCCC, the Kyoto Protocol as well as the Paris Agreement. In the following years, the Government produced a series of studies and policies:

- UNFCCC ratification (1992)
- Kyoto Protocol ratification (1998)
- First National Communication (INC, 2001)
- Technology Needs Assessment for Energy and Transport Sector (2006)
- Doha Amendment ratification (2015)
- Nationally Determined Contribution, NDC (2015)
- Paris Agreement ratification (2016)
- NDC Implementation Plan (in elaboration)
- Second National Communication (SNC 2016)

Table 2 includes a summary of Maldives' NDC targets.

Table 2: Summary of Maldives' NDC Targets

Summary of NDC targets		Estimated resources required USD \$
Unconditional	“In accordance with Decisions 1/CP.19 and 1/CP.20, Maldives communicates that it intends to reduce unconditionally 10% of its Greenhouse Gases (below BAU) for the year 2030”	Not quantified
Conditional	“The 10% reduction expressed above could be increased up to 24% in a conditional manner, in the context of sustainable development, supported and enabled by availability of financial resources, technology transfer and capacity building.	Not quantified

The Maldives Climate Change Policy Framework 2015 includes the following table outlining key climate change vulnerabilities:

Table 3: Key climate change vulnerabilities of the Maldives

Sector	Vulnerability
Coastal Zone Management	<ul style="list-style-type: none"> ■ Over 80% of the total land area of the Maldives is less than 1m above mean sea level ■ Approximately 44% of the settlement footprints of all islands are within 100 m of the coastline. More than 50% of the housing structures in 121 islands are within 100 m of the coastline. More than 60% of inhabited islands reported beach erosion at different scales and of different severity. More than 50% of the housing structures in 121 islands are within 100 m of the coastline ■ Severe and significant erosion has been reported, especially in 2019 and early 2020, counting to about 30% of inhabited islands. ■ The adaptation measures to mitigate erosion in the islands, due to its lack of planning and poor design have lead to increased maladaptation countrywide.
Critical Infrastructure	<ul style="list-style-type: none"> ■ The infrastructure of the four international airports are within 50m of the coastline. ■ More than 90% of all resort infrastructure and 99% of all tourist accommodations are within 100m of the coastline ■ Approximately 70% of all fisheries infrastructure is within 100m of the coastline ■ Utility facilities including most powerhouse and waste facilities are located within 100m of the coastline. ■ More than 75% of communications infrastructures are located within 100m of the coastline
Tourism	<ul style="list-style-type: none"> ■ Nearly 45% of tourist resorts have reported varying degrees of beach erosion. ■ Rise in temperature leads to coral bleaching, loss of beach, saltwater intrusion and loss of tropical vegetation. ■ Maldivian tourism product is based on sea, sand and sun. Adverse impacts on climate variability will have negative consequences to the tourism industry.
Fisheries	<ul style="list-style-type: none"> ■ During the 1997/1998 El Nino event the Indian Ocean purse seine fishery shifted to the east, unlike other years, owing to the elevated depth of the 20°C isotherm ■ Over the last few years ocean temperature changes led to the transformation of the biophysical conditions of the pelagic environment, resulting in decreased tuna catch in the islands.

Sector	Vulnerability
Human Health	<ul style="list-style-type: none"> ■ Changes in temperature and rainfall regimes are causing higher incidence of vector-borne diseases. There is evidence that dengue outbreaks are becoming more frequent and it appears that there is an association with El Nino Southern Oscillation events. ■ The vulnerability to climate change-related health risks is further compounded by local characteristics such as the level of malnutrition in children, accessibility and quality of healthcare, high population congestion and low income levels ■ Climate change-related impacts on fisheries and agriculture threaten food security in the Maldives. Such impacts will have a direct effect on the nutrition status of children and overall health of the population.
Water	<ul style="list-style-type: none"> ■ Rainwater is the main source of potable water in the outer islands. ■ After the 2004 Indian Ocean Tsunami, there is observed increased demand of bottled water as drinking water, mainly associated with groundwater contamination and reduced precipitation. ■ 7 out of 196 inhabited islands Capital Male' have access to piped desalinated water.
Agriculture and Food Security	<ul style="list-style-type: none"> ■ The total cultivable land area is estimated at 27 km², including 18 km² on inhabited islands and 9 km² on uninhabited islands ■ The agriculture sector is constrained by the limited availability of cultivable land, poor quality of soil and the abundance of cheap imports of vegetables and fruits ■ Due to the high import dependency, the food security of Maldives is vulnerable to climate change-related impacts on the agriculture of other countries ■ Heavy import dependency, limited food storage and ad hoc distribution also pose severe food security risk to the population. The Maldives imports almost all food items except fresh tuna and coconut. ■ Long-term and emergency food storage is virtually absent except for warehousing in Male' and nine other islands



Further, the MCCPF stipulates the following policy goals, objectives and strategies:

Table 4: Policy Goals, Objectives and Strategies of the Maldives Climate Change Policy Framework

Policy Goal 1
Sustainable financing: Ensure and integrate sustainable financing in climate change adaptation opportunities and low emission development measures
OBJECTIVES <ul style="list-style-type: none">■ To continue to advocate for and ensure the delivery of predictable and sustainable financial resources from the developed countries responsible for change, based on the polluter pays principle, to support the implementation of climate change measures now and in the future;■ To strengthen and clarify national and local governance and coordination including partnership arrangements for climate change responses;■ To streamline entry points for accessing and managing climate change funds and other resources;■ To improve and enhance robust financial management procedures and procurement policy for donor-funded (or partner-supported) climate change programmes, and■ To strengthen national institutional arrangements and to position the nation to obtain maximum benefits from relevant international and regional instruments relating to climate change finances.
STRATEGIES <ol style="list-style-type: none">1. Include financial allocations within the national budget for climate change adaptation opportunities and low emission development (LED) activities.2. Streamline climate finance through innovative financial mechanisms for funding adaptation opportunities and LED measures in the Maldives.3. Mobilize and realize predictable and sustainable funding for climate change actions through multilateral and bilateral mechanisms.4. Establish a mechanism to monitor the efficiency and effectiveness of national climate funding modalities and project delivery, and review accordingly.5. Develop and strengthen the leveraging of private financing to the fullest extent possible.6. Streamline the funding mechanism to reflect the national priorities for climate financing in collaboration with development partners.7. Establish a National Implementing Entity (NIE) for ensuring a direct access modality mechanism.8. Create an enabling environment to provide support for public and private organizations, non-government organizations (NGOs) and communities in accessing climate finance.9. Develop robust financial management procedures and procurement policy for climate change projects and programmes.

Policy Goal 2

Low emission development: Strengthen a low emission development future and ensure energy security for Maldives.

OBJECTIVES

- To improve the quality of life of the Maldivian people through the provision of clean, safe, reliable, affordable, accessible, environmentally appropriate and sustainable energy services;
- To create a more sustainable and stable economy independent of external shocks to economic factors such as fluctuating energy prices;
- To ensure that transport and electricity systems meet economic, social and environmental needs whilst minimizing their undesirable impacts on the economy, society and the environment;
- To achieve a balanced shift towards environmentally-friendly transport modes in order to bring about a sustainable transport and mobility system;
- To create a healthy environment for the citizens of the Maldives while introducing a Sustainable Resource-Efficient Economy with the 3Rs (Reduce, Reuse and Recycling) and achieve reduction of GHG: and
- To work towards increasing community ownership of renewable energy sources in order to maximize domestic energy benefits and opportunities.

STRATEGIES

1. Create and provide opportunities for climate-friendly technologies for both private and public partnership.
2. Strengthen the legal and regulatory framework for promoting EE, renewable energy and conservation.
3. Establish enforceable policies and standards towards achieving a low emission development and increasing energy security in the Maldives.
4. Prepare a sectoral low emission development covering power generation, transport, agriculture and waste plan to reduce GHG emission.
5. Develop a mechanism to monitor the target of energy source composition towards maintaining a low emission development.
6. Diversify power generation technologies through the application of Renewable and Alternative Energy.
7. Enhance and ensure the implementation of market mechanisms to curbing out GHG emissions.
8. Develop comprehensive policies and plans to reduce GHG emissions from the transport sector.
9. Strengthen the existing policies and plans on RE and EE, in particular efficient water use in water desalination plants, and their implementation, monitoring and reporting.
10. Develop management capabilities of the energy sector institutions through appropriate training, empowerment and proper delegation of authority.
11. Increase public awareness and advocate EE measures and EE appliances through labelling.
12. Develop a Measurable, Reportable and Verifiable mechanism to monitor the emissions and impacts of low emission development activities in order to disseminate lessons learned and increase duplicability.
13. Increase capacity among key stakeholders through public utilities, government authorities and local private parties for sustainable implementation of Nationally Appropriate Mitigation Actions
14. Encourage new and innovative LED measures and technologies.
15. Establish an information-clearing house for LED measures, technologies and innovations.
16. Facilitate research and development, and technology transfer programs to aid the exchange of innovative ideas.

Policy Goal 3

Adaptation and opportunities: Strengthen adaptation actions and build climate resilient infrastructure and communities to address current and future vulnerabilities.

OBJECTIVES

- To develop effective adaptation and risk reduction responses and capacity in all climate change priority areas;
- To promote and implement adaptation programmes that support and improve communities' livelihoods to reduce and increase resilience;
- To make the inhabited islands and people of the Maldives resilient against the threats posed by global climate change, and
- To protect critical infrastructure such as international airports, inhabited islands and tourist resorts from sea-related hazards and predicted climate change impacts.

STRATEGIES

1. Streamline and integrate climate change adaptation and create opportunities for climate- proof development.
2. Prepare adaptation vulnerability assessments for key vulnerable sectors identified in National Adaptation Plans and the subsequent plans and strategies.
3. Incorporate climate change scenarios and projections into the urban and rural planning sector.
4. Review and improve the national building code to ensure consideration of climate change impact projections and appropriate climate change resilience measures.
5. Develop mechanisms for the adoption of sustainable adaptation technologies that are locally and traditionally appropriate.
6. Prepare the detailed island risk assessments plans, tools and guides for selected islands in the Maldives.
7. Analyze and evaluate poverty, health and food security issues to determine vulnerability to climate change, and consider these vulnerabilities in future policies and initiatives for the Maldives.
8. Review and improve the policies, plans and strategies of all key vulnerable sectors to create opportunities for climate change adaptation.
9. Develop a mechanism to sustain the supply and management of fresh water availability for communities to adapt to a changing climate and prolonged dry spells.
10. Enhance and expand water resource storage capacity in island communities.
11. Foster the use of focal and traditional knowledge in climate adaptation.
12. Educate and empower local governments to incorporate adaptation into their planning including island planning and financial planning.
13. Encouraging academia to research and understand vulnerabilities and adaptation measures.

Policy Goal 4

Capacity building and leading advocacy at climate negotiations: Inculcate climate change advocacy and awareness cross-sectorally nationwide and in the international arena.

OBJECTIVES

- To strengthen human, technical, regulatory and institutional capacity for climate change adaptation and mitigation measures;
- To apply a strategic approach to integrating climate change awareness into education and training;
- To mobilize public interest and engagement on the subject of climate change including youth, who make up a high percentage of the Maldivian population;
- To improve the understanding and use of climate change information, including for decision-makers in policy and planning;
- To ensure that the Maldives maintains an active role in regional and internal arenas on climate advocacy,
- To promote the Maldives as a leader amongst Small Island Developing States (SIDS) with a coordinated and cohesive national policy;
- To ensure that the Maldives is well-represented at international climate and sustainable development negotiations towards achieving maximum benefit for the country; and
- To promote a coordinated and cohesive national policy at the international level.

STRATEGIES

1. Provide technical and scientific guidance to policy-makers through appropriate means.
2. Use available communication tools to spread awareness and advocate for climate change adaptation and opportunities, and LED measures.
3. Establish an effective communication and networking mechanism on climate change issues among various stakeholders.
4. Develop locally appropriate awareness materials for distribution and display across the nation.
5. Include and update climate change elements within the secondary school curriculum as well as in tertiary and vocational education courses
6. Encourage student research around the issue of local climate change and its significance to Maldivian communities.
7. Strengthen capacity building for atoll, island and city councilors to promote awareness of climate change Issues.
8. Develop appropriate training on climate change awareness for government officers involved in awareness and training programmes in all relevant government institutions.
9. Strengthen the institutional mechanisms of the government that represents the Maldives in the international arena such as Maldives Chief Negotiator on Climate Change.
10. Strengthen the institutional national coordination mechanism within the government that deals with international diplomacy on climate change.
11. Enhance the participation of the Maldives in various international climate negotiations relevant conferences.
12. Represent as much as possible within its capacity, chairmanship and coordinators' roles lead roles from the Maldives at various international climate negotiations including but not limited to UNFCCC, Post-2015 Sustainable Development Agenda framework
13. Endeavour to host both in the Maldives and by relevant Maldives Missions abroad, frequent seminars, workshops, interactive dialogues designed to promote Maldives' advocacy on climate change for climate vulnerable and frontline states.

Policy Goal 5

Fostering sustainability: Foster sustainable development while ensuring security, and economic, social and environmental sustainability and sovereignty, from the negative consequences of changing climate

OBJECTIVES

- To ensure that the people, identity, culture and livelihood of the Maldivians are secured as a sovereign country in terms of the adverse impacts of climate change;
- To diversify economic activities through the promotion of climate investments;
- To safeguard the critical life support functions provided by ecosystems in all their diversity, respect the limits and thresholds of the natural resource base for renewal, and ensure the highest level of protection and improvement of the aesthetic and ambient quality of the environment;
- To promote a harmonized, cohesive, caring and just society which respects human rights and diversity that creates equal opportunities, and combats discrimination in all forms;
- To promote a knowledge-rich, innovative, healthy and fit society that enjoys high living standards and high-quality employment, and is resilient to withstand shocks and stresses;
- To encourage the establishment and defend the stability of established institutions in the country, based on justice, fairness and openness;
- To ensure that the values of the society are consistent with sustainable development and other international commitments; and
- To invest time and resources constructing facilities and infrastructure that can, in turn, be used to enhance future income and the capacity for future well-being and to continuously upgrade and renew critical infrastructure, information and communication facilities.

STRATEGIES

1. Strengthen the integration of sustainable development including economic, social and political development and ecological integrity.
2. Ensure sustainable use and preservation of natural resources for future generations.
3. Ensure equitable development between population groups through the recognition of the unique nature of each of the atolls, diversity of needs and access to opportunities, services, goods and privileges.
4. Develop a mechanism to ensure that climate change considerations are integrated into all sectors of economic and social development, and ensure that the citizens of the Maldives respect, and preserve the values, culture and traditions of the Maldives.
5. Consider the National Climate Change Policy in legislative review processes and develop cooperative and coordinated agreements between sectors to ensure respect for human rights, the rule of law, gender equality and sensitivity.
6. Ensure the protection of national sovereignty, basic human rights, the rule of law and equity among the citizens from the impacts of climate change and its response measures through legislative means.
7. Ensure national ownership through the broad participation of stakeholders in the decision making and planning process for climate change issues.
8. Build on and strengthen the existing strategies and processes to enable convergence and coherence.
9. Establish mechanisms to reduce economic risks to investments from unavoidable future climate impacts.
10. Take the lead in climate change and development issues within regional communities.
11. Integrate economic, social and environmental objectives through mutually supportive policies and practices and the management of trade-offs.
12. Integrate population policy and population and development consolidation strategies in order to address climate change and sustainable use of resources and equitable services
13. Establish climate spatial data mechanisms to make well-informed decisions and climate sensitive reporting.

Institutional Framework

The Ministry of Environment (ME) is the lead government agency mandated with the formulation of national policy on climate change. ME is responsible for coordination of climate change projects at the national level, and to provide support in developing and obtaining donor funding for such projects. ME is also mandated to advocate on behalf of the Maldives and other small island developing states on the effects of climate change at regional and international forums. ME is the national focal point for the UNFCCC as well as the National Designated Authority to the Green Climate Fund.

Overall, key stakeholders in climate policy and finance implementation include:

- Government ministries, departments and agencies including:
 - Ministry of Finance
 - Ministry of National Planning and Infrastructure
 - Ministry of Gender, Family and Social Services
 - Ministry of Foreign Affairs
 - Ministry of Health
 - Ministry of Education
 - Ministry of Higher Education
 - Ministry of Arts, Culture and Heritage
 - Ministry of Tourism
 - Ministry of Economic Development
 - Ministry of Fisheries, Marine Resources and Agriculture
 - Ministry of Youth, Sports and Community Empowerment
 - Environmental Protection Agency
 - Maldives Meteorological Service
 - National Disaster Management Authority
- People's Majlis
- Local governments
- Citizens, communities and consumers.
- Companies, private sector.
- Academia
- Civil society groups and Non-Governmental Organisations
- International development partners, including international, multilateral and bilateral partners.

Monitoring and Predictive Climate Tools

The MCCPF 2015 states that Specific, Measurable, Achievable, Relevant and Time-bound (SMART) indicators and related monitoring of policy objectives and strategies should be developed and carried out. In addition, the MCCPF includes that the policy will be reviewed by an independent expert after five years. To inform the review a progress reporting would be implemented in the fourth year after adoption.

Regional

Maldives engages in the international climate change negotiations primarily through the Alliance of Small Island States (AOSIS), and in addition through the Group of 77 and China, which AOSIS is a sub group of. During the period 2015-2018, Maldives chaired the AOSIS and led on behalf of Small Island Developing States to reach the successful compromise of the Paris Agreement. A recent publication entitled “What you do for small islands, you do for the world” 2015 – 2018” published by the Maldivian Ministry of Environment and Energy in November 2018 highlights the main achievements of the AOSIS work to date:

- Important contributions from united SIDS perspective to the UNFCCC process – for example, AOSIS became a key player at the 21st Session of the Conference of the Parties in Paris.
- Important contributions to address climate change and sustainable development goals in a mutually reinforcing way.
- Advocate strong positions on the 1.5 degrees global temperature goal, loss and damage, recognition of the special circumstances SIDS, finance, capacity building, technology development, transfer, and adaptation.
- Inclusion of SIDS concerns into the 2030 Sustainable Development Agenda.
- Operation of the AOSIS Climate Change Fellowship Programme since 2014, designed to bring young professionals from AOSIS Member States to UN New York for a yearlong fellowship.

Further, Maldives is a member of the South Asian Association for Regional Cooperation (SAARC) and the South Asia Cooperative Environment Programme (SACEP). These alliances however do not coordinate as a group in the UNFCCC negotiations.



Access to Finance

At the national level and apart from the Public Sector Investment Programme (PSIP), the following financing mechanisms exist which could constitute sources of climate finance as well:

- The Maldives Green Fund, capitalized through the Tourist Green Tax and operated by the ME since 2019. The exact details of this Fund are being worked out at present. The Green tax on average has generated over USD 4 million in revenue per month.
- The Green Loan scheme¹ operated by the Bank of Maldives provides up to MVR 20 million (approximately USD 1.3 million) for individuals and businesses to invest in green technology and resources.
- The Fund for Renewable Energy System Applications (FRESA Fund) is a revolving fund operated by the ME and hosted by the Bank of Maldives. The fund focuses on small scale private sector investment through concessional loans.
- The Renewable Energy Development Fund (RED fund) supports utility scale renewable energy investments.
- The Baa Atoll Conservation Fund is a regional fund for Baa Atoll operated by ME in partnership with Baa Atoll Council and the tourism industry.

Gaps and Opportunities

While there is a relatively good understanding of climate change impacts, vulnerabilities and related policies and investment needs in the Maldives, the key challenges include:

- Limitation of public sector financing capacity including the Public Sector Investment Programme and availability of funds to finance climate change projects, especially grant-based funding for adaptation projects. This limitation should also be seen in the context of high public debt, economic reform challenges, and social challenges in outer islands.
- Lack of direct access to major international funding sources, such as the GCF. The planned accreditation of the Ministry of Environment is proposed and is expected to close this gap. The main challenges to successful accreditation include capacity constraints in local agencies to meet the necessary fiduciary standards as well as gaps in policy and legislation to meet such requirements.
- Private sector engagement in climate mitigation, except for potential suppliers of renewable energy technology. Key constraints for such local suppliers include access to capital due high borrowing costs, as well as competency in international procurement. Local providers have less references and capacities compared to large international competitors as well as higher cost structures than some international competitors, although local suppliers might perform better in operation and maintenance solutions after installation.
- Limited number and sometimes capacity of local experts to develop and implement projects which are acceptable to international climate finance sources, such as the GCF.
- Lack of dedicated adaptation investment frameworks. The implementation of GCF readiness assistance is expected to contribute towards closing this gap.

1 <https://www.bankofmaldives.com.mv/personal-banking/personal-loans/bml-green-loan>

- Data gaps and capacity constraints at local level pose severe challenges to sufficiently quantify adaptation needs at the local level as well as understand current investment in adaptation. Hence there is limited understanding of the scale and magnitude of these needs.
- Similarly, support is required to undertake an assessment to understand the technology needs with respect to adaptation and mitigation in the Maldives.





2. COUNTRY AGENDA AND GCF ENGAGEMENT

2.1 Institutional Arrangements

The National Designated Authority (NDA) Focal Point to the GCF is the Director General of the Climate Change Department of ME. This strategic positioning of the NDA function is useful for several reasons, including:

- With ME as the government agency mandated with coordinating climate change mitigation and adaptation activities in the Maldives as well as mobilizing resources for such projects, it allows for coordination and alignment with UNFCCC processes and technical and financial assistance from various foreign sources.
- The cross-cutting nature of the work of ME corresponds well to the cross-cutting nature of climate finance.

Further and as detailed in section 1.3.1., the important roles other agencies of the Ministry of Finance, the Ministry of National Planning and Infrastructure as well as the Ministry of Gender, Family and Social Services should be highlighted.

Table 5 provides an overview of climate finance engagements under the PSIP as well as with key international partners.



Table 5: Relationships with GCF Accredited Entities (AE)s, other international partners and PSIP in the area of climate finance

Approved GCF Funded Projects			
Entity/ Partner Name	Area/s of focus	Engagement in country	Status; efforts to strengthen engagement with GCF
UNDP	Water	In-country presence. Implementation ongoing. ME has an Executing entity role.	Ongoing; directly and fully engaged.
UNEP	Readiness assistance (delivery partner)	No in-country presence but well-established work relationships. Implementation ongoing. ME has an Executing entity role.	Ongoing; directly and fully engaged.

Donor Funded Projects with Government Co-finance as of 2019 (excluding GCF funded projects already mentioned above)

Project Name, duration (donor)	Donor Contribution (USD mln)	Total Cost (USD mln)	Executing Entities	Type	Status
Adaptation Fund: Integrated Water Resource Management Programme, 2011-2015	8.3	10.1	ME	A	Completed
Global Environment Facility through UN Environment Programme: Implementing Integrated Water Resource and Wastewater Management in Atlantic and Indian Ocean SIDS	9.7	9.7	ME	A	Completed
European Union, Climate Change Trust Fund: Climate Change Adaptation Project, 2015-2019	4.2	4.3	ME	A	Ongoing
Denmark: Present cost-effective, locally appropriate coastal management and drainage management options contributing to climate change resilience of communities in Fares-Maathoda, 2010-2015	0.9	0.9	ME	A	Completed
Least Developed Countries Fund through UNDP: Increasing Climate Change Resilience of Maldives through Adaptation in the Tourism Sector, 2012-2016	1.7	3.3	MoT	A	Completed
Least Developed Countries Fund through UNDP: Integrating Climate Change Risk into Resilient Island Planning, 2010-2016	4.5	9.3	ME	A	Completed

Donor Funded Projects with Government Co-finance as of 2019 (excluding GCF funded projects already mentioned above)

Project Name, duration (donor)	Donor Contribution (USD mln)	Total Cost (USD mln)	Executing Entities	Type	Status
Netherlands Enterprise Agency, Kuwait Fund: Coastal Protection, 2017-2018	25.0	25.0	ME	A	On Going
Japan: Project for Provision of a Solar Power Generation System to Dhiffushi Island, 2010-2016	38.3	38.3	ME, STELCO	M	Completed
Global Environment Facility: Renewable Energy Technology Development and Application Project	0.7	0.7	ME	M	Completed
Germany: Support of the Climate Neutrality Strategy of Maldives, 2011-2015	3.4	3.4	ME	M	Completed
China: Provision of Goods for Addressing Climate Change, 2013-2015 (China)	Tech Transfer	Tech Transfer	ME	M	Completed
World Bank: Maldives Clean Environment Project, 2017-2023	2.5	2.6	ME	M	Ongoing
Climate Investment Funds, Asian Development Bank, European Investment Bank, Islamic Development Bank, Japan: Preparing Outer Islands for Sustainable Energy Development, 2014-2018	55.0	124.0	ME, FENAKA, STELCO	M	Ongoing
World Bank, Climate Investment Funds: Accelerating Sustainable Private Investment in Renewable Energy, 2014-2018	11.7	22	ME, STELCO	M	Ongoing
Global Environment Facility: Strengthening Low-Carbon Energy Island Strategies, 2015-2018	3.9	38.3	ME	M	Ongoing
World Bank, ASTATE: ESMAP Renewable Energy Resource Mapping Project 2014-2019	2.4	2.4	WB	M	Ongoing
World Bank- International Development Agency: Maldives Environment Management Project (MEMP) Additional Finance, 2015-2016	3.3	3.8	ME	M	Completed
Abu Dhabi Fund for Development: Providing waste to energy component to incineration in RWMF, 2017-2019	3.5	3.5	ME, FENAKA	M	Ongoing

Donor Funded Projects with Government Co-finance as of 2019 (excluding GCF funded projects already mentioned above)

Project Name, duration (donor)	Donor Contribution (USD mln)	Total Cost (USD mln)	Executing Entities	Type	Status
Asian Development Bank: Design, Supply, Installation and Maintenance of Grid Tied Solar PV Diesel Hybrid Power Generation System in 5 pilot islands, 2015-2017	2.7	2.7	ME, CCE Oasis Technology	M	Completed
Asian Development Bank: Design, Supply, Installation and Maintenance of Generators and Grid Infrastructure in 5 Pilot Islands of Maldives, 2015-2017	2.5	2.5	ME, LTL Projects Private Ltd.	M	Completed
Asian Development Bank: Design, Supply, Installation and Maintenance of Grid Tied Solar PV Diesel Hybrid Power Generation System in 5 pilot islands, 2015-2017	0.3	0.3	ME, LTL Projects Private Ltd.	M	Completed
Asian Development Bank: Design, Supply and Installation of 8MW Diesel Generator in Male', 2016-2017	8.8	8.8	ME, Lakdhanavi Ltd.	M	Completed
Government of Japan, GSEP: Provision of Solar Power Generation Systems in Dhiffushi Island, 2014-2017	0.4	0.4	Kansai Electric Power Corp. (Japan)	M	Completed
Asian Development Bank: Regional Technical Assistance - effective deployment of distributed Power, 2013-2015	0.1	0.1	STELCO	M	Completed
Asian Development Bank: Regional Technical Assistance - effective deployment of distributed Power, 2013-2016	0.2	0.2	STELCO	M	Completed
UN Environment: The NIE Accreditation support to the Government, 2013-2017	0.3	0.3	ME	A/M	Ongoing
Government of Denmark: Low Emission Climate Resilient Development, 2013-2017	4.8	4.8	UNDP	A/M	Ongoing
Global Environment Facility, UN Environment Programme: Preparation of intended nationally determined contribution to the 2015 agreement under UNFCCC, 2015-2017	0.2	0.21	ME	A/M	Completed

Donor Funded Projects with Government Co-finance as of 2019 (excluding GCF funded projects already mentioned above)

Project Name, duration (donor)	Donor Contribution (USD mln)	Total Cost (USD mln)	Executing Entities	Type	Status
Government of Italy: Cooperation in the field of climate change vulnerability, risk assessment, adaptation and mitigation, 2015-2020	4.5	4.7	ME	A/M	Ongoing
Global Environment Facility: Preparation of the Biennial Update Report to the UNFCCC, 2017-2019	0.3	0.4	ME	A/M	Ongoing
Global Environment Facility: Second National Communication, 2012-2016	0.5	0.6	ME	A/M	Completed



Selected Projects Funded by Government of Maldives 2013 - 2018 (excluding projects co-financed by PSIP which are already mentioned above)

Project Name	Location	Start	End	Budget, USD mln	Executing entity	Status
Coastal Protection	Th. Veymandhoo	2015	2017	0.42	ME	Ongoing
Coastal Protection	Dh.Maaenboodhoo	2015	2018	1.50	ME	Ongoing
Coastal Protection - Storm water	G,dh Thinadhoo	2016	2017	2.46	ME	Ongoing
Coastal Protection	Th. Kandoodhoo	2015	2017	1.03	ME	Ongoing
Coastal Protection	Gd. Faresmaathoda	2014	2016	2.45	ME	Completed
Coastal Protection	G dh thinadhoo	2014	2016	0.26	ME	Completed
Coastal Protection	N. Holhudhoo	2013	2015	1.63	ME	Completed
Coastal Protection	R. Maduvarree	2013	2015	1.90	ME	Completed
Coastal Protection	M. Naalaafushi	2015	2016	1.10	ME	Completed
Coastal Protection	K Maafushi	2016	2017	0.97	ME	Completed
Coastal Protection	AA Ukulhus	2015	2016	0.86	ME	Completed
Coastal Protection	H dh Kulhudhufushi	2016	2016	2.08	ME	Completed
Coastal Protection	G dh Thinadhoo	2016	2016	1.51	ME	Completed
Coastal Protection	R. Fainu	2016	2016	0.32	ME	Completed
Coastal Protection	B . Thulhaadhoo	2015	2016	0.69	ME	Completed
Coastal Protection	Sh. Bilehfahi	2015	2016	0.85	ME	Completed
Coastal Protection	K Villimale	2015	2016	0.75	ME	Completed
Coastal Protection	Lh. Kurendhoo	2015	2016	0.54	ME	Completed
Coastal Protection	G dh Gahdhoo	2016	2017	1.35	ME	Completed
Coastal Protection	Ha Dhidhoo	2016	2017	1.10	ME	Completed
Coastal Protection	N Velidhoo	2016	2017	0.66	ME	Completed
Coastal Protection	Ha Hoarafushi	2015	2017	1.25	ME	Completed
Coastal Protection	G Dh Madaveli	2016	2017	0.71	ME	Completed

Selected Projects Funded by Government of Maldives 2013 - 2018 (excluding projects co-financed by PSIP which are already mentioned above)

Project Name	Location	Start	End	Budget, USD mln	Executing entity	Status
Coastal Protection	Gn Fuvamulah	2017	2018	25.00	ME	Ongoing
Coastal Protection	S Hulhudhoo	2016	2017	1.59	ME	Completed
Rainwater Harvesting Systems	R Innamaadhoo	2018	2018	0.03	ME	Completed
Fish Farming	Nationwide	2017	2018	4.32	MFMR	Ongoing
Food Storage Facilities	H dh Hanimadhoo	2014	2014	0.02	MFMR	Completed
Ice Plants for Food Storage	Nationwide	2015	2015	0.23	MFMR	Completed
Sustainable Fisheries Project	Nationwide	2017	2017	0.06	MFMR	Completed
Fisheries/Agric. diversification	Nationwide	2014	2018	1.02	MFMR	Ongoing
Post-tsunami agriculture and fisheries rehabilitation	Nationwide	2014	2016	0.17	MFMR	Completed
Drip irrigation systems for agric.	Nationwide	2016	2018	0.97	MFMR	Ongoing
Hydroponics Systems	Nationwide	2017	2018	0.06	MFMR	Ongoing
Food security programme TA	Nationwide	2015	2016	0.08	MFMR	Completed
Cultivating 5 imported crops	Nationwide	2017	2018	1.11	MFMR	Ongoing
Mariculture development	Nationwide	2014	2017	1.67	MFMR	Completed
Live Feed Culture	Maniyafushi	2016	2016	0.08	MFMR	Completed
Grouper Culture/Farming	Nationwide	2016	2016	0.05	MFMR	Completed

Note: In 2015-2018 PSIP also included:

7 water supply projects in as many different islands with a combined budget of approx. USD 18 million

26 sewerage systems projects in as many different islands with a combined budget of approx. USD 55 million

46 waste mgmt. projects in as many different islands with a combined budget of approx. USD 2.5 million



2.2 Agreement on Privileges and Immunities of the Green Climate Fund

An Agreement on Privileges and Immunities of the Green Climate Fund was signed between the Maldives and GCF Secretariat on 22 August 2019. The Agreement covers privileges and immunities to the GCF, its assets, archives and communications, as well as members and alternate members of the GCF Board, their advisers, the Executive Director, and officers and employees of the Fund, including experts performing missions for the Fund.



2.3 Roles And Contributions Of Key Stakeholders

Table 3 below provides a summary of the consultations that were undertaken to arrive the GCF Country Portfolio included in section 2.4.





Table 6: Overview of consultation processes

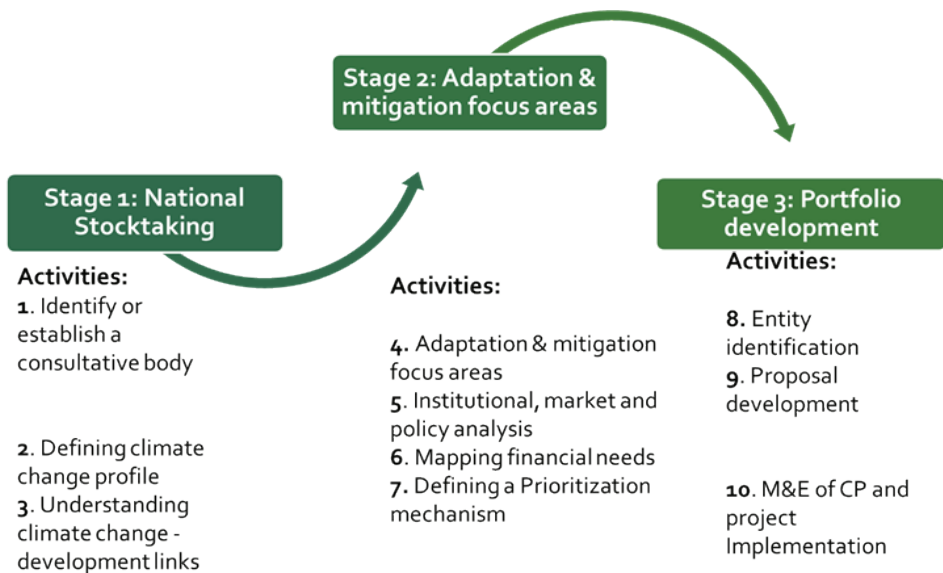
Stakeholder group	Date of consultation	Type or objective of consultation	Outcome
All climate change stakeholders	2015	NDC validation, including investment priorities contained therein	Official submission of NDC
Wide range of stakeholders	2015	NDC adoption	NDC represents official government strategy
All climate change stakeholders	2015	MCCPF validation, including investment priorities contained therein	Stakeholder input received for MCCPF
Wide range of stakeholders	2015	MCCPF adoption	MCCPF endorsed
All climate change stakeholders	2016	SNC validation, including investment priorities contained therein	Official submission of SNC
NDA, ME and selected development partners (FAO, JICA, UNDP, UNEP, WHO, WMO)	2016-2019	Mutual agreement to develop selected GCF Concept Notes (CN) and/or FP as reported in table 4 and as a result of ME's regular cooperation with these development partners	Prioritized investment proposals which are currently being turned into GCF CNs or FPs
All climate change stakeholders	2019	Workshop to develop potential additional project proposals to be included in the Maldives' initial GCF Country Programme	List of project ideas to be further developed as part of a dedicated GCF Concept Note development workshop held in March 2019
2-5 thematic experts (including national government, NGO, and technical experts) for each working group tasked with Concept Note elaboration	2019	Elaborate ca. 5 new draft GCF Concept Notes	Ca. 5 draft GCF Concept Notes largely aligned with GCF policies, overall national climate change project pipeline and national policy priorities
Stakeholder consultations, international consultant	2019	Discussion and finalization of selected new Concept Notes and project pipeline at executing entity, wider stakeholder, and government level	Feedback used to further develop and finalize draft Concept Notes
National validation workshop	2019	Validation of the present Country Programme including project pipeline	
Review with stakeholders	2019-2020	Review and approval of Concept Notes endorsed by the GCF	
GCF review	2019-2020	Review of submitted Concept Notes	

2.4 Identification of country priorities for the GCF

The following were taken into account to arrive at the GCF Country Portfolio included in section 2.4:

- The investment priorities as outlined in the NDC, MCCPF and SNC in section 1.3
- Recently concluded, proposed new and ongoing climate change projects funded by the GCF or other entities than the GCF as per section 2.1.
- Project pipelines under the PSIP and their prioritization.
- Engagement with the GCF to date.
- Project identification, elaboration and prioritization as per the process described in section 2.2.

The activities outlined in the graph below representing GCF guidance served as guiding steps towards developing the Maldives GCF Country Programme. These were intended to support and identify the activities that represent the highest impact and potential for transformation across mitigation and adaptation.



The following notes apply for each of the activities included in the above graph:

1. The Five Year National Strategic Framework to Mobilize International Climate Finance to address Climate Change in the Maldives and project pipeline development process was overseen and informed by extensive stakeholder consultations. The Concept Note development workshop referenced below and other processes outlined in section 2.2 above have benefited from stakeholder consultations too.
2. Information for defining Maldives' climate change profile largely stems from systematic

literature review, in particular the NDC, MCCPF and SNC. It is to be hoped that additional and even more refined information will become available in the future.

3. The climate change – development links included in the present version of the Country Programme resulted both from a policy review, as well as from discussions with relevant Ministries and key stakeholders, including study of the PSIP.
4. Adaptation and mitigation focus areas could then be identified based on prioritization processes outlined in section 2.2 and policy priorities, underlining that all GCF result areas are relevant for the Maldives and often cross-cutting, integrated concepts will yield the highest impact, efficiency and paradigm shift.
5. More specific institutional, policy and market analysis were implemented at project concept level as part of a dedicated GCF Concept Note development workshop held in March 2019, bringing together two to five sectoral experts from various institutions for each of the identified adaptation and mitigation focus areas. This workshop also facilitated integrated project conceptualization, alignment among different projects under preparation as well as past and expected climate change projects funded from other sources than GCF, alignment with GCF investment criteria and other relevant GCF policies. Some examples include Environmental and Social Safeguards, Results Management Framework, Performance Management Frameworks, gender, climate impact focus, private sector engagement, co-financing, incremental and full cost calculation methodologies; concessionality, readiness, as well as choice or narrowing down of options of Accredited Entities to eventually develop and hopefully implement the projects. Overall, the workshop resulted in very high national ownership of the proposed project pipeline.
6. Mapping of financial needs at the macro level was informed by Maldives' NDC, MCCPF and SNC, relevant information included in adopted policies or other relevant documents, study of state budget process, etc. At project level, initial draft budgets for proposed new projects were elaborated during the mentioned GCF Concept Note development workshop. For proposals already approved, data from respective Funding Proposals and other documents published on the GCF website were used. For project developed by international partners, dedicated stakeholder engagement and budgeting processes took place on a project by project basis.
7. The prioritization mechanism applied for the proposed project pipeline is the result of all above mentioned steps. Since the current project pipeline, although fairly large, does not cover all mitigation and adaptation investment needs yet, no further prioritization was carried out following the above-mentioned Concept Note development workshop. The challenge rather is to fully align proposed measures during Concept Note finalization and Funding Proposal development. In addition, the proposed initial project pipeline will have to be enhanced in future editions of the Country Programme.
8. Entity identification is in some cases concluded and agreed, in some cases, however, further discussions with desired and/or interested entities are still to take place in the process leading to Concept Note and Funding Proposal completion.
9. Proposal development is underway or completed in several cases as reported in section 2.4 of the present Country Programme. For a number of new proposed Concepts, Funding Proposal development is still to be done and, in some cases, this will be challenging and ideally requiring Project Preparation Facility and readiness support as indicated in section 2.4 of the present Country Programme.
10. Monitoring and evaluation of Country Programme and project implementation will constitute activities that have to be and will be implemented in the future.



2.5 Country Portfolio

The following list summarizes Maldives' current GCF project pipeline, whereas details are provided in tables 11-14:




	<i>approved</i>
	<i>submission expected before end of 2020</i>
	<i>submission expected in 2021 or later</i>

Table 7: Summary of Country projects/programmes pipeline (see table 11 for details)

No.	Title (AE)	Budget / GCF contribution	Status
01	FP007: Support of Vulnerable Communities in Maldives to Manage Climate Change-Induced Water Shortages (UNDP)	USD 28.2M / USD 23.6M	Approved 11/15 Under implementation
02	Ecosystem based adaptation through coastal and reef management (ME)	USD 11M / USD 10M (est.)	FP to be submitted in 2020 (expected)
03	Enhancing weather and climate monitoring in the Maldives and developing human resource capacity at Maldives Meteorological Service (UNEP)	USD 11.2M / USD 10M (est.)	FP to be submitted in 2020 (expected)
04	Assessment of vulnerabilities and risk reduction of health sector to vector borne diseases due to climate change impacts (tbd)	USD 6M / USD 5M (est.)	FP to be submitted in 2021 (expected)
05	Enhancing Infrastructure Resilience to Climate Change Impacts (tbd)	USD 205M / USD 155M (tbd)	FP to be submitted in 2021 (expected)
06	Strengthening Health Sector Emergency Response to floods and sea swells (tbd)	USD 6M / USD 5M (est.)	FP to be submitted in 2021 (expected)
07	Supporting Vulnerable Communities in Maldives to Manage Climate Change-Induced Water Shortages Project, PHASE 2 (tbd)	USD 75M / USD 65M (est.)	FP to be submitted in 2021 (expected)
08	Tourism Adaptation in the Maldives – TAM (tbd)	USD 15M / USD 10M (est.)	FP to be submitted in 2021 (expected)
09	Coastal protection in vulnerable islands (JICA)	USD 50.2M / USD 42.7M (est.)	FP to be submitted in 2020 (expected)
10	Establishing coastal protection measures in small islands with high population density (tbd)	USD 46.4M / USD 37.9M (est.)	FP to be submitted in 2021 (expected)

No.	Title (AE)	Budget / GCF contribution	Status
11	Supporting smallholder farmers to realize opportunities for linking agriculture to tourism through scaling-up of climate-smart agriculture practices and technologies (FAO)	USD 11M / USD 10M (est.)	FP to be submitted in 2020 (expected)
12	Blue Growth and climate-resilient livelihoods for Maldives Fisheries (FAO)	USD 11M / USD 10M (est.)	FP to be submitted in 2020 (expected)
13	Establish Health Care Waste Management systems in health facilities to reduce emissions (tbd)	USD 11M / USD 10M (est.)	FP to be submitted in 2020 (expected)
14	Energy Efficient and Climate Proof Assets in the Maldives (ME)	USD 20M / USD 10M (est.)	FP to be submitted in 2021 (expected)
15	Deployment of clean Energy in the outer islands of the Maldives (tbd)	USD 46.5M / USD 24M (est.)	FP to be submitted in 2020 (expected)
16	Identification of Disaster-Prone Zones in Maldives' Islands for Land Use and Adaptation Planning	USD 20M / USD 10M (est.)	FP to be submitted in 2021 (expected)
17	Piloting a Holistic Low Emission and Climate Resilient Mobility Network - Pilot HOMNET (tbd)	USD 10M / USD 10M (est.)	FP to be submitted in 2021 (expected)
18	Building resilient communities to climate change by using the "Preston Model" of innovative public procurement (tbd)	USD 10M / USD 10M (est.)	FP to be submitted in 2021 (expected)
19	Development of a sustainable finance centre for the Maldives and cooperation with the wider Indian Ocean region (tbd)	USD 10M / USD 10M (est.)	FP to be submitted in 2021 (expected)
20	Development of Hulhumale as a model Climate Resilient Smart Island (tbd)	USD 10M / USD 10M (est.)	FP to be submitted in 2021 (expected)
21	Generation of wave energy combined with coastal protection (tbd)	TBD	FP to be submitted in 2021 (expected)
22	Development of vertical farming (tbd)	TBD	FP to be submitted in 2021 (expected)

Table 8: Summary of Country Project Preparation pipeline (see table 12 for details)

No.	Title	Budget/GCF contribution	Status
23	PPF request for project #2: Ecosystem Based Adaptation through Coastal and Reef Management	USD 0.3M / USD 0.3M (est.)	PPF request to be submitted in 2020
24	PPF request for project #8: Tourism Adaptation in the Maldives	USD 0.3M / USD 0.3M (est.)	PPF request to be submitted in 2020
25	PPF request for project #14: Energy Efficient and Climate Proof Assets in the Maldives	USD 0.3M / USD 0.3M (est.)	PPF request to be submitted in 2020
26	PPF request for project #16: Identification of Disaster-Prone Zones in Maldives' Islands for Land Use and Adaptation Planning	USD 0.3M / USD 0.3M (est.)	PPF request to be submitted in 2020

Table 9: Summary of Country Readiness programme pipeline (see table 13 for details)

	Title (delivery partner)	Budget/GCF contribution	Status
27	NDA Strengthening and Country Programming (UNEP)	USD 0.3M / USD 0.3M	Under implementation
28	National Adaptation Plan (tbd)	USD 2.4M / USD 2.4M est.	Request to be elaborated and submitted in 2020
29	2nd NDA Support and Country Programming Project (ME)	USD 0.3M / USD 0.3M est.	Request to be elaborated and submitted in 2020
30	Direct Access Entity Support Project for ME (ME)	USD 0.3M / USD 0.3M est.	Request to be elaborated and submitted in 2020
31	Direct Access Entity Support Project for domestic bank (ME)	USD 0.3M / USD 0.3M est.	Request to be elaborated and submitted in 2021

Table 10: Accreditation pipeline (see table 14 for details):

Title	Budget/GCF contribution	Status
Ministry of Environment (ME)	TBD	2020 (expected)
A domestic bank	TBD	After 2020

Total proposed GCF commitment in present project pipeline (as per current estimates):

Projects #01-31, as detailed above	Total budget: USD 618.3M Estimated GCF contribution: USD 483M
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Note that the above country portfolio will be adapted and enhanced on a rolling basis, as the NDA receives proposals from AEs and other stakeholders in line with requirements included in national policies.



Table 11: Country projects/programmes pipeline

#01: FP007 Support of Vulnerable Communities in Maldives to Manage Climate Change-Induced Water Shortages				
Component 1: Scaling up integrated water supply system to provide safe water to vulnerable households (at least 32,000)				
Component 2: Decentralized and cost-effective dry season water supply system introduced benefiting 73,000 people across the seven northern atolls				
Component 3: Groundwater quality improved to secure freshwater reserves				
Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
UNDP	Approved 11/15	6	GCF: USD 23.6M	Other: USD 4.6M
Status	Action	Lead	Timeline	
Under implementation	Project completion	UNDP; GCF	2022 (expected)	
#02: Ecosystem based adaptation through coastal and reef management				
The islands of the Maldives are small, low lying, isolated and highly vulnerable to climate changes (CC). As the islands are atoll based and located in the middle of the Indian Ocean, marine biodiversity is rich and diverse. Coral reefs are extremely vulnerable to CC as the 2018 report of the Intergovernmental Panel on Climate Change clearly stated. The proposed project aims at implementing a complex ecosystem-based adaptation approach to coral reefs and coastal management in one atoll of the Maldives. This will include coral reef and coastal erosion management and monitoring plans, establishing adequate human resources for coastal and reef management, erosion and coral reef management investments, as well as alternative livelihoods for vulnerable communities.				
Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
ME	FP to be submitted to the GCF in 2020 (expected)	5, 6, 7, 8	GCF: USD 10M est.	Other: USD 1M est.
Status	Action	Lead	Timeline	
CN to be submitted to the GCF in 2019 (expected)	Submission of PPF request	ME, NDA	2019 (expected)	
	Finalization of Funding Proposal	ME, NDA	2019 (expected)	
#03: Enhancing Weather and Climate Monitoring				
The objectives of this project include: expand and strengthen the meteorological observation network to cover all Maldivian communities, establish and implement a management system throughout meteorological observation network to improve the observation, forecasting and early warning capability, expand Doppler Weather Radar Network to monitor approaching weather systems to issue early warnings, improve climate forecasting using climate modelling to support sectors affected by weather and climate variability, expand and strengthen the existing weather related early warning system to cover all communities, undertake research to understand the process contributing to beach erosion and how to effectively manage such problems.				
Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
UNEP	Funding Proposal to be submitted to the GCF in 2020 (expected)	5, 6	GCF: USD 10M est.	Other: USD 1.2M (est.)
Status	Action	Lead	Timeline	
Funding Proposal to be submitted to the GCF in 2020 (expected)	Finalization of Funding Proposal	UNEP, NDA	2019 (expected)	

#04: Assessment of Vulnerabilities and Risk Reduction of Health Sector to Vector Borne Diseases

This project will assess the different vector borne diseases in Maldives in light of climate changes, strengthen national capacity and strengthen surveillance and monitoring at the central level for effective delivery of integrated vector management.

Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: tbd	Funding Proposal to be submitted to the GCF in 2021 (expected)	5, 6	GCF: USD 5M est.	Other: USD 1M est
Status	Action	Lead	Timeline	
Funding Proposal to be submitted to the GCF in 2021 (expected)	Finalization of Funding Proposal	AE, NDA	2021 (expected)	

#05: Enhancing Infrastructure Resilience to Climate Change Impacts

The objectives of this project are to provide hard engineering coastal protection measures to protect the shoreline of air and sea ports, increase the capacity and reduce impacts of high winds and seas to the operation of the commercial port in Male', establishment of a National Building Code to provide guidance to the planners, architects and engineers to integrate climate and weather related factors into the designs of buildings and facilities, establish National Development Act to facilitate integration of climate change into development planning, considering the economies of scale for public services, land use planning and population consolidation and establish a mechanism to integrate adaptation planning to build long-term resilience to the impacts of climate change by mainstreaming planning into national sectoral strategies to deliver cost effective interventions.

Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: tbd	Funding Proposal to be submitted to the GCF in 2021 (expected)	5, 7	GCF: USD 155M est.	Other: USD 60M est.
Status	Action	Lead	Timeline	
Concept Note to be elaborated in 2020 (expected)	Finalization of Concept Note	AE, NDA	2020 (expected)	
	Elaboration Funding Proposal	AE, NDA	2022 (expected)	

#06: Strengthening Health Sector Response to Floods and Sea Swells

Ensure that hospital infrastructure is protected from damage due to floods and sea swells as an impact of climate change and strengthening rapid response framework in the health facilities in Zone 1 and 2 of Maldives.

Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: ME	Funding Proposal to be submitted to the GCF in 2021 (expected)	6	GCF: USD 5M est.	Other: USD 1M est.
Status	Action	Lead	Timeline	
Funding Proposal to be submitted to the GCF in 2021 (expected)	Finalization of Funding Proposal	AE, NDA	2019 (expected)	

#07: Enhancing Water Security, Phase 2

This project represents phase 2 of FP007, with four proposed outputs as per current planning:

- 1: Groundwater quality is improved to secure freshwater reserves
- 2: Water quality from water supply systems is assured during dry periods
- 3: Flood resilient communities are ensured
- 4: Renewable energy for water and sanitation services is secured

Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: ME	Funding Proposal to be submitted to the GCF in 2021 (expected)	5, 6	GCF: USD 65M est.	Other: USD 10M est.
Status	Action	Lead	Timeline	
Concept Note to be submitted to the GCF in 2020 (expected)	Finalization of Concept Note	AE, NDA	2020 (expected)	
	Elaboration Funding Proposal	AE, NDA	2021 (expected)	

#08: Adaptation in the Tourism Sector

Adaptation to CC is highly relevant to the tourism sector which directly accounts for one quarter of GDP and employment. The pristine natural environment of the Maldives and sea-sand-sun is the main backbone of the Maldivian tourism product and the Maldives could be considered a global tourism vulnerability hotspot. The project includes three strategic components:

- 1) awareness raising and systematic identification and documentation of adaptation strategies;
- 2) systematic improvement of relevant governance, policy and legislation; and
- 3) implementation of adaptation investments and a new insurance product for domestic, non-resort tourism operators.

Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: ME	Funding Proposal to be submitted to the GCF in 2021 (expected)	5, 6, 7	Other: USD 5M est.	GCF: USD 10M est.
Status	Action	Lead	Timeline	
Concept Note to be submitted to the GCF in 2020 (expected)	Submission of Concept Note	ME, NDA	2020 (expected)	
	Elaboration Funding Proposal	ME, NDA	2021 (expected)	

#09: Coastal protection in vulnerable islands

This project is targeted towards protecting the community, infrastructure and environment of islands with less than 500 inhabitants, as the communities are more vulnerable to associated impacts of erosion, storm surges and flooding instances due to land scarcity. This project is anticipated to preserve the livelihood of the communities, along with protecting critical infrastructure and households from erosion and sea surge events that are increasing in frequency and strength due to climate change, by constructing approximately 17 kilometers of coastal protection on 26 selected islands.

Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: JICA	Funding Proposal to be submitted to the GCF in 2020 (expected)	1, 5, 7, 8	GCF: USD 42.7M est.	Other: USD 7.5M est.
Status	Action	Lead	Timeline	
Funding Proposal to be submitted to the GCF in 2020 (expected)	Finalization of Funding Proposal	AE, NDA	2020 (expected)	

#10: Highly Populated Small Islands Coastal Protection

This projects aims towards protecting shorelines, communities and infrastructures of islands that are larger than 90 hectares with great potential for population consolidation. This project proposes to protect a total of approximately 32,874 meters of coastline of 11 islands, which has reported varying degrees of erosion.

Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: TBD	Funding Proposal to be submitted to the GCF in 2021 (expected)	5, 7, 8	GCF: USD 37.9M est.	Other: USD 8.5M est.
Status	Action	Lead	Timeline	
Funding Proposal to be submitted to the GCF in 2021 (expected)	Elaboration Funding Proposal	AE, NDA	2021 (expected)	

#11: Island-Smart Agriculture to Support Smallholder Farmers to Link Their Produce to Tourism

The project aims to

- 1) support Maldivian smallholders living on agricultural islands to adopt climate resilient and low-emission agricultural practices and technologies locally suitable to their agro-ecological landscapes for improved food security; and
- 2) strengthen links between agriculture and tourism for enhanced livelihoods and resilient food systems in Maldives through certification and climate-smart market supply chains.

The project will build evidence base and match the scientific knowledge and economics with climate smart agriculture (CSA) practices through field demonstrations. It will help facilitate the alignment of food security and climate change priorities. Lastly, strategies for CSA market supply chains for strengthened linkages between tourism and agriculture will be developed. The target outcome of the project is enhanced capacities of smallholders to address food security and to establish climate-resilient market value chains.

Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
FAO	Funding Proposal to be submitted to the GCF in 2020 (expected)	5, 6	GCF: USD 10M est.	Other: USD 1M est.
Status	Action	Lead	Timeline	
Funding Proposal to be submitted to the GCF in 2020 (expected)	Finalization of Funding Proposal	AE, NDA	2020 (expected)	

#12: Blue Growth and Climate-Resilient Livelihoods for Maldives Fisheries

The project aims to work within a Blue Growth framework to strengthen the livelihoods of fishers, fish farmers and those whose livelihoods depend on the sector in the Maldives. The project will develop and implement climate proofed Ecosystem Approach to Fisheries (EAF) Management plans for the sector, diversifying livelihoods and building resilience. EAF and interdisciplinary approaches will build and strengthen links and collaboration with tourism, coastal management, conservation, biodiversity and DRM priority areas identified under NDC. The project will link to the implementation of the Bay of Bengal Large Marine Ecosystem Project SAP implementation (GEF IW). The project will strengthen post-harvest, value chains and trade and processing of fisheries and aquaculture products (and Small Scale fishers and fish farmers). The target outcome of the project is enhanced national capacity to achieve food security while addressing the impacts and drivers of climate change in its fisheries management systems.

Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
FAO	Funding Proposal to be submitted to the GCF in 2020 (expected)	5, 6	GCF: USD 10M est.	Other: USD 1M est.
Status	Action	Lead	Timeline	
Funding Proposal to be submitted to the GCF in 2020 (expected)	Finalization of Funding Proposal	AE, NDA	2020 (expected)	

#13: Health Care Waste Management

This project will build resilience and reduce emissions in the waste management and health sectors, establishing environment friendly health care waste management systems in the health facilities in Zone 1 and 2 of Maldives.

Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: TBD	Funding Proposal to be submitted to the GCF in 2020 (expected)	1, 5, 6, 7	GCF: USD 10M est.	Other: USD 1M est.
Status	Action	Lead	Timeline	
Funding Proposal to be submitted to the GCF in 2020 (expected)	Elaboration Funding Proposal	AE, NDA	(expected) 2020	

#14: Energy Efficient and Climate Proof Assets

The project will systematically and at nation-wide scale finance the mainstreaming of new, retrofit and replace technologies that either increase climate resilience or EE, or both. Target sectors include residential, services, manufacturing and transport and a multitude of technologies and equipment in these sectors will be supported with tailored financial incentives. Financial incentives will include repayable and non-repayable grants blended with commercial loans and leasing. Grants and technical assessment will be delivered through the Accredited Entity, commercial finance and financial and risk assessment through domestic banks participating in the project.

Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: ME	Funding Proposal to be submitted to the GCF in 2021 (expected)	2, 3, 5, 7	GCF: USD 10M est.	Other: USD 20M est.
Status	Action	Lead	Timeline	
Concept Note to be submitted to the GCF in 2020 (expected)	Submission of Concept Note	ME, NDA	2020 (expected)	
	Elaboration Funding Proposal	ME, NDA	2019-2020 (expected)	

#15: Deployment of Clean Energy in the Outer Islands of the Maldives

The proposed project on the outer islands would transform the existing grids through physical investments in renewable energy, energy management and control systems, storage and improvements in distribution networks and significantly reduce the requirement for diesel to generate electricity.

Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: TBD	Funding Proposal to be submitted to the GCF in 2020 (expected)	1	GCF: USD 24M est.	Other: USD 22.5M est.
Status	Action	Lead	Timeline	
Funding Proposal to be submitted to the GCF in 2020 (expected)	Elaboration Funding Proposal	AE, NDA	2020 (expected)	

#16: Identification of Disaster-Prone Zones in Maldives' Islands for Land Use and Adaptation Planning

Maldives is highly vulnerable to climate changes and yet, disaster prone zones (flood, swell, land slide, ground failure, erosion, water shortage, etc.) have not been systematically identified, documented, rated and discussed at the level of the country's 188 inhabited islands. The project will generate detailed surveys (land use, topographic, biodiversity, bathymetric, aerial, tides, current) for each inhabited island, along with enabling related research and development and education in related fields and presenting and discussing the surveys generated at island level and drawing policy conclusions at national level.

Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: ME	Funding Proposal to be submitted to the GCF in 2021 (expected)	5, 6, 7, 8	GCF: USD 10M est.	Other: USD 10M est.
Status	Action	Lead	Timeline	
Funding Proposal to be submitted to the GCF in 2021 (expected)	Submission of Concept Note	AE, NDA	2020 (expected)	
	Elaboration Funding Proposal	AE, NDA	2021 (expected)	

#17: Piloting a Holistic Low Emission and Climate Resilient Mobility Network (Pilot HOMNET)

Pilot HOMNET aims at realizing a paradigm shift from fossil fuel based to electric vehicles based terrestrial and sea transport. A two-phase approach is proposed including a pilot phase to test feasible approaches and an implementation phase to carry out the paradigm shift at scale, which would be a future project following PILOT HOMNET implementation.

Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: TBD	Funding Proposal to be submitted to the GCF in 2021 (expected)	2	GCF: USD 10M est.	Other: USD 0M est./TBD
Status	Action	Lead	Timeline	
Concept Note to be submitted to the GCF in 2020 (expected)	Submission of Concept Note	AE, NDA	2020 (expected)	
	Elaboration Funding Proposal	AE, NDA	2021 (expected)	

#18: Building resilient communities to climate change by using the "Preston Model" of innovative public procurement

To be further elaborated

Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: TBD	Funding Proposal to be submitted to the GCF in 2021 (expected)	5, 8	GCF: USD 10M est.	Other: USD 0M est./TBD
Status	Action	Lead	Timeline	
Funding Proposal to be submitted to the GCF in 2021 (expected)	Finalization of Funding Proposal	AE, NDA	2021 (expected)	

#19: Development of a sustainable finance centre for the Maldives and cooperation with the wider Indian Ocean region

To be further elaborated

Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: TBD	Funding Proposal to be submitted to the GCF in 2021 (expected)	5	GCF: USD 10M est.	Other: USD 0M est./TBD
Status	Action	Lead	Timeline	
Funding Proposal to be submitted to the GCF in 2021 (expected)	Finalization of Funding Proposal	AE, NDA	2021 (expected)	

#20: Development of Hulhumale as a model Climate Resilient Smart Island

To be further elaborated

Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: TBD	Funding Proposal to be submitted to the GCF in 2021 (expected)	TBD	GCF: USD 10M est.	Other: USD 0M est./TBD
Status	Action	Lead	Timeline	
Funding Proposal to be submitted to the GCF in 2021 (expected)	Finalization of Funding Proposal	AE, NDA	2021 (expected)	

#21: Generation of wave energy combined with coastal protection

To be further elaborated

Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: TBD	Funding Proposal to be submitted to the GCF in 2021 (expected)	1, 7	GCF: TBD	Other: TBD
Status	Action	Lead	Timeline	
Concept Note to be submitted to the GCF in 2020 (expected)	Finalization of Concept Note	AE, NDA	2020 (expected)	
	Finalization of Funding Proposal	AE, NDA	2021 (expected)	

#22: Development of vertical farming

To be further elaborated

Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: TBD	Funding Proposal to be submitted to the GCF in 2021 (expected)	1, 5, 6	GCF: TBD	Other: TBD
Status	Action	Lead	Timeline	
Concept Note to be submitted to the GCF in 2020 (expected)	Finalization of Concept Note	AE, NDA	2020 (expected)	
	Finalization of Funding Proposal	AE, NDA	2021 (expected)	

Table 12: Country Project Preparation pipeline

#23: PPF request for project #02: Ecosystem Based Adaptation through Coastal and Reef Management				
Elaboration of feasibility study, Environmental and Social Impact Assessment (ESIA), FP and other documents required for FP submission related to project pipeline item #02: Ecosystem Based Adaptation through Coastal and Reef Management				
Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: ME	2019	5, 6, 7, 8	GCF: USD 0.3M	Other:-
Status	Action	Lead	Timeline	
PPF request to be submitted	CN and PPF request submission	AE, NDA	2019	
#24: PPF request for project #8: Tourism Adaptation in the Maldives – TAM				
Elaboration of feasibility study, ESIA, FP and other documents required for FP submission related to project pipeline item #8: Tourism Adaptation in the Maldives				
Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: ME	2020	5, 6, 7	GCF: USD 0.3M	Other:-
Status	Action	Lead	Timeline	
PPF request to be elaborated	CN and PPF request submission	AE, NDA	2020	
#25: PPF request for project #14: Energy Efficient and Climate Proof Assets in the Maldives				
Elaboration of feasibility study, ESIA, FP and other documents required for FP submission related to project pipeline item #14: Energy Efficient and Climate Proof Assets in the Maldives				
Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: ME	2020	2, 3, 5, 7	-GCF: USD 0.3M	Other:
Status	Action	Lead	Timeline	
PPF request to be elaborated	CN and PPF request submission	AE, NDA	2020	
#26: PPF request for project #16: Identification of Disaster-Prone Zones in Maldives' Islands for Land Use and Adaptation Planning				
Elaboration of feasibility study, ESIA, FP and other documents required for FP submission related to project pipeline item #16: Identification of Disaster-Prone Zones in Maldives' Islands for Land Use and Adaptation Planning				
Accredited Entity	Submission timeframe	Fund level strategic impacts	Total financing	
Targeted AE: ME	2020	5, 6, 7, 8	-GCF: USD 0.3M	Other:
Status	Action	Lead	Timeline	
PPF request to be elaborated	CN and PPF request submission	AE, NDA	2020	

Table 13: Country Readiness programme pipeline

#27: NDA Strengthening and Country Programming			
Establishing and strengthening the National Designated Authority (NDA) and development of a strategic framework for engagement with the Fund, including the preparation of a country programme. Total financing: USD 300'000.-			
Delivery Partner	Submission timeframe	Total financing	
Targeted AE: ME	Submitted	USD 300'000.-	
Status	Action	Lead	Timeline
Approved, under implementation	Complete project	NDA, UNEP, consultants, GCF	2019
#28: National Adaptation Plan			
National Adaptation Plan Total financing: USD 2.4M			
Delivery Partner	Submission timeframe	Total financing	
tbd	2020	USD 2.4M	
Status	Action	Lead	Timeline
Request in preparation	Submit readiness request	NDA	2020 (expected)
#29: 2nd NDA support and country programming project			
To be decided in line with new GCF readiness framework Total financing: USD 0.3M est.			
Delivery Partner	Submission timeframe	Total financing	
ME	2020	USD 0.3M est.	
Status	Action	Lead	Timeline
Request to be prepared	Submit readiness request	NDA	2020 (expected)
#30: Direct Access Entity support project (ME)			
To be decided. Ideas discussed to date include: Systematic capacity development of Ministry of Environment in GCF project development/implementation Implementation of new fiduciary standards Total financing: USD 0.3M est.			
Delivery Partner	Submission timeframe	Total financing	
ME	2020	USD 0.3M est.	
Status	Action	Lead	Timeline
Request to be prepared	Submit readiness request	NDA	2020 (expected)
#31: Direct Access Entity support project (domestic bank)			
To be decided. Ideas discussed to date include: Systematic capacity development of bank staff in GCF project development/implementation Implementation of new fiduciary standards Total financing: USD 0.3M est.			
Delivery Partner	Submission timeframe	Total financing	
ME	2021	USD 0.3M est.	
Status	Action	Lead	Timeline
Request to be prepared	Submit readiness request	NDA	2021 (expected)

Table 14: Accreditation pipeline

Entity Name	Type	Action	Lead	Timeline
Ministry of Environment (ME)	Direct National	Submission of accreditation application	ME, NDA	2020
Domestic bank	Direct National	Gap analysis against GCF standards; submission of accreditation application	Bank, NDA, GCF	2021





3. MONITORING AND EVALUATION OF COUNTRY PROGRAMME IMPLEMENTATION

The NDA aims to update the Maldives GCF Country Programme as a whole every five years, and update the project pipeline annually.

The full update of the Maldives GCF Country Programme and annual updates of the project pipeline will consider among others:

- new and better data and information on expected climate changes impacts in the Maldives;
- new or updated relevant policy;
- new international good practice or GCF guidelines; and
- changes to relevant GCF operational policies.

The NDA, considering GCF guidance and advice that may be provided by Maldivian stakeholders, will determine the exact scope of updates and revision. In line with Maldives' NDA policies and procedures, Country Programme updates and revisions will be drafted by qualified experts with GCF Readiness Support, under the coordination and guidance of the NDA and be based on comprehensive and meaningful stakeholder engagement. Prior to finalization, draft updates and revised versions of the Country Programme will be discussed in the Country Coordination Group and wider stakeholder meetings convened by the NDA. The annual updates of the project pipeline will be completed by considering all GCF Concept Notes, Funding Proposals and other relevant discussions with AEs and domestic stakeholders which were processed during the year.

Updates of the Country Programme will guide future project development and implementation in line with latest available information and good international practice and thereby improve the impact and efficiency of the projects and programs funded by the GCF in the Maldives.

Monitoring and evaluation of the Country Programme and GCF portfolios in the Maldives will follow the recommendations, requirements and schedules communicated by the GCF to the NDA. The NDA will engage in creating and realizing alignment and efficiency gains wherever possible with other relevant processes, including for example the process of updating Maldives NDC.

The present Country Programme should be considered as a living document, including in the context of the GCF being a relatively young institution and considering the fact that many lessons are still to be learned. This includes learning from the GCF as an institution, the large number of GCF projects proposed and financed all over the world, lessons from direct access implementation, as well as proposed and planned capacity development efforts in the Maldives and elsewhere. It is also for this highly challenging, evolving and creative process that an annual update of the Country Programme project pipeline is planned.

Overall, the expectation is that the implementation of the Country Programme will significantly advance the achievement of national policy goals as well as Maldives' objectives towards a low carbon and climate resilient society and economy to preserve the island way of life for coming generations.





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ISBN: 978-99915-59-88-9