Environmental Assessment and Review Framework

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Maldives: Enhancing Climate Resilience and Food Security Project

Prepared by Ministry of Climate Change, Environment and Energy and endorsed by the Ministry of Finance for the Asian Development Bank (ADB).

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CURRENCY EQUIVALENTS

(as of 11 July 2024)

\$1.00 = 15.42 MVR MVR refers to Maldivian Rufiyaa and "US\$" to US dollars.

ABBREVIATIONS

ADB - Asian Development Bank

EA - Executing Agency

EARF - Environmental Assessment and Review Framework

EHS - Environment, Health and Safety
EIA - Environmental Impact Assessment
EMP - Environmental Management Plan
EMR - Environmental Management Review

ESMP - Environmental and Social Management Plan

GRM - Grievance Redress Mechanism

IA - Implementing Agency

IEE - Initial Environmental Examination LGA - Local Government Authority

MAAW - Ministry of Agriculture and Animal Welfare

MCCEE - Ministry of Climate Change, Environment and Energy

MOF - Ministry of Finance

MMS - Maldives Meteorological Service

NCN - Non-conformance Notice

NGO - Non-Governmental Organization
PAM - Project Administration Manual

PC - Public Consultation

PIC - Project Implementation Consultant

PCM - Public Consultation Meeting
PCR - Physical Cultural Resources
PMU - Project Management Unit
PSA - Poverty and Social Assessment
REA - Rapid Environmental Assessment

SAEMR - Semi-Annual Environmental Monitoring Review SEMP - Site-Specific Environmental Management Plan

SME - Small and Medium Enterprise
SPS - Safeguard Policy Statement
SST - Social Safeguards Team
ToR - Terms of Reference

URA - Utility Regulatory Authority

WDC - Women's Development Committee

WEIGHTS AND MEASURES

kg - Kilogram mm - Millimetre

m, m², m³ - Metre, square metres, cubic metres

km, km² - Kilometre, square kilometre

ha - Hectare

GLOSSARY

Activity: A group of tasks carried out using project inputs to produce the desired outputs.

Critical habitat: Critical habitat includes areas with high biodiversity value, including habitat required for the survival of critically endangered or endangered species; areas having special significance for endemic or restricted-range species; sites that are critical for the survival of migratory species; areas supporting globally significant concentrations or numbers of individuals of congregatory species; areas with unique assemblages of species or that are associated with key evolutionary processes or provide key ecosystem services; and areas having biodiversity of significant social, economic, or cultural importance to local communities. Critical habitats include those areas either legally protected or officially proposed for protection, such as areas that meet the criteria of the World Conservation Union classification, the Ramsar List of Wetlands of International Importance, and the United Nations Educational, Scientific and Cultural Organization's world natural heritage sites.

Hazard: A condition with the potential for causing an undesirable consequence (e.g. an unstable slope above a settlement). The description of landslide hazard should include the location, volume (or area), classification and velocity of the potential landslides and any resultant detached material, and the probability of their occurrence within a given period of time.

Impacts: Positive and negative, short and long-term effects produced by a development intervention, directly or indirectly, intended or unintended.

Impact statement: (a) Report describing the results of an impact assessment process; (b) The expected results of a project, typically sourced from a government national or sector plan before the project is conceptualized (ADB 2016).¹

Natural habitat: Land and water areas where the biological communities are formed largely by native plant and animal species, and where human activity has not essentially modified the area's primary ecological functions.

Outcome: The immediate and direct benefits of the use or application of a project's outputs (ADB 2016).

Outputs: Goods, services or products delivered by the project to beneficiaries (ADB 2016).

Results chain: A series of expected achievements, or positive changes, linked by causality. The results chain can be seen as a continuum from inputs to outputs to outcomes (ADB 2016).

Risk: (a) A measure of the probability and severity of an adverse effect to health, property or the environment (e.g. a potential slope failure); (b) Factors outside the project's control that can hinder its progress from one results level to the next.

¹ ADB. 2016. Guidelines for Preparing a Design and Monitoring Framework. Manila.

NOTE

(i) In this report, "\$" refers to United States dollars.

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I. INTRODUCTION

A. Background

- 1. The Maldives' physical vulnerability combined with a reliance on climate-sensitive sectors such as tourism, fisheries and subsistence farming put the country at high risk of adverse consequences from climate change. The country is exposed to numerous natural hazards including rainfall-induced floods, coastal flooding from waves and tides, swells, coastal erosion, cyclone winds, storm surges, heat waves, earthquakes, tsunamis and drought.² These events have devastating impacts such as loss of life, injury and displacement, damage to houses and infrastructure, disruption of livelihoods and services, environmental degradation, reduced economic productivity, particularly in tourism, and a potential increase in poverty and social vulnerability.
- 2. To address some of these challenges, the Asian Development Bank (ADB) is proposing an investment project on climate resilience. The overall objective of the "Enhancing Climate Resilience and Food Security Project" (hereinafter "the Project") is to strengthen the climate resilience of inhabited islands and agri-food systems. Key features of the Project include enhancing the nation's weather monitoring capacity to support informed climate decisions, and safeguarding urban infrastructure, agricultural productivity and food security. The Project interventions are both physical (engineering measures and nature-based solutions) and institutional (broader climate change adaptation measures to address gaps in the institutional and regulatory environment and build capacity within government and local communities).
- 3. The Project Outcome is "Islands community resilience to climate change strengthened in the project area."
- 4. The Project will have four outputs:
 - (i) Output 1 strengthens the country's institutional capacity for weather monitoring, forecasting and early warning by improving infrastructure, software and capacities in real-time weather monitoring, forecasting and early warning. A Doppler S-band weather radar and ancillary equipment will be installed in Addu City to improve real-time weather monitoring over the south of the country. The existing Malé radar will be refurbished. An advanced data processing and analysis system will be put in place to ensure the interoperability of the various instruments and systems. The development and use of agro-climate forecasts and advisories will also be piloted. Lastly, capacity building and behavioral change activities will be conducted to maximize the effectiveness of the enhance monitoring and early warning systems at both institutional and community levels;
 - (ii) Output 2 will implement infrastructure and nature-based solutions for pluvial flood mitigation, coastal protection and mangrove restoration in Kulhudhuffushi City. Stormwater drainage and filtration systems and nature-based solutions such as bioswales will be constructed for inland flood protection. Nearshore coastal protection structures will be improved to prevent overtopping and erosion. The island's long-term protection and resilience will be supported through the development of a drainage management plan and mangrove restoration and management plan. To maximize impacts nationwide, new design and construction standards and associated training materials for green and grey coastal and flood protection measures will be formulated, informed by the experience in Kulhudhuffushi. Modeling and detailed design studies are

² Asian Development Bank. 2024. *Preparation of the Climate Change Adaptation and Resilience Project in Maldives. Climate Change Assessment. Consultant's Report. Manila.*

- required as a first step to ensure appropriate designs suitable for the complex ecosystems on Kulhudhuffushi City island;
- (iii) Output 3 will capacitate farmers and other value chain stakeholders to enhance the resilience of island agri-food systems. The Hanimaadhoo Agriculture Center will be upgraded to an advanced research and advisory hub on climate smart agriculture and supported to implement a farmer field school program; and
- (iv) Output 4 will enable entrepreneurs to identify develop, and apply viable business proposals for innovative adaptation measures and demonstrate high-level technologies and improved techniques for climate smart agriculture through a matching grant scheme in partnership with the SME Development Finance Corporation.
- 5. Output 1 will be implemented in Addu City atoll (Gan), Hulhulé island (Greater Malé/Kaafu) and at national level; Output 2 will be implemented in Haa Dhaalu atoll (Kulhudhuffushi City); Output 3 will be implemented in Haa Dhaalu atoll (Hanimaadhoo, Kulhudhuffushi, Nolhivaranfaru). Output 4 demonstrations will initially be implemented in Haa Dhaalu atoll (Hanimaadhoo, Kulhudhuffushi, Nolhivaranfaru) and Addu City atoll (Hulhumeedhoo and Hithadhoo) with the potential to be scaled up to national level, while the grant mechanism will be implemented nation-wide.
- 6. The Republic of Maldives will be the borrower and the Ministry of Finance will be the executing agency (EA). The Ministry of Climate Change, Environment and Energy (MCCEE) will be the lead implementing agency (IA) for all Project Outputs, while the Ministry of Agriculture and Animal Welfare (MAAW) will also be an IA. For Output 1 the main state agency involved will be the Maldives Meteorological Service (MMS), under MCCEE. For Output 2, Kulhudhuffushi City Council will be engaged, while for Output 3 and 4, MAAW will be the lead.
- 7. The indicative start date of the investment project is December 2024 and the project will be implemented until June 2030, with the estimated grant and loan closing date on 31 December 2030.

B. Purpose of the Environmental Assessment and Review Framework

- 8. The purpose of the Environmental Assessment and Review Framework (EARF) is to guide the environmental screening, assessment and management of the subprojects that can only be identified in detail after Board approval of the Enhancing Climate Resilience and Food Security Project. The Project will incorporate the environmental safeguards required by ADB's Safeguard Policy Statement (2009) and ADB's Environment Safeguards, A Good Practice Sourcebook (2012), Republic of Maldives environmental laws and regulations, and any subsequent modifications and additions agreed by the Executing Agency and ADB. This EARF is disclosed on the ADB website as part of the Report and Recommendations of the President for the Project.
- 9. The procedures set forth in this document have been formulated to satisfy the environmental assessment frameworks of both the Government of the Maldives and the safeguards policy of ADB, as defined in their respective environmental policies, guidelines, laws, and regulations. These are documented in Section III. In preparing this EARF, in addition to the relevant environmental safeguard practices the past experience in the sector were also reviewed. The review also included central level consultations; qualitative and quantitative assessments of environmental safeguard compliance processes and capacity assessment of the executing and implementing agencies.

C. Safeguards Categorization of the Project

10. The project has a wide range of planned activities. Some involve small to mediumscale physical construction works in highly modified terrestrial and coastal habitats (small buildings, grey/green drainage infrastructure, grey/green coastal protection works). The specific techniques proposed are in common use throughout the world, and the works will be limited to specific sites with clear boundaries. Impacts during the construction process are predictable, limited and can be mitigated by standard best practice measures. After construction these works are not expected to have any negative off-site or indirect impacts except those intended (e.g. sediment trapping by coastal structures). Other interventions include physical interventions to restore wetlands (mangroves, a sensitive ecosystem) and support for the agriculture sector which might, indirectly, promote increased use of agrochemicals and therefore require appropriate mitigation such as an integrated pest management (IPM) plan. Hence, the project will not involve any significant adverse environmental impact that are irreversible, diverse or unprecedented. Consequently, the project is categorized as B for environment.

A Climate Change Assessment (CCA) has been carried out to support the geographical scoping and prioritization for the investment project.3 This included a countrylevel climate risk assessment, which was developed based on the IPCC's risk framework⁴ and performed by (i) developing geospatial representation of elements at risk, (ii) hazard zoning for pluvial floods, udha (high waves), storm surges, windstorms and coastal erosion, (iii) exposure mapping and analysis, (iv) vulnerability analysis, (v) risk analysis, and (vi) hotspot identification. The assessment found that 52 of the 189 islands (27.5%) are at high to very high risk of hazards and climate change (combining exposure and vulnerability) and can therefore be considered as multi-hazard exposure and vulnerability hotspots.⁵ A Preliminary Climate Risk Screening has been carried (Annex 1) which indicates that the project is high risk.

D. **Subproject Selection Process**

- 12. Subprojects under the Project have been identified through a process of multi-criteria analysis and stakeholder discussion during the project preparation phase. An initial longlist of 47 potential measures was developed based on literature, best practices and policy review⁶ and consultations during the project preparation phase. The result was 11 options for Output 1, 23 options for Output 2, and 14 options for Output 3.
- 13. The longlist for Output 1 and Output 2 was presented to government stakeholders during a Prioritization Workshop in January 2024,7 where participants were tasked to assign scores to the potential measures, based on the following eligibility criteria agreed with ADB and MCCEE:
 - Reduces exposure or vulnerability to hazards and climate change: Subprojects (i) should significantly reduce exposure or vulnerability to the priority hazards and climate change and increase adaptive capacity and resilience of the population. infrastructure, and the economy.
 - Delivering co-benefits: Benefits in terms of (i) environmental protection or (ii) sustainability including for women and people of disadvantaged groups⁸: (ii)

³ ADB. 2023. Preparation of the Climate Change Adaptation and Resilience Project in Maldives. Climate Change Assessment. Consultant's Report (TA-6977). Manila.

⁴ IPCC, 2021: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, In

⁵ Footnote 3.

⁶ Asian Development Bank. 2024. Preparation of the Climate Change Adaptation and Resilience Project in Maldives. Detailed Sector Assessment. Consultant's Report. Manila.

⁷ The Prioritization Workshop only focused on prioritizing measures under Output 1 and 2, as the technical analysis and development of measures for Output 3 and Output 4 was undertaken by separate consulting firms, who conducted the prioritization separately.

⁸ Disadvantaged groups include disadvantaged youth, people with disabilities, older citizens, income poor people and people in remote geographical locations

- increased income and other economic benefits including for women and people of disadvantaged groups; (iii) improved health and nutrition including for women and people of disadvantaged groups; and (iv) changing discriminatory policies and practices⁹ affecting women and people of disadvantaged groups.
- (iii) Advances national and local priorities: Subprojects will be aligned with national and subnational policy and strategy priorities.
- (iv) Innovative, valued added and potential for upscaling: Subprojects should avoid duplication and be complementary to planned and ongoing Government and non-Government initiatives. Innovation and added value should be clearly demonstrated. Subprojects should be replicable and scalable to other areas or regions in the country that have similar conditions or needs.
- (v) Minimal impact on the environment: Subprojects likely to cause significant negative environmental impacts (classified as category A under ADB's SPS (2009)) shall be excluded. This also includes subprojects located within, or with the potential for adverse impacts on, critical habitat.
- (vi) Minimal impact on land acquisition and resettlement. Subprojects likely to cause significant negative land acquisition and/or resettlement impacts shall be excluded.
- (vii) Lifecycle cost. Subprojects should be least-cost solutions based on lifecycle cost.
- 14. The following stakeholders were involved in the prioritization: President's Office (Special Envoy for Climate Change), Ministry of Climate Change, Environment and Energy (Climate Change Department, Water and Sanitation Department), MAAW, Ministry of Construction and Infrastructure, MMS (Hulhulé Met Office, Gan Met Office), National Disaster Management Authority, and Kulhudhuffushi City Council.
- 15. The result of the participatory scoring and ranking was a shortlist of 22 eligible subprojects: under Output 1, nine measures were shortlisted for further feasibility analysis; and under Output 2, 13 measures. The lists were further refined by the expert team in consultation with the IA and implementing partners after a consultation and site visits to Kulhudhuffushi (January and May 2024) and Addu City (March 2024).

On 21 May 2024, a final shortlisting workshop was organized by ADB and attended by MCCEE, MAAW, MMS and technical experts to discuss the priority measures for all Project outputs. The shortlisting process considered the government's priority for adaptation investments, the scale and nature of development impacts, budget, safeguards category and requirements, and implementation feasibility and readiness. The final list of subprojects is shown in

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⁹ Discriminatory practices could include mobility constraints for women, gender biased work-division; wage disparities, limited access to services and opportunities and limited decision-making authority of women and people of disadvantaged groups

16. Table 1.

17. The islands targeted for Output 1 and Output 2 were agreed between ADB and MCCEE at the project concept stage. ¹⁰ The locations for Output 3 were decided in consultation with MAAW during the project preparation phase between January and May 2024. Output 4 will be implemented nation-wide.

¹⁰ ADB. 2023. Republic of Maldives: Enhancing Climate Resilience and Food Security Project: Project Concept Paper. Manila.

Table 1: Output-wise Subprojects

OP1	
1.1	Addu weather radar system, including tower
1.2	Male radar upgrades
1.3	Pilot agro-climate advisories
1.4	Behavioral Change Communication program
1.5	Capacity building program for MMS, including on improved models and software packages
OP2	
2.1	Marine, coastal and groundwater hydrology study and detailed design
2.2	Inland drainage network improvements, including bioswale
2.3	Measures for the protection of the eastern shoreline
OP3	
3.1	Construct a multipurpose facility at HAC
3.2	Capacity building program for HAC to support project island communities and urban
	farmers
OP4	
4.1	Matching grant scheme to support adaptation innovations

II. THE PROJECT

A. Modality

18. The Project will use a sector modality, reflecting its provision of strategic and policy implementation support for climate change adaptation and resilience. A key feature of the Project will be to identify and prepare 'model' subprojects that will support the objectives and outcomes expected from a Sector Modality Project by progressively implementing replicable subprojects in other inhabited islands over an extended period. In parallel, national capacity to adapt to climate change will be strengthened.

B. Implementation Arrangements

1. Project Proponents

- 19. The Republic of Maldives will be the borrower, and the Ministry of Finance will be the lead implementing agency (IA) for all Project Outputs, while the MAAW will also be an IA.
- 20. Several state agencies will be closely involved in project implementation. For Output 1 the main partner will be MMS under MCCEE. For Output 2, Kulhudhuffushi City Council will be involved as well as the Ministry of Construction and Infrastructure. For Output 3, the MAAW will be involved. Once constructed, the Project-funded civil works will be operated by MMS for Output 1, Kulhudhuffushi City Council for Output 2, and MAAW for Output 3. There are no major civil works planned under Output 4, the grant beneficiaries will maintain any technologies or small works supported under the Project.

2. Project Management

- 21. A new Project Management Unit (PMU) will be established within MCCEE to implement the entire project scope comprising: (i) a PMU Director to manage the overall project; (ii) a Compliance Unit covering finance, safeguards, and procurement for the entire project; (iii) a Technical Unit for project implementation; and (iv) and Support Staff. The PMU will:
 - (i) Be responsible for overall project management, implementation and monitoring.
 - (ii) Monitor and ensure compliance with covenants, particularly timely submission of audited project accounts and compliance with safeguard requirements.
 - (iii) Maintain project accounts and project financial records.
 - (iv) Review the reports submitted by project implementation consultants (PIC).
 - (v) Prepare bidding documents, request for proposals, and bid evaluation reports.
 - (vi) Serve as point of contact with ADB, maintains project documents, and submit timely reports (quarterly progress reports and project completion report) to ADB by consolidating relevant inputs from project partners and island councils.
 - (vii) Consolidate expenditures and prepare withdrawal applications for direct payment, reimbursements and use of advance account.
 - (viii) Open and manage an advance account for the ADB Grant.
 - (ix) Organize project orientation for participating island councils by informing them of the scope of the project.
 - (x) Establish and maintain the project website by disclosing progress reports, safeguard monitoring reports and design reports.
 - (xi) Collect supporting documents and submit withdrawal applications to ADB via MOF.
- 22. Several individual PICs will be recruited to support the PMU, which will include environment, coastal engineering, and mangrove ecology experts. A firm will be recruited to provide construction supervision for all civil works under the Project.

23. The Project organizational structure is shown in Figure 1. The PMU's Compliance Unit will include two safeguards specialists, one of whom will be an environmental specialist, the other a social safeguards specialist. The PMU staffing is shown in Table 2.

Figure 1: Project Organizational Structure and Staffing

Ministry of Finance (Executing Agency)

Project Steering Committee

Ministry of Climate Change, Environment and Energy (Implementing Agency 1) Ministry of Agriculture and Animal Welfare (Implementing Agency 2)

Project Management Unit (headed by PMU Director, MCCEE)

- Project Manager
- Civil/Environmental Engineer
- Procurement Specialist
- · Finance Management Specialist
- Urban Agriculture Expert
- Environmental Safeguards Specialist
- Social Safeguards Specialist
- GESI Specialist
- · Communication/Behavioral
 - Change Specialist
- Secretary
- Office assistant

Project Implementation Consultants

Civil Works Supervision Consulting Firm

Output 1:

- Weather Observatory Specialist
- Agrometeorologist

Output 2:

- Coastal/Environmental Engineer
- Mangrove Ecologist

Output 3:

Urban Agriculture Expert

Note: PMU additionally includes support staff

Table 2: Expected PMU Staffing

PMU	Staff	Location	Expected Total Months	# Staff
1	Project Director	Malé	36	1
2	Project Manager	Malé	60	1
Proc	urement Unit			
3	Procurement Specialist	Malé	66	1
4	Financial Management Specialist	Malé	66	1
Safe	guard Unit			
5	Environmental Safeguards Specialist	Malé	66	1
6	Social Safeguards Specialist	Malé	36	1
7	Gender and Social Inclusion Specialist	Malé	36	1
Tech	nical Unit			
8	Civil/Environmental Engineer	Malé	66	1
9	Urban Agriculture Specialist	Malé	66	1
10	Communication/Behavioral Change Specialist	Malé	66	1
Sup	oort Staff			
11	Secretary	Malé	66	1
12	Office Assistant	Malé	66	1

3. ADB Review

24. ADB will review the project progress and quality of safeguard compliance from time to time, and by fielding project review missions, generally twice a year.

III. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

A. Republic of Maldives

1. Legal System and Environmental Policies and Laws

- 25. The Maldives is a Presidential Republic as per the constitution adopted on August 7, 2008. The constitution stipulates the separation of powers to three branches of the government: Executive, Legislative and Judicial. The Executive branch is led by the President, elected for a five-year term and assuming the roles of both head of state and leader of the government. The President appoints Cabinet Ministers who must be approved by the Legislature. This comprises a unicameral People's Majlis or Parliament with, at present, 87 members. The Judicial system is made up of a Supreme Court, a High Court and other lower courts. The highest authority is given to the chief justice of the Supreme Court.
- 26. Article 22 of the Constitution stipulates the need to protect and preserve the natural environment, biodiversity, resources and beauty of the country for the benefit of the present and future generations. The article also stipulates that all development activities should be undertaken considering principles of sustainable development, taking measures as necessary to foster conservation, prevent pollution, the extinction of any species and ecological degradation.
- 27. The Environmental Protection and Preservation Act of the Maldives (4/93) is the primary legislation with respect to environmental management in the Maldives. The Act identifies the Ministry designated for environment (currently the Ministry of Climate Change, Environment and Energy (MCCEE)) as the primary authority responsible for implementation of the Act. The primary enforcement agency is the Environmental Protection Agency (EPA) of the Maldives and was established under a presidential decree on December 18, 2008. It is considered to be an affiliated agency of MCCEE.
- 28. Several other government entities have some environmental protection mandate. These include the Utility Regulatory Authority (URA), the National Disaster Management Authority, the Ministry of Housing, Land and Urban Development, the Ministry of Construction and Infrastructure, the MAAW, the Ministry of Fisheries and Ocean Resources, and local councils (Island, Atoll and City Councils).
- 29. The principal regulations in effect to implement the provisions of the Environmental Protection and Preservation Act of the Maldives (4/93) are the Regulation on Environment Liabilities (2011/R-9), the Environmental Impact Assessment Regulation (2012/R-27), the Regulation Governing Reclamation ad Dredging of Islands and Lagoons of Maldives (2013/R-15), the Regulation for Protection and Preservation of Island Vegetation and Flora in The Maldives (2022/R-92), the Protected Species Regulation (2021/R-25), the Protected Area Regulation (2018/R-78), the Regulation on Migratory Birds (2014/R-1236), the Water Resource Protection Regulation (2021/R-22), and the Dewatering Regulation for Construction and other Industrial Purposes (2021/R-20).
- 30. In addition to the Environmental Protection and Preservation Act of the Maldives (4/93), other acts directly related to environmental management are the Waste Management Act (24/2022), the Energy Act (18/2021), the Climate Emergency Act (9/2021), the Water and Sewerage Act (8/2020), and the National Disaster Management Act (28/2005).
- 31. The key environmental legislation and regulations are summarized in Table 3.

Table 3: Principal Legislation on Environmental Protection in the Maldives

Legislation/ Regulation	Date (Amended)	Purpose / Contents	Implementation Entity
Constitution of Republic of Maldives	2008	The constitution assigns responsibility for protection of the environment to the state. It addresses intergenerational equity and highlights the need for sustainable development and for taking measures to prevent pollution, extinction of any species and ecological degradation.	Government of Maldives (GoM)
Environment Protection and Preservation Act	1993 (2014, 2021)	This is the primary legislation with respect to environmental protection in the Maldives. The act defines the requirement to undertake Environmental Impact Assessment for any project that may cause significant negative impact on the environment. It prohibits irresponsible waste disposal and has provisions that facilitate designation of protected areas and protected species. The primary responsibility for enforcement of the act lies with the government Ministry with the mandate on environment. Amendments to the act allow the Ministry to delegate some functions to councils.	MCCEE/EPA/ Councils
Regulation on Environment Liability	2011	The objective of this regulation is to prevent actions violating the Environmental Protection and Preservation Act (4/93) and to ensure compensation for all damages caused by activities that are detrimental to the environment. The regulation provides guidance on how to value the damage and how fines should be calculated.	MCCEE/EPA
Environmental Impact Assessment Regulations	2012 (2013, 2015, 2016, 2017, 2018)	Provides guidance on the EIA process of the Maldives. The regulations define the steps and timeframes involved in screening, scoping, review and monitoring the process. The regulation specifies that EIAs can be prepared only by registered consultants and it defines the procedure to register as a consultant. It provides guidance on reviewing reports and the qualifications for EIA reviewers.	MCCEE/EPA
Regulation governing dredging and reclamation in the Maldives	2013 (2014)	This regulation establishes guidelines for minimizing environmental damage caused by dredging and reclamation, including minimum distances from reefs and the shoreline.	EPA
Regulation for protection and preservation of island vegetation and flora in the Maldives	2022	The main objectives of this regulation are to encourage greening and protect old trees in the Maldives. It defines the characteristics of plants that are protected, and specifies that for each tree removed two trees need to be planted.	MCCEE/EPA/ Council
Protected Species Regulations	2021	These regulations concern the designation, rehabilitation and management of protected species, and include fines for non-compliance.	MCCEE/EPA
Protected Area Regulation	2018	This regulation specifies mechanisms to protect, conserve and manage areas designated as protected areas.	MCCEE/EPA
Regulation on Migratory Birds	2014	The aim of this regulation is to ensure that migratory birds and their habitats are protected from damage and destruction. The regulation prohibits the capture of migratory birds, their use as pets, trade in birds or any parts, and actions harming the birds or their nests in anyway.	MCCEE/EPA

Legislation/ Regulation	Date (Amended)	Purpose / Contents	Implementation Entity
Water Resource Protection Regulation	2021	This regulation includes provisions to protect the water resources of the islands, especially groundwater. It gives guidance on protection of groundwater from spills, water quality testing requirements where chemicals are stored, use of groundwater for irrigation and the design of drainage systems.	URA
Regulation on dewatering for the purpose of construction and other industrial purposes	2021	The primary aim of this regulation is to protect the groundwater resource from dewatering activities. It requires permits to be obtained prior to dewatering, with a daily fee which progressively increases as the number of days of dewatering increases, providing a financial disincentive to long-term significant dewatering.	URA
Construction Site Health and Safety Regulations	2019	These regulations define the minimum standard for safety and security for the community and labour force when undertaking construction activities. It covers requirements for Personal Protective Equipment (PPE), safety signs and damage to nearby infrastructure.	Ministry of Construction and Infrastructure
Disaster Management Act	2015	The main objective of this act is to protect people from natural hazards and man-made disasters. It provides details of the composition and responsibilities of the National Disaster Management Authority. It also specifies the requirements for a National Disaster Management Plan and the requirements when preparing land use plans.	National Disaster Management Authority/ Council
Climate Emergency Act	2021	This act has several requirements that need to be achieved to address the climate emergency which was declared by parliament in February 2020. It specifies the establishment of a climate change Directorate and the assigning of a climate change envoy by the President. The act includes a requirement for preparation of a climate change national action plan and sectoral plans for the Tourism, Fisheries and Health sectors. The act also specifies that the country should become carbon neutral by 2030.	MCCEE
Waste Management Act	2022	This is the primary act that defines roles and responsibilities concerning waste management in the Maldives. The act requires the Ministry to publish a waste management regulation, prepare guidelines for waste management and gazette a list of products to which extended producer responsibility applies. It also defines the responsibilities of councils, the EPA, URA and the Ministry with respect to waste management.	MCCEE, EPA, URA and Councils
Agriculture Pesticide Control Act	2019	This act concerns the import, production, safe use and disposal of pesticides. It defines overall responsibility, requirements and penalties for non-compliance. A regulation has been published under the act to define the required operational procedures.	Ministry (Agriculture)
Decentralization Act	2010 (2011, 2015, 2017, 2019)	This act defines the composition, functions and responsibilities of the Island Council, Atoll Council, City Council, Local Government Authorities, and Women's Development Committees. It also creates a requirement for the preparation of island development plans and land use plans.	LGA, Councils, WDC and Ministry (Planning)

Legislation/ Regulation	Date (Amended)	Purpose / Contents	Implementation Entity
		This act governs the way in which land can be allocated for various uses. The categories include	Ministry (Planning),
	2014, 2015,	housing, economic purposes, community purposes, environment protection purposes and	Councils.
	2016)	other uses of the government.	

2. Environmental Assessment Procedures

A. Republic of Maldives

- 32. The Environmental Impact Assessment (EIA) process in the Maldives is determined by the Environmental Impact Assessment Regulations (2012/R-27) which were formulated under article 5 of the Environmental Protection and Preservation Act (4/93) of the Maldives.
- 33. The EIA regulations are implemented by Environmental Protection Agency (EPA).
- 34. The process comprises the typical steps of screening, scoping, review, decision-making and monitoring.
- 35. For screening, the regulations list those projects that require EIA (schedule D), those projects that do not require EIA (Schedule T) and those projects that can be undertaken subject to a mitigation plan provided by the EPA (Schedule U). Any projects that do not fall into these categories need to undergo a screening process, as described in article 8 of the regulation. Following screening, the EPA decides the level of assessment required. The screening decision will be one of the following:
 - (i) Environmental Impact Assessment (EIA) is required;
 - (ii) Environmental Management Plan (EMP) is required;
 - (iii) Initial Environmental Examination (IEE) is required;
 - (iv) The project can be undertaken with a mitigation plan proposed by the EPA;
 - (v) The project can be undertaken without any further clearance through the regulation.
- 36. Where an IEE is required, after review of the IEE report the EPA decides as follows, as per the regulations:
 - (i) EIA is required;
 - (ii) EMP is required;
 - (iii) The project can be undertaken without any further clearance through the regulations.
- 37. For projects that require EIA, the regulation details the scoping process in article 11. This includes a scoping meeting attended by stakeholders identified by the EPA. After scoping, Terms of Reference (ToR) will be issued which specify the technical requirements of the EIA report. For projects that require EMP, the format of the report is provided in the regulations and no further scoping is needed.
- 38. Under article 16 of the regulation, an EIA report must be prepared by a consultant who is registered with the EPA. The registration process is administered by a consultant registration board, as detailed in article 17 of the regulations. For an EMP, article 6 of the regulations requires the team preparing the report to include a person who has at minimum a bachelor's degree in environment.

- 39. Once the EIA/EMP/IEE report is submitted, the EPA sends it for review by two independent reviewers, as per article 13. The review duration depends on the amount paid by the proponent, in accordance with the following fee schedule (articles 7 and 13):
 - (i) For a review fee of MVR 5,000 15 days
 - (ii) For a review fee of MVR 10,000 10 days
 - (iii) For a review fee of MVR 20,000 5 days
- 40. Schedule I of the regulations defines the qualifications and experience needed by EIA reviewers.
- 41. Following review, the EPA informs the proponent if any additional information is required, or approval can be given, or the EIA report is rejected, or the project itself is rejected due to potential irreversible damage to the environment.
- 42. The EIA regulations require the EPA to disclose all the reports that are currently on review, placing them in the public domain for public feedback. All comments received from the public are to be considered during the review process.
- 43. Where deemed necessary, a public hearing maybe undertaken by the EPA.
- 44. Article 15 describes the procedures for appealing an EPA decision, with the final determination being made by the Minister of Environment. Article 20 describes the fining mechanism for non-compliance.
- 45. During project implementation, monitoring reports, as detailed in the approved EIA/EMP reports, must be submitted to the EPA by the project proponent. As per article 6 of the regulations, a monitoring report can be prepared by anyone with a bachelor's degree in environment or related field.
- 46. The required content of an EIA report is set out in Schedule E-1 of the regulations, as summarized below.

Table 4: Contents of Maldivian EIA report

- (i) Executive Summary of the Report (both in English and Dhivehi).
- (ii) Introduction: This chapter covers the general introduction of the project, the proponent and financial arrangements of the project.
- (iii) Policy and Legal: This chapter highlight the laws, regulations and policies that are applicable for the project.
- (iv) Project Description: This chapter covers a detailed description of the project, individual components, land approvals, utility arrangements, project inputs, project outputs, conceptual drawings and project schedule.
- (v) Methodology: This chapter covers the method adopted in preparing the EIA report including various survey methods and methods adopted for impact assessment.
- (vi) Existing Environment: This chapter covers the results of the various baseline assessments that are undertaken as part of the assessment.
- (vii) Stakeholder consultation: This chapter includes details of the concerned public, NGOs and other government and non-government stakeholders consulted and the outcomes of these consultations.
- (viii) Impact Prediction: This chapter covers, direct, indirect and cumulative impacts during the construction, operation and demobilization phase of the project.
- (ix) Alternatives: This chapter covers alternatives explored for the project including the no project alternative. The alternatives are compared from environmental, social and economic points of view. The preferred alternative is required to be provided as part of this analysis.
- (x) Mitigation Measures: This chapter covers the mitigation measures for the impacts identified. The cost of mitigation measures, equipment and resources required to implement the measures are highlighted in this chapter.

- (xi) Monitoring: This chapter covers the monitoring requirements of the project, the monitoring schedule, the report submission schedule, the cost of monitoring and equipment and the resources required for monitoring.
- (xii) Conclusion: This chapter covers the overall conclusion of the EIA study.

3. Country Framework

a. Environmental management

47. The mandate for environmental management of the country lies with Ministry of Climate Change, Environment and Energy (MCCEE) and the Environmental Protection Agency (EPA). The EPA is the primary regulatory agency and MCCEE is the primary entity which formulates the policies relevant to environmental management.

b. Public consultation

- 48. Public consultation is required for development initiatives through a variety of laws and regulations, in particular the Decentralization Act. Article 68 of the act stipulates that for any proposed development the proponent must consult with the council and other relevant authorities established in the island. The same article also states that any EIA reports developed for any project need to be shared with the relevant council, including information on the impacts and mitigation measures. Article 107-1 of the act requires councils themselves to hold meetings with the public regarding any important development activities undertaken in the islands, and give five days' notice of such meetings' time and place.
- 49. The EIA Regulations also have provisions to ensure public/stakeholder consultation and participation. Firstly, all stakeholders are required to participate in the scoping meeting. The ToR issued as a result of scoping identify the parties to be consulted during the next stage of the process. Once an EIA report has been prepared and submitted to the EPA, the agency is required to disclose the report for public comments during the period of review. Moreover, where there is significant public concern during the review stage, the EPA can hold a public hearing.

c. Information disclosure

- 50. The Right to Information Act (1/2014) requires each government institute to have an information officer. Subject to some exceptions, any person can request information from a state institution and the institution must provide the information within 21 working days or less, in normal cases. Where the institution has to carry out extensive research to find the information, a further 14 days may be allowed for it to comply with the request. The act also defines the responsibilities of the information commissioner and the information commissioner's office. This office is an independent body established to hear disputes and maintain records regarding state institutions.
- 51. EIA reports must be placed in the public domain during the review period, as per the EIA regulations.

4. National Environmental Regulator and Capacity of Implementation Agency

52. The national environmental regulator is the Environmental Protection Agency. The EPA is responsible for regulatory activities for protecting, conserving and managing the environment and biodiversity, including pollution prevention and regulating waste management under the Environment Protection and Preservation Act (4/93).

53. The implementation agency for the project will be MCCEE. The ministry's key mandate and functions relate to policy and regulatory development with respect to energy, waste, water, sanitation, climate change adaptation and coastal protection. In addition, the Ministry implements infrastructure development projects in these fields. MCCEE has many years' experience in implementing development cooperation initiatives, including ADB-funded projects, and MCCEE staff are familiar with donor requirements, procedures and terminology. Thus, in terms of capacity, the Ministry has the knowledge and know-how for implementation of the proposed project.

B. ADB Safeguard Policy Statement 2009

1. Policy

- 54. <u>Safeguard Policy Statement (SPS) (2009)</u>. SPS 2009 is ADB's main safeguards policy document.¹¹ It describes the common objectives and policy principles of ADB's safeguards, and outlines the delivery process for ADB's safeguard policy. It promotes sustainability through protection of people and the environment from the adverse impacts of projects, and by supporting the strengthening of country safeguard systems. It presents a consistent, consolidated framework for environment, resettlement, and indigenous people safeguards. Appendix 4 of the SPS specifies safeguard requirements for different financing modalities, including sector lending. For this project, the SPS requires:
 - (i) Screening of subprojects using a rapid environmental assessment (REA) checklist:
 - (ii) Use of subproject selection criteria that exclude subprojects with potential high impact;
 - (iii) Environmental categorization of both the overall project and each subproject, with category A subprojects excluded;
 - (iv) Preparation of an Initial Environmental Examination and an Environmental Management Plan for both the overall project and any subproject subsequently classified as environmental category B but for which details were not available during project appraisal;
 - (v) Consideration of physical cultural resources (PCR) including chance finds;
 - (vi) Public disclosure of project plans, designs and impacts;
 - (vii) Consultation and participation with all stakeholders, especially those directly affected:
 - (viii) Establishment and operation of an accessible and effective Grievance Redress Mechanism (GRM);
 - (ix) Consideration of occupational safety and health (OSH) at all stages of subproject planning and implementation;
 - (x) Making provision for management of unanticipated environmental impacts;
 - (xi) Use of international best practice for pollution prevention.
- 55. <u>ADB Operations Manual, Safeguard Policy Statement, Section F1/BP [Bank policies]</u> & Safeguard Review Procedures, Section F1/OP [operational procedures] (2013). These documents operationalize SPS 2009. The policy sets out the scope of SPS 2009 applicability to ADB operations, and the procedures describe the safeguards process and outputs, including consultation and disclosure requirements, through the various stages of project preparation.
- 56. The <u>Access to Information Policy (2018)</u> guides ADB's efforts to be transparent and accountable to the people it serves, which it recognizes are essential to development

11 Currently ADB is conducting a comprehensive review of the policy in order to update it. https://www.adb.org/news/events/adb-safeguard-policy-review-update-phase-2-regional-consultations

effectiveness. The policy recognizes the right of people to seek, access, and impart information about ADB's operations, and it aims to enhance stakeholders' trust in and ability to engage with ADB, through clearly stated principles including proactive disclosure, presumption in favor of disclosure, recognition of the right to access and impart information and ideas, country ownership, limited exceptions, and the right to appeal.

2. Guidance

- 57. Environmentally Responsible Procurement (ERP) (2007) provides guidance to ADB staff, consultants, and executing agencies on ERP, defined as "a systematic approach to the purchase of goods and services that are thought to be less damaging to the environment than other goods and services that serve the same purpose," specifically, products that "reduce waste, improve energy efficiency, limit toxic by-products, contain recycled content or are reusable, and are produced with the least environmental impact...[and] services...that help improve the environment, are rendered with minimum environmental and social impacts, and use resources and energy efficiently.
- 58. <u>Complaint Handling in Development Projects Grievance Mechanisms: A Critical Component of Project Management (2010)</u>. This document presents definitions, concepts, rationale, and history relevant to ADB project grievance redress mechanisms.
- 59. <u>Complaint Handling in Development Projects Building Capacity for Grievance Redress Mechanisms (2010).</u> This document presents a framework and practical suggestions for building the capacity of an organization to manage an effective grievance redress mechanism.
- 60. <u>Environment Safeguards, A Good Practice Sourcebook (2012).</u> This draft working document aims to add clarity, provide technical guidance, and recommend good practices in SPS (ADB 2009) implementation.

3. ADB Environmental Screening and Categories

- 61. ADB projects are screened in-house using a rapid environmental assessment (REA) checklist, either generic or specific to the sector. The checklist captures the type, location, sensitivity, scale, nature, and magnitude of potential environmental impacts, and availability of cost-effective mitigation measures. Based on the checklist findings, a proposed project is assigned to one of the following ADB environmental categories:
 - (i) <u>Category A</u> likely to have significant adverse environmental impacts that are irreversible, diverse, or unprecedented. These impacts may affect an area larger than the sites or facilities subject to physical works. An environmental impact assessment (EIA), including an environmental management plan (EMP), is required;
 - (ii) <u>Category B</u> potential adverse environmental impacts are site-specific, few if any of them are irreversible, and in most cases mitigation measures can be designed more readily than for category A projects. An initial environmental examination (IEE), including an EMP, is required;
 - (iii) <u>Category C</u> a proposed project is likely to have minimal or no adverse environmental impacts. An EIA or IEE is not required, although environmental implications need to be reviewed.
- 62. The category of a project is determined by its most sensitive component. The potential impacts of Output 2 of the Project define it as Category B. An IEE has been prepared for the overall project. However, since it is a sector project with multiple subprojects, the Project requires an Environmental Assessment and Review Framework (EARF) to guide

environmental risk management procedures for all subprojects, including those that may be identified and processed after project approval.

- 63. The proposed subprojects to be covered by this EARF have undergone initial screening using a rapid environmental assessment checklist adapted to the sector (Annex 2). They will be screened again when additional design details are available. This will be done by the PMU at an early stage of subproject detailed planning. Subprojects assigned to Category A are excluded from Project financing, with the other key environmental safeguard screening requirements for sub-project selection are listed above in para 13.
- 64. A consolidated initial environmental examination (IEE) including environmental management plan (EMP) has been prepared for the overall Project.

C. Compatibility between Country's and ADB Safeguard Policies

65. The ADB's SPS is generally in line with those of other principal multilateral development financing institutions. The environmental policies and laws of the Maldives are similar in many ways, but with some differences. **Error! Reference source not found.** p rovides a comparison of ADB SPS policy principles and the regulations of the Maldives, identifying gaps and measures to be implemented by the project to address the gaps.

Table 5: Comparative analysis of Government and ADB safeguard requirements

ADB SPS Requirement	ADB SPS Policy Principle	Maldives Regulation	Gap	Measures to Address Gap
Screening of environmental impacts and risks	Use a screening process for each proposed project, as early as possible, to determine the appropriate extent and type of environmental assessment so that appropriate studies are undertaken commensurate with the significance of potential impacts and risks.	The EIA regulations require screening of EIA reports for projects that do not fall in the categories of mandatory EIAs and Exemption list. If further information is required during the screening phase, an option for IEE is provided in the EIA regulations. ¹²	No significant gap. ADB does not have an exemption list and screening is mandatory, even if a project is locally exempt.	Undertake screening of all sub-projects even though exempted by EPA.
2. Assessment of potential impacts and risks to physical, biological, socio-economic and physical cultural resources of the project affected area	Conduct an environmental assessment for each proposed project to identify potential direct, indirect, cumulative, and induced impacts and risks to physical, biological, socioeconomic (including impacts on livelihood through environmental media, health and safety, vulnerable groups, and gender issues), and physical cultural resources in the context of the project's area of influence. Assess potential transboundary and global impacts, including climate change. Use strategic environmental assessment where appropriate.	The EIA regulations define several levels of assessment, depending on the type, scale and potential impacts of the project. ¹³	The EIA regulations focus on the natural environment rather than on social considerations such as livelihoods, vulnerable groups, gender issues and health & safety. There are no requirements for SEA in the regulations.	Even though not required by the EIA regulations, incorporate livelihoods, vulnerable groups, health & safety and gender issues in the ToRs for environmental assessments of all project activities. SEA is not considered necessary for this project.
3. Examination of alternatives for project's location, design, technology and potential environmental impacts	Examine alternatives to the project's location, design, technology, and components and their potential environmental and social impacts and document the rationale for selecting the particular alternative proposed. Also consider the no project alternative.	The EIA regulations specify that alternatives need to be explored. ¹⁴	No gaps identified.	None needed.
Preparation of Environmental Management Plan	Avoid, and where avoidance is not possible, minimize, mitigate, and/or offset adverse impacts and enhance positive impacts by means of environmental planning and management. Prepare an environmental management plan (EMP) that includes the proposed mitigation measures, environmental monitoring and reporting	The EIA regulations stipulate that, following screening, standalone EMPs may be appropriate management tools for certain projects. Where an EIA has to be	No gaps identified.	None needed.

<sup>Article 08 of the regulations
Article 08 of the regulations
Article 12 and schedule E of the regulations</sup>

ADB SPS Requirement	ADB SPS Policy Principle	Maldives Regulation	Gap	Measures to Address Gap
	requirements, related institutional or organizational arrangements, capacity development and training measures, implementation schedule, cost estimates, and performance indicators. Key considerations for EMP preparation include mitigation of potential adverse impacts to the level of no significant harm to third parties, and the polluter pays principle.	prepared, an EMP forms a key component of the study. 15		
5. Public consultation and consideration of concerns	Carry out meaningful consultation with affected people and facilitate their informed participation. Ensure women's participation in consultation. Involve stakeholders, including affected people and concerned nongovernment organizations, early in the project preparation process and ensure that their views and concerns are made known to and understood by decision makers and taken into account. Continue consultations with stakeholders throughout project implementation as necessary to address issues related to environmental assessment.	The EIA regulations require stakeholder/public consultation during the EIA preparation phase. ¹⁶	The ADB policy highlights topics such as informing all stakeholders, ensuring the involvement of all groups in consultations, and consultation during project implementation.	Develop a project-level stakeholder engagement framework or plan that specifically addresses all aspects of information sharing and consultation, for all project phases.
6. Grievance redress mechanism	Establish a grievance redress mechanism to receive and facilitate resolution of the affected people's concerns and grievances regarding the project's environmental performance.	No specific requirements for project- related grievance redress mechanisms.	No specific government regulation on addressing grievances.	Define project-level GRM in EARF. All EIAs/EMPs prepared for all subprojects should have a GRM.
7. Disclosure of draft and final environmental assessment reports	Disclose a draft environmental assessment (including the EMP) in a timely manner, before project appraisal, in an accessible place and in a form and language(s) understandable to affected people and other stakeholders. Disclose the final environmental assessment, and its updates if any, to affected people and other stakeholders.	The EIA regulations require all reports to be published on the EPA website, with a limited comment period. They also require the Executive Summary of the reports to be in Dhivehi language. 17	Disclosure typically involves stakeholder and/or public workshops; these are not mandated in the Maldives. Website disclosure might be effective in terms of reaching the affected public, especially in the outer islands.	Present the key findings of the draft and final EIA/EMP reports prepared for the project and sub-projects to the affected public. Publicise the availability of reports on the EPA website.

Article 8 of the regulations
 Article 12 and Schedule E of the regulations
 Article 13 of the regulations

ADB SPS Requirement	ADB SPS Policy Principle	Maldives Regulation	Gap	Measures to Address Gap
Implementation of effective monitoring	Implement the EMP and monitor its effectiveness. Document monitoring results, including the development and implementation of corrective actions, and disclose monitoring reports.	The EIA regulations require preparation of a section on monitoring, where monitoring indicators and related aspects are defined. ¹⁸	No gaps identified.	None needed.
9. Protection of critical habitats and protected flora and fauna	Do not implement project activities in areas of critical habitats, unless (i) there are no measurable adverse impacts on the critical habitat that could impair its ability to function, (ii) there is no reduction in the population of any recognized endangered or critically endangered species, and (iii) any lesser impacts are mitigated. If a project is located within a legally protected area, implement additional programs to promote and enhance the conservation aims of the protected area. In an area of natural habitats, there must be no significant conversion or degradation, unless (i) alternatives are not available, (ii) the overall benefits from the project substantially outweigh the environmental costs, and (iii) any conversion or degradation is appropriately mitigated. Use a precautionary approach to the use, development, and management of renewable natural resources.	Protected Area Regulations. Protected Species Regulations. These regulations require management plans to be developed for protected areas and species, and specify fines for non-compliance. 19	The ADB policy has specific terminology on habitats and specific guidance on habitat assessment methodologies, as the basis for any further actions or planning.	Use ADB-style approach to habitat assessment as foundation in biodiversity studies and management.
10. Application of pollution prevention and control technologies	Apply pollution prevention and control technologies and practices consistent with international good practices as reflected in internationally recognized standards such as the World Bank Group's Environmental, Health and Safety Guidelines. Adopt cleaner production processes and good energy efficiency practices. Avoid pollution, or, when avoidance is not possible, minimize or control the intensity or load of pollutant emissions and discharges, including direct and indirect greenhouse gases emissions, waste generation, and release of hazardous materials from their production, transportation, handling, and storage. Avoid the use	Waste Management Act. Agriculture Pesticide Control Act.	ADB requirements are more stringent. Many guidelines and standards to be prepared under the Waste Management Act are yet to come into force.	Apply ADB standards where more stringent and where local standards/guidelines are missing.

Article 12 and Schedule E of regulations
 Article 12 of the protected area regulations and article 09 of protected species regulations

ADB SPS Requirement	ADB SPS Policy Principle	Maldives Regulation	Gap	Measures to Address Gap
·	of hazardous materials subject to international bans or phaseouts. Purchase, use, and manage pesticides based on integrated pest management approaches and reduce reliance on synthetic chemical pesticides.			
11. Ensure worker and community health and safety (H&S)	Provide workers with safe and healthy working conditions and prevent accidents, injuries, and disease. Establish preventive and emergency preparedness and response measures to avoid, and where avoidance is not possible, to minimize, adverse impacts and risks to the health and safety of local communities.	Construction Site Health and Safety Regulations. These cover both community and worker health. ²⁰ For projects above a value of MVR 1.5 million (~\$100,000), the act requires preparation of a health and safety plan and an emergency response plan. ²¹	ADB policy requires all projects, no matter how small, to consider health and safety during both planning and implementation.	Develop and include a standard, simple H&S code of practice for all small project activities, with an increased level of detail for sub-projects requiring an EMP.
12. Conservation of physical cultural resources and avoidance of destroying or damaging them	Conserve physical cultural resources (PCR) and avoid destroying or damaging them by using field-based surveys that employ qualified and experienced experts during environmental assessment. Provide for the use of "chance find" procedures that include a pre-approved management and conservation approach for materials that may be discovered during project implementation.	The Heritage Act defines chance find procedures. ²²	ADB policy mandates a proactive approach to PCR management by assessing project sites for their PCR potential during the planning stage, as well as a reactive approach (Chance Finds procedures).	Ensure all sites where project physical activities will occur are screened for potential PCR.

Chapter 2 of the regulations concerns measures that need to be taken to ensure public and worker safety
 Article 5 and 6 of the regulations respectively
 Articles 28 and 29 of the Act.

IV. ENVIRONMENTAL IMPACTS OF OVERALL PROJECT

66. The environmental impacts of the project's physical components are anticipated to be moderate and easy to mitigate by standard measures. At the same time, as a climate change adaptation initiative, the project will reduce the impacts of predicted climate change on the physical, biological and socio-economic environment. Under a "do-nothing" scenario, climate change impacts will be more damaging than with the project.

A. Impacts of Each Output

- 67. The Output 1 subprojects involve construction of a new weather radar on Addu Atoll, refurbishment of the existing weather radar at Malé, piloting of new and improved forecasting programs and associated training and capacity building. The new radar is a small building that will be constructed on modified habitat within the airport perimeter, with no land acquisition impacts or special access requirements. The Malé radar is also an existing installation. There are no unusual operational issues for any of the subprojects.
- The Output 2 subprojects involve significant civil works on the highly urbanised island of Kulhudhuffushi City to instal grey-green infrastructure solutions for pluvial flood mitigation. coastal protection and mangrove restoration. Inland, stormwater drainage and infiltration systems and nature-based solutions such as bioswales will be constructed to reduce flood depths and duration and increase freshwater inputs to the island's crucial groundwater lens. These works are all simple, although innovative for the Maldives, and will be built on public land managed by the City Council, mostly on existing city streets. Traffic volumes and speeds on the island are low and streets are on a grid pattern, so travel disruption due to the works will be minimal. On the eastern shoreline coastal protection measures (beach nourishment and rock groynes) will be undertaken to prevent overtopping and erosion of the remaining beach ridge and manage marine sediment movement. Materials (sand) will be sourced from existing stockpiles on the island, with rock being imported by barge from India. The marine environment around the island has been very heavily affected by previous large-scale infrastructure works, especially harbor development, and is much modified. The coastal protection works will help to stabilize the inshore environment on the exposed eastern coast. The functioning of the island's remaining mangrove wetlands, which are inland, will be improved by re-establishing marine connectivity. These wetlands are important natural habitats and may qualify as critical habitat due to their scarcity and biodiversity. Restoration of their ecosystem functions is a local priority. Monitoring of all the subprojects will be important since (i) the stormwater drainage works are closely tied to recovery of the groundwater lens. (ii) the coast protection works will be built in a dynamic environment in which change is a constant factor, and (iii) wetland recovery can only be checked after several seasons of ecological monitoring.
- 69. The Output 3 subprojects involve upgrading and expansion of the existing Hanimaadhoo Agriculture Center and associated capacity building and farmer training. The civil works involve replacement of the existing buildings with modern, purpose-built facilities appropriate to a small agricultural research and training station, including offices, workshops, laboratories, lecture-rooms, accommodation, greenhouses and storage. The Center is located on a fenced plot of land allocated for MAAW use. Demolition will generate a small amount of non-hazardous solid waste, some of which can be re-used as fill (building rubble). Construction will not involve any unusual materials or practices. Existing mature trees will be retained as far as possible. The Center has very limited land for trials and demonstrations, since adjacent land has recently been allocated to local households for agricultural production. Operation of the upgraded centre will not involve any unusual activities beyond the normal requirements for laboratory chemicals and the use of small quantities of artificial fertilizers in agricultural trials.

70. Output 4 involves the provision of matching grants for a variety of agricultural activities and initiatives. Some, such as home gardens, will be very small-scale with negligible environmental impact. The scale of any commercial developments is limited by the physically small size of the nation's many islands. However, within limited areas, impacts of any particular development might be significant due to changes to habitat, demand for groundwater, waste generation from agro-processing, the use of agrochemicals, the displacement of existing crop varieties and the introduction of alien genes and species. All these issues will need to be checked for every application, and the proposal modified or rejected as appropriate.

B. Cumulative Impacts

71. The cumulative negative impact of all subprojects under the Project will be low, since (i) environmental Category A subprojects are excluded; (ii) the physical works will be localized and involve simple construction activities - small buildings, drainage, coastal protection; and (iii) the agriculture sector support activities will improve agricultural productivity and food security in a climate sensitive manner, including water-saving technologies.

V. ENVIRONMENTAL ASSESSMENT PROCESS FOR SUBPROJECTS

- 72. The Output 1 subprojects with civil works are clearly defined at feasibility level. The Output 2 subprojects will be further developed based on a detailed study at the beginning of project implementation. The Output 3 subprojects require further design work, again to be carried out at the next stage of project implementation. The Output 4 subprojects will be identified during project implementation. All subprojects will require both ADB and Maldivian environmental clearance.
- 73. All subprojects will be screened using the list of selection criteria provided in Para 13 of this document. Based on the screening, subprojects are to be classified into one of the following ADB environmental categories.
 - (i) Category A. A proposed project is classified as category A if it is likely to have significant adverse environmental impacts that are irreversible, diverse, or unprecedented. These impacts may affect an area larger than the sites or facilities subject to physical works. Category A subprojects will not be considered under the project scope;
 - (ii) Category B. A proposed project is classified as category B if its potential adverse environmental impacts are less adverse than those of category A projects. These impacts are site-specific, few if any of them are irreversible, and in most cases mitigation measures can be designed more readily than for category A projects. An IEE and EMP are required. Hence, Category B or less will apply to all additional new subprojects as suggested by the findings of environmental screening prepared by using ADB's Rapid Environmental Assessment (REA) checklist;
 - (iii) Category C. A proposed project is classified as category C if it is likely to have minimal or no adverse environmental impacts. No environmental assessment is required although environmental implications need to be reviewed. Application of this category to the new subproject work will be decided according to the findings of the environmental screening prepared by using REA checklist. A simple Due Diligence Report for any addressing any residual impacts shall be prepared.
- 74. **Preparation of IEE:** The outline and contents of an IEE is presented in Annex 5. The subprojects may be grouped together as appropriate into individual civil works procurement packages. One IEE may be prepared per procurement package subject to the concurrence of PMU/GOM and ADB.
- 75. **Environmental Management Plan:** An EMP describes and addresses the potential impacts and risks identified by the environmental assessment. The EMP includes mitigation measures, environmental monitoring and reporting requirements, emergency response procedures, related institutional or organizational arrangements, capacity development and training measures, implementation schedule, cost estimates, and performance indicators. Where impacts and risks cannot be avoided or prevented, mitigation measures and actions are identified so that the subproject is designed, constructed, and operated in compliance with applicable laws and regulations and meets the requirements specified in the EMP. The level of detail and complexity of the EMP and the priority of the identified measures and actions will be commensurate with the subproject's impacts and risks. Key considerations include mitigation of potential adverse impacts to the level of "no significant harm to third parties," the "polluter pays" principle, the precautionary approach, and adaptive management.
- 76. If some residual impacts are likely to remain significant after mitigation, the EMP will also include appropriate compensatory measures (offset) that aim to ensure that the project

does not cause significant net biodiversity loss or degradation to the environment. Such measures may relate, for instance, to conservation of habitat and biodiversity, preservation of ambient conditions, and greenhouse gas emission reduction. Monetary compensation in lieu of offset is acceptable in exceptional circumstances if the compensation is used to provide environmental benefits of the same nature and is commensurate with the project's residual impact.

- 77. **Pollution prevention and applicable standards:** Pollution prevention for conservation of resources, environmental standards, occupational and community health and safety, will be addressed in the IEE. During the design, construction, and operation of the project, the PMU will apply pollution prevention and control technologies and practices consistent with international good practice, as reflected in internationally recognized standards such as the World Bank Group's Environment, Health and Safety (EHS) guidelines. These standards contain performance levels and measures that are normally acceptable and applicable to projects. When Maldivian regulations differ from these levels and measures, the PMU will apply whichever is more stringent. If less stringent levels or measures are appropriate in view of specific project circumstances, the PMU will provide full and detailed justification for any proposed alternatives that are consistent with the requirements presented in ADB SPS.
- 78. The IEE and EMP will be included in bidding and contract documents with specific provisions requiring contractors to (i) comply with all other conditions required by ADB, ²³ and (ii) to submit a site-specific environmental management plan (SEMP), including (a) proposed sites/locations for construction work camps, storage areas, haul roads, lay down areas, disposal areas for solid and hazardous wastes; (b) specific mitigation measures following the approved EMP; (c) monitoring program as per SEMP; and (d) budget for SEMP implementation.
- 79. **Public Consultation, Information Disclosure and Grievance Redress:** Public consultation and information disclosure are mandatory as part of the environmental assessment process. The adequacy of public consultation and disclosure process will be one of the criteria used to determine the project compliance with ADB safeguard policies. Similarly, a grievance redress mechanism (GRM) to receive, evaluate, and facilitate the resolution of affected persons' concerns, complaints, and grievances about the social and environmental performance at subproject level is to be established and detailed in each IEE Report. The GRM will be made operational during the EMP implementation phase. The process of public consultation and information disclosure, which is to be carried through project preparation and implementation, as well as the project GRM to be established and maintained, are presented in detail in Section VIII.
- 80. **Review of Environmental Assessment Reports:** Subproject IEE and environmental due diligence reports including EMPs prepared during the subproject design process will be reviewed by the PMU and submitted to ADB for no-objection. Approval and clearance of safeguard documents of the respective subprojects by the PMU and ADB, respectively, is a prerequisite to initiate the bidding process.
- 81. All IEEs, EMPs and environmental due diligence reports will be prepared prior to invitation of the bids for construction contracts. The bid documents will include the safeguards provisions, as prepared in master bid document for the project, and requirement to incorporate necessary resources to implement the EMP. The EMP will form part of the contract document. Draft IEEs prepared at feasibility study stage will be updated (i) once detailed design is

²³ Contractors to comply with (i) all applicable labor laws and core labor standards on (a) prohibition of child labor as defined in national legislation for construction and maintenance activities; (b) equal pay for equal work of equal value regardless of gender, ethnicity, or caste; and (c) elimination of forced labor; and with (ii) the requirement to disseminate information on sexually transmitted diseases, including HIV/AIDS, to employees and local communities surrounding the project sites.

completed, (ii) if and when a major change in scope, location or design is needed, or (iii) when unanticipated environmental impacts occur. The PMU will submit all IEEs to ADB for clearance and disclosure. ADB will review and disclose on its website the final reports (IEEs) of all subprojects.

82. Environmental assessment for subprojects must follow both the ADB SPS and Government processes. According to Schedule D of the Environmental Impact Assessment Regulations (2012/R-27), most or all of the Output 2 subprojects and possibly some others will require an EIA study since they involve sea defence structures, beach nourishment, marine outfall pipes and agriculture projects. Table 6 notes the steps in complying with these processes per subproject stage.

Table 6: Environmental Assessment Process for Subprojects

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Project Stage	Environmental Assessment and Review Framework Procedure	ROM Procedure
Subproject identification	Apply subproject selection criteria (Section I of the EARF) and screen using Rapid Environmental Assessment Checklist (REA). Checklist will be	PIC will support PMU to select subprojects using selection criteria.
Feasibility/ preliminary design	prepared by the PIC and submitted to PMU for concurrence of categorization and scope of the IEE if required. ²⁴ Initial assessments must include information on site-specific observations such as state of the existing site and land preparation needed, physical cultural resources, and critical habitat assessment.	PIC supports PMU to determine assessment requirements if project type listed or screening form if not.
	Categorization (B or C): PMU to review the REA checklists and reconfirm the categorization.	Screening decision by EPA.
	Preparation of draft IEEs with EMP for Category B and environmental due diligence report for Category C.	Preparation of IEE, EIA and/or EMP as required; EIA involves scoping and preparation of ToR. Consultants must be registered.
	Public consultation will be carried out in a manner commensurate with the impacts of affected communities. The consultation process and its results will be documented and reflected in the IEE.	Public consultation and inclusion of outcomes in report.
	Disclosure: For category B: disclosure of the draft IEE, updated IEEs and corrective action plans, and environmental monitoring reports. Environmental information will be disclosed in an accessible place and in a form or language understandable to affected persons and other stakeholders. For illiterate people, other suitable communication methods will be used. Identify and incorporate environmental mitigation	The Ministry will place all EIAs and EMPs in the public domain.
	and monitoring measures (including the EMP) into bid/contract documents.	
Appraisal and Approval	EMP and other environmental covenants (budget, personnel, etc.) are incorporated into the legal agreement, loan or project agreement, and project administration memorandum (PAM). ADB will review draft final reports of all IEEs.	
Detailed design	Finalization of draft IEE based on detailed design. Further public consultation will be carried out in a manner commensurate with the impacts of affected communities. The consultation process and its results are to be documented and reflected in the IEE.	

²⁴ The subprojects (sites) may be grouped together as appropriate into individual civil works procurement packages. One IEE may be prepared per procurement package subject to concurrence of ADB.

2

Project Stage	Environmental Assessment and Review Framework Procedure	ROM Procedure
	Disclosure: For category B: disclosure of the final IEE on ADB's	
	website, also updated IEEs and corrective action	
	plans and environmental monitoring reports.	
	Environmental information will be disclosed in an	
	accessible place and in a form or language	
	understandable to affected person and other stakeholders. For illiterate people, other suitable	
	communication methods will be used.	
	Mitigation measures specified in IEE incorporated in	
	project design.	
	Identify and incorporate environmental mitigation	
	and monitoring measures (including the site-specific	
	EMP and appointment of an EHS supervisor) into	
Contract award	bid/contract documents.	
Contract award	Confirm that all necessary environmental clearances, consents, and no-objection certificates	
	as per the legal framework are in place prior to	
	contract award.	
	Implementation of EMP, including monitoring plans	
	based on IEE findings, to be incorporated into civil	
	works contracts.	
Implementation	EA will submit to ADB the following documents for	Project proponent to submit
	disclosure on ADB's website:	regular monitoring reports with respect to the stipulated
	 Updated IEE (if applicable due to change in scope or detailed design) 	environmental clearance
	 Corrective action plan prepared during project 	conditions.
	implementation, if any	
	Semi-annual environmental monitoring reports	
	EA to ensure the effective implementation of the	
	following:	
	 Safeguards induction of Contractors 	
	Information disclosure	
	GRM establishment	
	EMP monitoring and supervision	
	 Reporting corrective actions. 	

Note: ^a The corrective action plan will define necessary remedial actions, the budget for such actions, and the time frame for their implementation. The audit report (including corrective action plan, if any) will be made available to the public in accordance with the information disclosure requirements of Safeguard Requirements 1–3.

VI. SAFEGUARDS IMPLEMENTATION ARRANGEMENTS

A. Inputs, Responsibilities, and Accountability

- 83. Responsibility for supervision of EARF implementation, including subproject IEE-EMP preparation, rests with the MCCEE PMU. A PMU environment safeguard officer, with support provided by a PIC, will screen and classify potential subprojects. Preparation of subproject IEE-EMPs and due diligence reports will be carried out by the relevant PIC. National impact assessment documentation will be prepared by licensed national environmental services firms, to be recruited by the MCCEE PMU, using counterpart funding. The PMU will ensure that EIA findings are locally disclosed and that EMP measures are incorporated into civil works designs and contracts as needed.
- 84. An overview of key environmental tasks and responsibilities is given in Table 7.

No.	Task	Responsibility
1	Preparation, review and clearance of IEE and SEMP	PIC / PMU
2	Obtaining national clearances, permits etc.	PMU
3	Stakeholder engagement, consultation, information disclosure	PIC, EIA contractor
4	Grievance redress	PMU / PIC
5	Updating of IEEs	PIC / PMU
6	Preparation of corrective action plans, if required, and monitoring their implementation	PIC / PMU
7	Reporting to regulatory agencies	PMU / PIC
8	Reporting to ADB	PMU / PIC
9	Capacity development	PIC

Table 7: Key Environmental Tasks and Responsibilities

85. **PMU:** The PMU will have the following responsibilities:

- (i) Under the loan funds, engage a qualified and experienced PIC who will undertake environmental assessment consistent with the EARF and ADB's SPS 2009; the PMU will be responsible to undertake any environmental safeguard requirements guided by national legal requirements;
- (ii) Ensure timely preparation of the environmental assessments for subprojects in a manner satisfactory to ADB;
- (iii) Submit draft IEEs for subprojects to ADB in a timely manner to permit the necessary review and clearance;
- (iv) Ensure that IEEs are revised based on ADB comments. Submit the final environmental assessment documents to ADB for clearance and disclosure on ADB website:
- (v) Ensure that the EMP provisions are implemented for the subprojects;
- (vi) Submit to ADB semi-annual environmental reports on project implementation;
- (vii) If there is a change in scope of a subproject, confirm to ADB that the environmental category has been reviewed. Review the environmental assessment based on the revised environmental category, if necessary;
- (viii) Ensure that necessary regulatory environmental permits and clearances required by the Government are obtained in a timely manner (primarily by the respective design consultants as part of their design responsibilities) and that copies are promptly submitted to ADB;
- (ix) Ensure efficient operation of the project's GRM.
- 86. The PMU will ensure that bidding and contract documents include specific provisions requiring Contractors (i) to comply with all applicable labor laws and core labor standards on (a) prohibition of child labor as defined in national legislation for construction and maintenance

activities, (b) equal pay for equal work of equal value regardless of gender, ethnicity, or caste, and (c) elimination of forced labor; and (ii) to disseminate information on sexually transmitted diseases including HIV/AIDS, to employees and local communities surrounding the project sites.

- 87. For subprojects with IEE-EMP, the PMU will ensure that:
 - (i) The IEE is cleared by ADB prior to bid invitation;
 - (ii) The subproject tender documents are properly assembled to:
 - (a) include standard construction contract environmental safeguard clauses (see Annex 6):
 - (b) include the respective IEE, and
 - (c) require bids to include a SEMP setting out the bidder's approach to providing the required construction-phase mitigation and monitoring measures (during technical evaluation of submitted bids, the executing agency may request the PIU to task their environment staff and/or consultants to assist in evaluation of SEMPs).
 - (iii) Bidders, construction contractors, construction supervisors, and any other entities involved in subproject environmental safeguards have access to subproject IEEs;
 - (iv) EMP provisions and compliance requirements per (i) covenants and (ii) the Project Administration Manual are explained to bidders in the pre-bid meeting;
 - (v) Confirmation is obtained that bids include sufficient costs and personnel to implement all environmental safeguards;
 - (vi) Arrangements are made for implementation of any EMP measures not included in SEMPs as the contractor's responsibility;
 - (iv) Contracts and workplans for construction supervision include supervision of EMP implementation (whether undertaken within SEMPs or implemented separately); and
 - (vii) Project management monitoring and reporting systems track and report EMP implementation indicators.
- 88. During subproject construction and operation, the PMU or other organization directly responsible for the subproject will undertake the following tasks:
 - (i) Supervise and monitor EMP/SEMP implementation;
 - (ii) Include summaries of EMP/SEMP implementation supervision and monitoring in regular progress reports;
 - (iii) Promptly identify deficiencies and adverse impacts observed during EMP/SEMP monitoring, and take action to address these;
 - (iv) Prepare monthly environmental monitoring reports (EMR), documenting achievements and deficiencies in EMP/SEMP implementation, and submit these to the PMU (the reports should be based on the outline at Annex 6); and
 - (v) Undertake EMP public consultation activities.
- 89. **PIC:** On behalf of and in support of the PMU, the PIC will:
 - (i) Prepare the subproject screening checklists in accordance with sub-project selection criteria as listed in Para 13 of this document;
 - (ii) In close cooperation with the design consultants, undertake subproject environmental assessment and prepare necessary ADB reports;
 - (iii) As part of the environmental assessment process and in close cooperation with the design consultants, ensure that adequate public consultation with affected groups and local stakeholders is undertaken and documented in accordance with ADB's SPS 2009;
 - (iv) Based on ADB's review of the draft IEEs, revise these in a manner satisfactory to ADB;

- (v) Ensure that the EMP provisions are incorporated in the design as well as in the bid and contract documents for civil works;
- (vi) Ensure that subproject EMP provisions are implemented properly and in a timely manner;
- (vii) Prepare and implement an updated EMP or a corrective action plan to address unpredicted environmental impacts and/or non-compliance with EMP measures during subproject implementation; and
- (viii) Monitor the environmental performance of contractors and prepare semiannual environmental monitoring reports.

90. **Design consultants:** Each subproject design consultant will:

- (i) Arrange for the provision of licensed environmental specialists for the respective subproject;
- (ii) In close cooperation with the PIC, undertake subproject environmental assessment and prepare necessary reports to obtain environmental clearance;
- (iii) As part of the environmental assessment process and in close cooperation with the PIC, ensure that adequate public consultation with affected groups and local stakeholders is undertaken and documented;
- (iv) Based on comments from the public and the regulator, revise and update the draft environmental documentation;
- (v) Ensure that all approved EMP provisions are included in the draft bid documents.
- 91. **Contractors:** Each contractor will appoint an EHS Officer who will be responsible on a day-to-day basis for (i) ensuring implementation of the SEMP, (ii) coordinating with the PIU and environment specialist/s of project consultant team/s; (iii) consulting with interested/affected people, (iv) field-level grievance redress; and (iv) reporting.
- 92. Each contractor will be required to submit to the PMU, for review and approval, a SEMP including (i) proposed sites or locations for construction work camps, storage areas, haul roads, lay down areas, disposal areas for spoil and for solid and hazardous wastes; (ii) specific mitigation measures following the approved EMP; (iii) monitoring program per SEMP; (iv) budget for SEMP implementation. No works can commence prior to approval of SEMP.
- 93. A copy of the approved SEMP will be kept on-site during the construction period at all times. Non-compliance with, or any deviation from, the conditions set out in the SEMP constitutes a failure in compliance and will require corrective actions. The EARF and the subproject IEEs specify responsibilities for EMP implementation during the design, construction and operation/maintenance phases.
- 94. **ADB:** ADB will be responsible for review and timely clearance of the IEEs for subprojects. Technical guidance will be provided by ADB to the PMU as needed. ADB will also be responsible for reviewing regular monitoring reports for the entire Project and officially disclosing the safeguard documents (IEEs and environmental monitoring reports) on the ADB website. During implementation of the Project, ADB will:
 - (i) Review and clear IEEs for Category B subprojects and environmental due diligence reports for Category C subprojects to ensure compliance with the EARF and ADB's SPS 2009.
 - (ii) Disclose the draft and final IEE and environmental monitoring reports on the ADB website upon receipt from PMU.
 - (iii) Review, clear, and disclose environmental monitoring reports submitted by the PMU.

- (iv) Conduct regular review missions during implementation to monitor EMP implementation.
- (v) Provide guidance to the PMU, as required.

B. IEE and EMP Contents

- 95. Subproject IEEs will be prepared to satisfy ADB requirements, including any relevant new policies, laws, and regulations promulgated subsequent to this EARF, and any modifications and additions to the EARF agreed by the Executing Agency and ADB. Maldivian environmental clearance application requirements demand documentation in a different form.
- 96. IEEs will include Environmental Management Plans (EMPs) consisting of a mitigation plan and a monitoring plan. Each of these should address subproject pre-construction, construction, and operation phases (decommissioning is not relevant to the physical measures to be implemented).
- 97. Sample contents of an IEE are given in Annex 3.

C. Custody and ADB Review/Clearance of Subproject IEEs

- 98. Draft IEEs will be placed on file with the PMU. The PMU will submit draft IEEs to ADB for review and clearance.
- 99. Public consultation will be carried out as part of the process of preparing each subproject IEE. Formal local disclosure of the complete IEE will be done after ADB no-objection to the IEE has been received.
- 100. In cases where local disclosure starts and a request for ADB review is subsequently received, local disclosure will be suspended until the results of the ADB review are received by the PMU. If review results warrant, the IEE-EMP and/or local disclosure information materials (e.g. local language brochure) will be appropriately modified prior to re-starting local disclosure.

VII. REPORTING

- 101. **Environmental monitoring reports:** The PMU, assisted by the relevant PIC, will produce six-monthly environmental monitoring reports and submit these to ADB, for disclosure on the ADB website. The reports will include summaries of environmental progress, achievements, and deficiencies related to EMP implementation, monitoring data collected, information on non-compliance notices issued to contractors, complaints received from stakeholders through GRM or other routes, and actions taken to rectify problems. A template for these semi-annual monitoring reports is given at Annex 5.
- 102. **ADB review mission reports:** ADB review missions will review and report on compliance with environmental conditionalities and agreed corrective action plans in the loan agreement documents.
- 103. **Contractor record keeping and reporting:** Contractors will maintain records of emissions, spills, accidents and complaints, and provide copies to the PIU as part their monthly progress reports.
- 104. **Public communication and consultation reporting:** Public consultation during preparation of each IEE will be recorded in a public consultation record (see formats in Annex 6) and included in the project IEE as an Appendix.
- 105. **GRM reporting:** During construction, stakeholder complaints, and actions taken to resolve them, will be recorded in complaints logs maintained GRM local focal points. Monthly environmental monitoring reports will review all active log books and summarize the GRM activity during the period. GRM shall be prepared for overall project including environmental and social safeguards (see Section VIII.G).

VIII. PUBLIC CONSULTATION AND INFORMATION DISCLOSURE

A. Overview

- 106. **ADB** requirements: ADB's environmental safeguard policies require public consultation meetings (PCM) at an early stage of the IEE process for environment Category B investments. Adequacy of public consultation and information disclosure is one of the criteria used to determine compliance with ADB safeguard policies. Requirements for Category B subprojects are documented here. Category A subprojects are excluded from Project financing.
- 107. **Category B:** Public consultation meetings will be undertaken both during the early stages of subproject planning, during the IEE process and throughout project implementation, addressing any environmental issues of concern to local communities, NGOs, government bodies, and other interested parties.
- 108. **Category C:** Public consultation meetings are not required but may be held if warranted by the nature of the subproject, its environmental and social issues, or stakeholder interest.
- 109. **Objectives:** PCMs seek to (i) explore genuine local demand for the proposed works; (ii) foster participatory, comprehensive, and accurate preparation of the works, (iii) strengthen local community groups and their commitment and participation in subproject implementation, (v) contribute to effective and transparent communication between implementing agencies and local residents, and (vi) provide opportunities for both men and women to participate and contribute to planning of interventions beneficial to them.

110. All consultations and information disclosure will combine, as far as possible, the requirements of both ADB safeguards processes and the national environmental assessment and review process.

B. Public Consultation during IEE Preparation

111. Sufficient and at least two rounds of public consultation meetings will be held during each IEE study to present the subproject proposal to stakeholders and affected people, collect their comments, suggestions, and concerns, and agree proposed mitigation measures. A typical round of public consultation meetings for IEE for a proposed subproject will consist of two or more meetings with local residents from the affected area, with at least one meeting specifically for women.

C. Local Availability of IEE

112. The PMU will promptly provide a copy of the IEE, in printed or electronic form, to any subproject stakeholder, Project staff, or member of the public on request.

D. Local Disclosure of IEE Findings

- 113. IEE and social safeguards findings relevant to local stakeholders will be disclosed in a form, place, and language accessible to them (English and Dhivehi). A single combined environmental and social disclosure will be provided that includes:
 - (i) What will be affected by the subproject?
 - (ii) When will these effects occur?
 - (iii) When and how will the effects be mitigated and/or compensated and how?
 - (iv) How were concerns expressed by stakeholders and affected people in the IEE public consultation meetings addressed by the Project proponents? Have any concerns not been addressed, and if so, which ones and why?
 - (v) Who is available to listen to concerns, answer questions, and receive complaints?
- 114. The PMU will prepare a presentation of this information in Dhivehi and, after reviewing it with representative local stakeholders (community members, elders, district governors, women, etc.), print and distribute brochures and/or handbills to be placed in public places.

E. Implementation-Phase Public Consultation Programs

115. All EMPs will include an implementation phase Public Consultation plan, to be supervised by the PIU as part of the implementation program. Its purpose is to advise stakeholders about Project activities and monitoring results.

F. Disclosure of Subproject IEEs on ADB and Project Websites

116. IEEs of all subprojects will be disclosed on the ADB and project websites.

G. Grievance Redress Mechanism

117. As soon as the Project commences, the PMU will establish a project specific simple and acceptable, transparent and effective GRM, stipulating the required level and number of GRCs. The GRM will provide time-bound and transparent mechanism to effectively manage and resolve any social or environmental concerns that may arise during the pre-construction, construction and operation of the Project, such as regarding negotiated/voluntary land

donation or involuntary land acquisition, relocation, income restoration, environmental management and other related issues.

- 118. It is the responsibility of the PMU to provide information on the GRM to project affected communities, i.e. all locations where the project is undertaken. This information should be provided within three months of the project commencement. Multiple means should be utilized to provide this information, including community meetings, public notices, mainstream media and social media.
- 119. The GRM will ensure that AP's concerns and complaints are promptly addressed, using an understandable and transparent process that is gender responsive, culturally appropriate and readily accessible to all segments of the AP at no costs and without retribution. It will be accessible to members of the community but also workers upon approval of the Project by ADB. The mechanism is not impeding access to the Maldivian judicial or administrative remedies.
- 120. PMU, Island/City Councils and contractors will inform the AP about the GRM on approval of the project. Through public consultations and distribution of the public information booklet, APs will be informed that they have a right to file complaints to the GRC. For issues pertaining to sexual exploitation and abuse and sexual harassment the grievance form and board should give direction on the appropriate contact numbers of Ministry of Gender, Family and Social Services to contact regarding such cases. Confidentiality of the aggrieved party should be maintained in such cases.
- 121. The GRC will be free to act independently and ensure equitable treatment of women and men in all decision making. The GRM will take effect immediately after loan/grant effectiveness or award of contract, whichever is earlier. The GRC will mediate conflict and avoid lengthy litigation that is inconvenient to APs.
- 122. A GRC does not possess any legal mandate or authority to resolve any issue, rather acts as an advisory body or facilitator to try to resolve issues between the affected household/person and the IAs. Any complaints of ownership or other suits, to be resolved by Maldivian legislation, will not be resolved in GRC. The AP always has final recourse through Maldives legal channels. However, every effort will be made to avoid this by applying traditional conflict resolution procedures in negotiating resolutions to complaints.
- 123. Should the AP want to pursue legal recourse, the Project will ensure that the support is given to the AP to prepare a case. The PMU will provide the contact details of the Attorney General's office, and will assist aggrieved persons(s) in accessing the Attorney General's office. No fees will be charged on the AP for such assistance. Similarly, no financial payments will be required for APs to have their grievances addressed.
- 124. A three-tier mechanism is proposed for grievance redress of environmental and social matters in regards to the installation and operation of various project components using existing island council administrative structures for APs, organizations, community groups, and workers, any of which can be complainants. Should the grievance not be resolved and/or the AP is not satisfied with the outcome, the complaint will be referred to the next tier. The mechanism is visualised in Figure 2, and detailed in Table 8.

Figure 2: Flowchart of Grievance Redress Mechanism

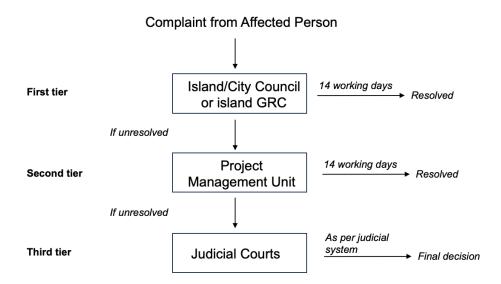


Table 8: Grievance Redress Process							
Focal Person Contacts, Communication and Other Facilitation by Project							
First Tier: Island/C	First Tier: Island/City Council and Contractor / Island-level GRC						
Designated contact persons should be established within the Council with a designated contact number.	In the island/city council office, contractor office and the project site there will be an Information Board providing details of the GRM listing the names, sex and contact telephones/emails. Grievances will be registered informally by contacting the designated island/city council or GRC member. If the grievance cannot be resolved informally, a formal complaint can be registered through phone/email or by submitting the complaint form. The form must be available online (digital form) on the websites of all implementation partners and physical forms should be available from the contractor's office, at the council offices and at PMU, including drop boxes to submit physical forms. A hotline will be established to receive grievances via phone call and mobile message. For those who cannot properly write, a staff will assist in filling the complaint form and get it signed by the aggrieved party. The council or island GRC will screen the grievance to determine if the issues and concerns raised in the complaint falls within the mandate of the project. If it is related to the project, the council will inform the aggrieved party in writing (copied to PMU) how the case will be processed as per this GRM. This should occur within 03 working days of receiving the complaint. If the aggrieved party is unable to read (for whatever reason) the issued letter will be read to the person in presence of a witness and the witness should declare their witness to this event. Alternatively, if it is not related to the project, the council or island GRC will inform the aggrieved party that it is not related to the project in writing (copied to PMU) and will inform how the case will be handled. This communication will occur within 03 working days of receiving the complaint. If the aggrieved party is unable to read (for whatever reason), the issued letter will be read to the person in presence of a witness and the witness should declare their	14 working days					

Where the grievance is related to the project, the council or island GRC will come up with a solution either by (i) discussing within the

witness to this event.

Focal Person for Contact	Contacts, Communication and Other Facilitation by Project	Timeframe to address grievance
•	 council; (ii) joint problem solving with the aggrieved parties, PMU and the contractor or; (iii) a combination of both options. The council or island GRC will communicate the final decision in writing, in terms of how the grievance was handled to the aggrieved party within 14 working days of receiving the complaint. If the aggrieved party is unable to read (for whatever reason) the issued decision will be read to the person in presence of a witness and the witness should declare their witness to this event. The aggrieved party must acknowledge the receipt of decision and submit their agreement or disagreement with the decision within 10 days. If no acknowledgement is submitted from the aggrieved party, then the decision will be considered as accepted. If the grievance is not resolved to the satisfaction of the aggrieved party within 14 working days of submission of the grievance to tier 1 then the aggrieved party may notify the MCCEE, in writing, of the intention to move to tier 2. The council or GRC will maintain records of all complaints received. 	3
Second Tier: Min	nistry of Climate Change Environment and Energy (Project Management Ur	nit)
the designated contacts for the PMU.	 Where the aggrieved party is not satisfied with the outcome of the decision by the council or GRC or where the aggrieved party is of the view that the council or GRC is not capable of justly solve the issue or where the grievance is not resolved within 14 working days the grievance can be upgraded to tier 2. The Island Council or GRC will forward the grievance to the MCCEE. MCCEE will forward the grievance to the PMU. A formal receipt of the complaint will be provided to the aggrieved party. The PMU will come up with a solution either by (i) discussing in the project steering/technical committee; (ii) joint problem solving with the aggrieved parties, the council and the contractor (iii) undertaking site visits and holding onsite discussions or; (iii) a combination of all these options. The PMU will be responsible to ensure that there is no cost imposed on the aggrieved person, due to the GRM at the third tier. MCCEE will communicate the final decision in writing, in terms how the grievance was handled to the aggrieved party within 14 working days of receiving the complaint. If the aggrieved party is unable to read (for whatever reason) the issued letter should be read to the person in presence of a witness and the witness should declare their witness to this event. The aggrieved party must acknowledge the receipt of decision and submit their agreement or disagreement with the decision within 10 days. If no acknowledgement is submitted from the aggrieved party then the decision will be considered as accepted. 	14 working days
The social	 The legal system is accessible to all aggrieved persons. Assistance from the PMU is available to all aggrieved persons as per this GRM. In cases where aggrieved persons have no means to access the legal system, the Attorney General's office will provide legal support to the vulnerable person(s). The PMU must provide the 	As per established Judicial Procedure

Focal Person for Contact	Contacts, Communication and Other Facilitation by Project	Timeframe to address grievance
accessing the judicial power	contact details of the Attorney General's office. The verdict of the Courts will be final.	

- 125. At the first tier, a GRC is proposed to be set up in Kulhudhuffushi City due to the extent and duration of the proposed Project activities on this island. On the other Project islands, where the measures are smaller in nature and of shorter duration, the island council and contractor will jointly form the first tier, and will solicit views of other stakeholders (WDC, farmers, fishermen, youth, NGOs, etc.) as appropriate and needed.
- 126. Specifically for the measures under SP1.1 at Addu International Airport (Gan) and SP1.2 on Velana Airport (Hulhulé), due to the nature of these islands being industrial managed by the airports authority rather than inhabited and managed by a council, a GRC will not be formed. The relevant airports authority (Addu International Airport and Maldives Airports Company Limited, respectively), MMS and a representative from the construction contractor will jointly form the first tier, and the three-tier system remains in place. Any aggrieved party can lodge grievances, despite not residing on the islands.
- 127. The GRC at Kulhudhuffushi City is proposed to be composed of a 6-member body, formed at the project area to facilitate the timely resolution of APs' concerns, complaints, and grievances about the project's environmental and social performance.

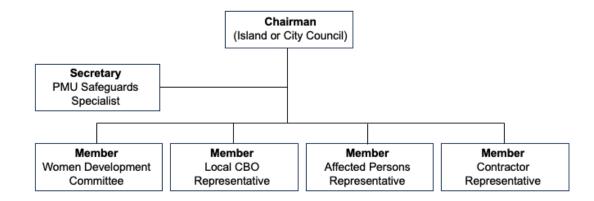
The PMU safeguards team will organize the required training program to brief the GRC members about their responsibilities and the operation of the GRC. The proposed composition of a GRC membership is presented in

Table 9 and visualized in Figure 3.

Table 9: Composition of Island Grievance Redress Committee

Member	Number	Position	
Chairperson	1	Representative from Island/City Council	
Member	1	Concerned Women Development Committee	
Member	1	Representative from local CBO/NGO	
Member	1	Representative from the Construction Contractor	
Member	1	Representative of Affected Persons	
Secretary	1	Project Safeguards Specialist	

Figure 3: Composition of Island Grievance Redress Committee



- 128. If the aggrieved person is a female, then the GRC must include at least one female member (ideally a representative from the local WDC) to participate in the hearings. In case of the absence of any of the members during the decision-making process, an appropriate candidate will be nominated by the original representative.
- 129. At the second tier, the MCCEE PMU will be based in Malé and have two designated staff members (the Social Safeguards Specialist and Environmental Safeguards Specialist) to address all potential complaints from the public, workers and other APs for the preconstruction, construction and operation of the Project. They will liaise regularly with the island councils, contractors and site supervisors regarding any grievances received. They will also liaise with national agencies and line departments as required.
- 130. At the third tier, the AP can access the judicial power through Attorney General's office. The PMU will provide the contact details of the Attorney General's office, and will assist aggrieved persons(s) in accessing the Attorney General's office.
- 131. The AP at any time can access the national judicial system irrespective of the result of project-level grievance redress mechanism.
- 132. For issues pertaining to gender-based violence, sexual exploitation and abuse, and sexual harassment all grievances need to be forwarded to the hotline number of Ministry of Social and Family Development (1421). Confidentiality of those who submit such grievances should be ensured. This information should be provided in the grievance information boards.
- 133. For the workforce at the PMU and other contractors the employment contracts should define the grievance redress mechanism to follow. The Human Resource Committee or department of the organization can look into general grievances and the SEA/SH committee of the Ministry for those pertaining to such cases.
- 134. The AP have the right to submit their complaint at any time directly to the respective Project Officer at ADB headquarters, writing in any of the official languages of ADB's Developing Member Countries. The PMU Social Safeguard Specialist will support the Affected People in providing the following contact information of ADB:

IX. STAFFING REQUIREMENTS

- 135. The PMU will have a full-time Environmental Safeguards Specialist who will be responsible for ensuring that the EARF is properly implemented. The PMU will coordinate with the EPA to seek advice on regulatory requirements for the project. If required the PMU, with support from the Construction Supervision Consultant, will update this EARF to meet the EPA requirements to obtain necessary approvals as per national requirements.
- 136. The responsibilities of the Environmental Safeguards Specialist are as follows:
 - (i) Lead the overall management and implementation of environmental safeguard policies of ADB and Government of Maldives.
 - (ii) Provide technical support to the PMU/MCCEE to ensure that all environmental requirements of ADB including occupational health and safety requirements of the Government of Maldives are complied with by the project.
 - (iii) Ensure all IEEs and EMPs are included in the bid documents and civil works contracts and they are followed during construction.
 - (iv) Implement a system for monitoring the environmental safeguards.
 - (v) In coordination with the PMU, conduct regular site visits at the construction sites to verify/check compliance to IEEs and EMPs (including SEMPs).
 - (vi) Together with the PMU-designated staff and the representative of the contractor, conduct stakeholder consultations, as appropriate, to determine if there is any concern during construction.
 - (vii) Assist in obtaining associated government permits (if any) prior to start of construction works.
 - (viii) Take immediate action in the event of unexpected adverse impact or ineffective mitigation measures identified during implementation and in preparing the corrective action plan.
 - (ix) Provide technical support to the PMU-designated staff in drafting the environmental monitoring reports required by ADB, and in monitoring compliance of contractor to the environmental, health, and safety requirements.
 - (x) Address any grievances through the GRM in a timely manner, and prepare record of such grievances for inclusion in the environmental monitoring report.
 - (xi) Prepare the semi-annual environmental monitoring reports to be submitted to ADB, and upon ADB review, address any comments raised (if any).
- 137. All contractors will be informed of their responsibility to comply with the relevant EMP and the requirements of ADB. There are specific responsibilities for EMP compliance during the construction phase that will rest with the contractors who will be supervised and monitored by the PMU safeguards team. The contractors will be required to have one staff with experience in environmental management and one staff with experience of health and safety to supervise and monitor day-to-day EMP implementation, and to be responsible for preparing plans such as the SEMP, Health and Safety Plan, etc.
- 138. **Training for the PMU environmental specialist:** The training should cover the following issues: (a) national legislation and ADB requirements for environmental assessment; (b) screening and scoping procedures including checklists of potential environmental impacts of the proposed activities; (c) main provisions of environmental management plans for proposed sub-projects, including mitigation and monitoring requirements; (d) public consultation and communication requirements and techniques; (e) grievance redress mechanisms. Fieldwork should be included in the training program (visits to construction sites; focus group meetings; discussion with Maldivian peers and mentors (environmental professionals).

X. INDICATIVE ENVIRONMENT-RELATED COSTS

- 139. Costs required for implementing the EARF will cover the following activities:
 - (i) conducting environmental assessments of new subprojects, preparing and submitting reports, and public consultation and disclosure;
 - (ii) application for government regulatory consents and approvals; and
 - (iii) implementation of EMPs.
- 140. For budgeting purposes, it is assumed that all Output 2 subprojects will be classified by ADB as category B (requiring IEE). It is assumed that all Output 1, 3 and 4 subprojects will be classified as category C (requiring environmental due diligence and a simplified EMP).
- 141. Preparation of an IEE and EMP requires an experienced environmental specialist for conducting the following activities: (i) desk study, (ii) site visit to assess environmental conditions and potential impacts of the scheme; (iii) liaison with stakeholders and others to obtain any environmental/social data that might be available locally (e.g., population figures, designated sites, etc.); (iv) consultation with the local community to inform them about the scheme and obtain their views and concerns; (v) assessment of impacts and development of mitigation measures and management plan; (vi) liaison with the social specialist and design engineers on the project preparation team; and (vii) report preparation.
- 142. Subproject mitigation measures and environmental monitoring tasks during construction will be specified in the Site-specific Environmental Management Plans (SEMPs). These will be implemented by the contractors and the associated costs included in their bids, which will be binding for implementation.
- 143. In the case of mitigation and monitoring measures for a particular subproject being identified but not suitable for inclusion in the tender document as a contractual responsibility, their costs will be included in the overall subproject budget.
- 144. Environmental supervision during construction will be straightforward and will involve periodic site inspections and interviews with workers and others, plus checks of monitoring reports and other documents. This will be conducted by the Project Implementation Consultant's environmental specialist on behalf of the PMU, working closely with the PIC's construction supervision firm and liaising with the local office of the environmental regulator.
- 145. All environmental monitoring during the operation and maintenance phase will be conducted by the PMU in cooperation with local government agencies and self-government bodies, therefore no additional costs are anticipated.
- 146. No equipment purchases specifically related to environmental activities are anticipated Note: specialized equipment is likely to be needed for the OP2 Subproject 2.1, the detailed study of the island's hydrology, coastal dynamics and mangrove connectivity. This will be provided by the contractors for the study). The PIC will be equipped with standard equipment for use by all staff in the field (cameras, GPS units, flipcharts, projector and screen for meetings). The contractors will supply any specialized equipment needed for environmental monitoring such as pH and conductivity meters for water quality measurement. Analysis of samples (e.g. groundwater) will be carried out by specialized laboratories, as a service.
- 147. A total of 3% of the total project cost has been allocated for the implementation of subproject EMPs. However, EMP cost will be arranged as per the requirements not limiting to 3% of subproject cost.

Annex 1: Checklist for Preliminary Climate Risk Screening

Country/Project Title: Maldives / Enhancing Climate Resilience and Food Security

Project

Sector: XX

Subsector: XX

Division/Department: XX

	Screening Questions				
Location and Design of project	Is siting and/or routing of the project (or its components) likely to be affected by climate conditions including extreme weather-related events such as floods, droughts, storms, landslides?	2	See Feasibility Study reports for details		
	Would the project design (e.g. the clearance for bridges) need to consider any hydrometeorological parameters (e.g., sea-level, peak river flow, reliable water level, peak wind speed etc)?	2	16		
Materials and Maintenance	Would weather, current and likely future climate conditions (e.g. prevailing humidity level, temperature contrast between hot summer days and cold winter days, exposure to wind and humidity hydro-meteorological parameters) likely affect the selection of project inputs over the life of project outputs (e.g. construction material)?	2	ű		
	Would weather, current and likely future climate conditions, and related extreme events likely affect the maintenance (scheduling and cost) of project output(s)?	2			
Performance of project outputs	Would weather/climate conditions, and related extreme events likely affect the performance (e.g. annual power production) of project output(s) (e.g. hydropower generation facilities) throughout their design life time?	2	ű		

Options for answers and corresponding score are provided below:

Response	Score
Not Likely	0
Likely	1
Very Likely	2

Responses when added that provide a score of 0 will be considered <u>low risk</u> project. If adding all responses will result to a score of 1-4 and that no score of 2 was given to any single response, the project will be assigned a <u>medium risk</u> category. A total score of 5 or more (which include providing a score of 1 in all responses) or a 2 in any single response, will be categorized as a <u>high risk</u> project.

Result of Initial Screening (Low, Medium, High):High					
	The project is a response to existing and anticipated climate change and will increase areas – weather forecasting, urban infrastructure, coastal protection, and agriculture.				
Prepared by:					

²⁵ If possible, provide details on the sensitivity of project components to climate conditions, such as how climate parameters are considered in design standards for infrastructure components, how changes in key climate parameters and sea level might affect the siting/routing of project, the selection of construction material and/or scheduling, performances and/or the maintenance cost/scheduling of project outputs.

Annex 2: Rapid Environmental Assessment Screening Checklist

Country/Project Title:

Maldives / Enhancing Climate Resilience and Food Security Project

Sector Division:

Agriculture, Food, Nature, and Rural Development Sector Office (SG-AFNR)

Screening Questions	Yes	No	Remarks
a. project siting Is the project area adjacent to or within any of the following environmentally sensitive areas?			
cultural heritage site		Х	
 legally protected area (core zone or buffer zone) 		Х	
 special area for protecting biodiversity 	Х		The project will re-establish marine connectivity for degraded mangrove
• wetland	Х		systems in the north and south of
mangrove	Х		Kulhudhuffushi, although they will not encroach upon any protected areas. The project will prepare a mangrove restoration and management plan.
■ estuary		Х	
• bay		Х	
Is the project area			
densely populated?	Х		Kulhudhuffushi is densely populated with
heavy with development activities?	X		increasing commercial activity; the project will introduce nature-based solutions to hydrological issues in an urban environment. Other Islands are comparatively sparsely populated. There will not be any particular adverse environmental impacts due to work to be carried out in densely populated areas.
with a high percentage of i. women-headed households; ii. persons with disability; iii. older persons; iv. income poor population groups?		Х	No indication at this time; also, the project's activities are gender-sensitive and inclusive, with specific attention to the needs of different social sectors
B. POTENTIAL ENVIRONMENTAL IMPACTS Will the project cause			
degradation of cultural property, and/or loss of cultural heritage and tourism revenues?		Х	
 degradation of land and ecosystems (e.g. loss of wetlands and wild lands, coastal zones, watersheds and forests)? 		Х	The project is designed to protect and restore ecosystems, hydrological functioning and coastal processes
 encroachment on precious ecology resulting in loss or damage to fisheries and fragile coastal habitats such as coral reefs, mangroves, and seagrass beds? 		х	The project will restore mangrove ecosystem functions; the inshore zone subject to coastal protection works is significantly modified and the works are designed to restore natural coastal dynamics. All these will positively contribute to the project area environment.

Screening Questions	Yes	No	Remarks
short-term increase in turbidity and sunlight penetration as well as changes in sediment pattern and flows at dredging sites?	х		The project may involve localized small-scale turbidity increase during construction of the coastal protection and sewerage construction works. However, no major change in sea-water quality is anticipated, and any residual impact would be short-term. The project does not involve dredging of sea bed.
removal and disturbance of aquatic flora and fauna at dredging sites?		X	
 alteration of bottom surface and modifications to bathymetry, causing changes in tidal bore, river circulation, species diversity, and salinity? 		Х	
 changes in sediment pattern and littoral drift that may cause beach erosion of neighboring areas? 		Х	The coastal protection works are designed to restore natural coastal processes and retain sediment, taking into account the whole island (Kulhudhuffushi).
modification of terrestrial habitat by upland disposal of dredged material or covering of potential archaeological sites with dredge spoil?		X	
alteration of surface water hydrology?		Х	On Kulhudhuffushi the project will increase infiltration of surface water to recharge the non-saline groundwater lens.
 deterioration of surface water quality due to silt runoff and sanitary wastes from labour camps and chemicals used in construction? 		X	
 poor sanitation and solid waste disposal in construction camps and work sites, and impacts on water, groundwater and/or related urban services? 		Х	
possible transmission of communicable diseases (such as STI's and HIV/AIDS) from workers to local populations?		X	The local culture is conservative; alcohol and socially unacceptable activities are not issues in Maldives. Yet, project will provide education on health and safety of staff and workers.
noise, dust and vibration due to project construction or operation?	х		There will be localized noise and dust from construction activities; dust is suppressed by frequent rainstorms; noise from coastal protection activities is some distance from residences and will be attenuated by intervening topography and vegetation; working hours will be limited.
traffic disturbances due to construction material transport and wastes?	Х		Traffic on all islands is minimal and urban areas have grid road layouts where alternative routes are easily available.
 creation of temporary breeding habitats for diseases such as those transmitted by mosquitoes and rodents? 		Х	Construction related minor impacts will be duly mitigated.
 involuntary resettlement of people? (physical displacement and/or economic displacement) 	Х		Commercial agricultural developments may affect land users on some islands, but areas and numbers will be small due to the very small size of all Maldivian islands
social conflicts if workers from other regions or countries are hired?		Х	
 large population influx during project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)? 		Х	

Screening Questions	Yes	No	Remarks
 disproportionate impacts on the poor, women and children, Indigenous Peoples or other vulnerable groups? 		Х	
negative impacts on women's decision-making authority and existing social status or marginalize people of disadvantaged groups?		X	The project is designed to promote women's participation as decision-makers and to ensure disadvantaged people are engaged in project processes
increased challenges for persons with disabilities?		X	All project infrastructure investments will consider disability guidelines
risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project construction and operation?	X		Construction related impacts will be duly mitigated. All construction activities have inherent risks which can be minimized through implementation of standard health and safety plans and procedures; the project's works have no chemical and other hazards, Operation of the Hanimaadhoo Agriculture Centre (HAC) will involve normal laboratory procedures in a controlled lab. environment; commercial agricultural developments may use pesticides. These will be managed on-site and safe disposal will be arranged.
 risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during construction and operation? 		X	Construction related minor impacts will be duly mitigated.
deterioration of surrounding environmental conditions due to rapid urban population growth, commercial and industrial activity, and increased waste generation to the point that both manmade and natural systems are overloaded and the capacities to manage these systems are overwhelmed?		Х	Construction related minor impacts will be duly mitigated.
 community safety risks due to both accidental and natural causes, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation and decommissioning? 		X	The coastal protection works are designed to protect the population of Kulhudhuffushi from anticipated sea-level rise and will improve on the existing sub-standard measures
 social conflicts if construction depletes local fishery resources on which communities depend for subsistence? 		Х	
 social concerns relating to local inconveniences associated with port operation (e.g. increased volume of port traffic, greater risk of accidents, communicable disease transmission)? 		X	
generation of wastewater during construction or operation?		Х	Construction related minor impacts will be duly mitigated.
generation of solid waste and/or hazardous waste?		Х	
use of chemicals?		Х	
 overconsumption of groundwater, leading to land subsidence, lowered ground water table, and salinization? 	X		On Kulhudhuffushi the project will improve groundwater recharge; on other islands agricultural development may increase groundwater consumption – on agricultural islands the project is introducing multiple technologies to make water use more efficient and sustainable in combination with groundwater monitoring systems

Screening Questions	Yes	No	Remarks
 pollution of receiving waters resulting in amenity losses, fisheries and marine resource depletion, and health problems? 		X	
deterioration of water quality due to ship (e.g. ballast water, oil waste, lubricant and fuel spills, sewage) and waterfront industry discharges?		X	
increased noise and air pollution resulting from airborne emissions (e.g. gas, smoke, fumes) from maneuvering and berthing ships and the waterfront industry?		X	
 pollution due to improper disposal of expired batteries from weather stations? 	х		Rehabilitation of the Malé radar station may involve replacement of expired lithium-ion batteries; due to lack of local recycling facilities, these may have to be collected and sent offshore for appropriate disposal
 loss of indigenous crop varieties due to agricultural intensification? 	х		Commercial agricultural developments may displace existing crop varieties on some islands; mitigation requires development and implementation of an agrobiodiversity protection program
 environmental contamination by agrochemicals (fertilizers and pesticides)? 	х		Commercial agricultural developments and intensification of home farms may increase use of artificial fertilizers and pesticides; surface water, groundwater and inshore marine pollution from nitrates and phosphates can be avoided through training, monitoring and the promotion of organic systems; pesticide use can be management through integrated pest management (IPM). However, these are anticipated at minor scale which could ne addressed through better management at place.

Annex 3: Sample Contents of IEE

1. Executive Summary

This section describes concisely the critical facts, significant findings, and recommended actions.

2. Policy, Legal, and Administrative Framework

This section discusses the national and local legal and institutional framework within which the environmental assessment is carried out. It also identifies project-relevant international environmental agreements to which the country is a party.

3. Description of the Project

This section describes the proposed project; its major components; and its geographic, ecological, social, and temporal context, including any associated facility required by and for the project (for example, access roads, power plants, water supply, quarries and borrow pits, and spoil disposal). It normally includes drawings and maps showing the project's layout and components, the project site, and the project's area of influence.

4. Description of the Environment (Baseline Data)

This section describes relevant physical, biological, and socioeconomic conditions within the study area. It also looks at current and proposed development activities within the project's area of influence, including those not directly connected to the project. It indicates the accuracy, reliability, and sources of the data.

5. Anticipated Environmental Impacts and Mitigation Measures

This section predicts and assesses the project's likely positive and negative direct and indirect impacts to physical, biological, socioeconomic (including occupational health and safety, community health and safety, vulnerable groups and gender issues, and impacts on livelihoods through environmental media, and physical cultural resources in the project's area of influence, in quantitative terms to the extent possible; identifies mitigation measures and any residual negative impacts that cannot be mitigated; explores opportunities for enhancement; identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions and specifies topics that do not require further attention; and examines global, transboundary, and cumulative impacts as appropriate.

6. Analysis of Alternatives

This section examines alternatives to the proposed project site, technology, design, and operation—including the no project alternative—in terms of their potential environmental impacts; the feasibility of mitigating these impacts; their capital and recurrent costs; their suitability under local conditions; and their institutional, training, and monitoring requirements. It also states the basis for selecting the particular project design proposed and, justifies recommended emission levels and approaches to pollution prevention and abatement.

7. Formation Disclosure, Consultation, and Participation

This section:

- (i) describes the process undertaken during project design and preparation for engaging stakeholders, including information disclosure and consultation with affected people and other stakeholders;
- (ii) summarizes comments and concerns received from affected people and other stakeholders and how these comments have been addressed in project design and mitigation measures, with special attention paid to the needs and concerns of vulnerable groups, including women, the poor, and Indigenous Peoples; and
- (iii) describes the planned information disclosure measures (including the type of information to be disseminated and the method of dissemination) and the process for carrying out consultation with affected people and facilitating their participation during project implementation.

8. Grievance Redress Mechanism

This section describes the grievance redress framework (both informal and formal channels), setting out the time frame and mechanisms for resolving complaints about environmental performance.

9. Environmental Management Plan

This section deals with the set of mitigation and management measures to be taken during project implementation to avoid, reduce, mitigate, or compensate for adverse environmental impacts (in that order of priority). It may include multiple management plans and actions. It includes the following key components (with the level of detail commensurate with the project's impacts and risks):

- (i) Mitigation (see template in Table):
 - (a) identifies and summarizes anticipated significant adverse environmental impacts and risks;
 - (b) describes each mitigation measure with technical details, including the type of impact to which it relates and the conditions under which it is required (for instance, continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate;
 - (c) provides links to any other mitigation plans (for example, for involuntary resettlement, Indigenous Peoples, or emergency response) required for the project:
 - (d) provides performance indicators, institutional responsibilities and cost estimates;
 - (e) the plan may also include enhancement measures (i.e. measures that significantly improve the baseline environment at low additional cost); if these are physical works and are within the scope of Project financing, they will be incorporated in the subproject civil works designs.

Mitigation Plan Summary Template

Project Stage	Project Activity	Potential Environmental Impacts	Proposed Institutional Mitigation Responsibilities	Cost Estimates (US\$)
Construction Phase				
Operation and Maintenance				
Phase				

(ii) Monitoring (see template in Table):

- (a) describes monitoring measures with technical details, including parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits and definition of thresholds that will signal the need for corrective actions; and
- (b) describes monitoring and reporting procedures to ensure early detection of conditions that necessitate particular mitigation measures and document the progress and results of mitigation.
- (c) identifies institutional responsibilities for monitoring and estimates approximate costs.

Monitoring Plan Summary Template

Project Stage	Mitigation Measure	Parameters to be monitored	Location Measurements Frequency Responsibilities	Cost (US\$)
Construction				
Phase				
Operation &				
Maintenance				
Phase				

(iii) Implementation arrangements:

- specifies the implementation schedule showing phasing and coordination
 with overall project implementation;
- (b) describes institutional or organizational arrangements, namely, who is responsible for carrying out the mitigation and monitoring measures, which may include one or more of the following additional topics to strengthen environmental management capability: technical assistance programs, training programs, procurement of equipment and supplies related to environmental management and monitoring, and organizational changes; and
- (c) estimates capital and recurrent costs and describes sources of funds for implementing the environmental management plan.

(iv) Performance indicators:

(a) describes the desired outcomes as measurable events to the extent possible, such as performance indicators, targets, or acceptance criteria that can be tracked over defined time periods.

10. Conclusion and Recommendation

This section provides the conclusions drawn from the assessment and provides recommendations.

Annex 4: Standard Construction Contract Environmental Safeguard Clauses

The following standard construction contract environmental clauses will be incorporated in tender documents for all subprojects with IEE-EMP. They will be included and operationalized in the SEMP to be produced by successful bidders to provide the required construction-phase mitigation and monitoring measures.

1. Environmental Protection and Control of Pollution

a. General

The Contractor shall observe and comply with all National Laws, Government Regulations, Presidential Decrees, and

Except where otherwise agreed or provided for by the Employer or expressly stipulated in Particular Specifications or Technical Specifications forming part of the Contract Documents, no separate payment will be made for complying with the provisions of this Clause and attendant sub-clauses; and all costs shall be deemed to be included in the prices for the Contractor's mobilization for construction, and the various rates and lump sum items for the works included in the priced Bill of Quantities.

b. Pollution of watercourses and streams

The emission of polluting liquids or other waste into drains, water courses, or groundwater shall not be permitted.

No concrete or cement washings from the works or drainage from the Contractor's concrete batching and mixing areas, asphalt (hot mix) plants, or other manufacturing or production facilities shall be allowed to discharge into streams or drains without passing through an adequate system of settling ponds.

Storage of fuels, fueling and maintenance of plant and vehicles, etc. shall take place only on sites and under conditions that that do not allow spilt fuels to be discharged to water bodies. Fuel storage and fueling areas shall be equipped with adequate protective measures to confine and retain accidental spillages. No drainage from fuel store and plant maintenance depots shall be allowed to be discharged without passing through an adequate arrangement of oil traps and separators.

Washing of vehicles shall not be permitted in streams but only in specially designated and equipped areas.

Operations in quarries and borrow areas shall be carried out in such a way as to minimize any possible pollution from particulate matter entering the streams. Adequate sanitary waste control facilities shall be provided in site offices and workers camps, and sewage waste shall be collected regularly and disposed in accordance with relevant environmental legislation.

The Contractor shall accordingly be responsible for the installation, operation and maintenance of a comprehensive drainage system to all areas of the Works. The system shall be constructed such that no discharges of oil, cement, silt or other liquid or solid waste matter can enter the streams and water courses at the site; and it shall have all necessary solid waste and sediment traps, settling ponds, oil separators, etc., required to ensure that pollution of streams watercourses and natural bodies of water does not occur. The Contractor shall be responsible for maintaining the system to the satisfaction of the Employer's Construction Supervisor and all costs of providing the system shall be deemed to be included in the various rates and lump sum items for the works included in the priced Bill of Quantities.

c. Air pollution

The Contractor shall take all necessary steps to minimize air pollution resulting from his/her operations.

Except where stipulated in these Specifications for the disposal of natural vegetation and organic materials from clearing operations, the burning of waste materials for disposal, particularly oil and petroleum wastes, rubber, plastics and similar materials will not be permitted.

During the performance of the work required under the Contract or of any operations appurtenant thereto, whether on the Project Site or elsewhere, the Contractor shall take all steps necessary, and shall furnish all labor, equipment, materials and means, required to reduce dust nuisance from the Works, and to prevent dust originating from his/her operations from damaging crops, orchards, cultivated fields, and dwellings; or causing a nuisance to persons. The Contractor shall be held liable for any damage resulting from dust originating from his operations including on Government roads, rights-of-way or elsewhere.

The emission of dust into the atmosphere shall not be permitted during the manufacture, handling and storage and handling of cement and of concrete aggregates, and the Contractor shall use such methods and equipment as are necessary for the prevention, or the collection and disposal, of dust during such operations. All truckloads of loose materials shall be covered during transportation.

Concrete batching and mixing areas, asphalt (hot mix) plants, or other manufacturing or production facilities shall be sited at least 500m from the nearest habitation. Emission outlets shall be fitted with pollution control devices in compliance with relevant current Government emission control legislation.

The cost of spraying water on haul roads, access roads, government roads, aggregate stockpiles, etc.; or of any other methods of reducing the formation of dust; and the cost of furnishing and applying materials to maintain the works areas, adjacent areas, and roads, in a dustless condition, shall be deemed to be included in the various rates and lump sum items for the works included in the priced Bill of Quantities.

d. Noise pollution

The Contractor shall take all necessary precautions to minimize the amount of noise and vibrations coming from construction activities.

The Contractor shall ensure that all plant and equipment is properly maintained in good operating condition, and that noisy construction activities shall be effectively sound reduced by means of silencers, mufflers, acoustic linings or shields, acoustic sheds or screens or other means, to avoid disturbance to any nearby noise sensitive receivers. All plant and equipment shall comply with relevant Government legislation covering sound emissions.

Quarry operations and blasting shall be undertaken so as to minimize blasting and disturbance during the night and, insofar as possible, noise, vibration and dust. Operation of trucks and heavy vehicles and machinery shall be restricted to the hours of 06:00 to 21:00.

All necessary measures shall be undertaken to protect schools, hospitals and other adjacent noise sensitive receptors, including the use of noise barriers.

e. Damage to property, crops, and vegetation

The Contractor shall limit the movement of his/her employees and equipment within the project area and on adjacent land, including access routes approved by the Employer's Construction Supervisor, so as to minimize damage to natural vegetation, crops and property, and shall endeavor to avoid any damage to land.

The Contractor shall strictly ensure employees and equipment do not enter any sensitive environmental areas that are demarcated as "no-entry" zones.

The Contractor shall preserve existing trees, plants and other vegetation that are to remain within or adjacent to the Works and shall use every precaution necessary to prevent damage or injury thereto. Trees or shrubs shall only be felled or removed where such impinge directly on the permanent works or necessary temporary works areas; and where such is approved by the Employer's Construction Supervisor.

On completion of the Works all areas disturbed by the Contractor's construction activities shall be restored by the Contractor to their original condition, or as may be acceptable to the Employer.

The Contractor shall be responsible directly to the Employer for any excessive or unnecessary damage to crops or lands arising from his/her operations, whether within the project area, on lands adjacent thereto, or adjacent to approved access roads: and deductions will be made from the payment due to the Contractor to cover the cost of such excessive or unnecessary damage, as determined by the Employer.

2. Reporting

The Contractor shall maintain a record of all emissions and spills of liquid, solid and gaseous matter which occur at the site, whether into water courses, streams, on land, or into the air. This record shall be compiled daily and shall include details of date, time and nature of the event, along with details of the remedial and clean-up measures carried out.

Copies of these records shall be given to the Employer monthly.

The Contractor shall also maintain a record of any complaints made by any Governmental or Community Organization or by the public, regarding his/her operations. This record shall contain the date and time of receipt of the complaint, the name and address of the complainant and the action taken to remedy the situation. Copies of these records shall be given to the Employer monthly.

3. Environmental Management Plan

The requirements of this clause and attendant sub-clauses on Environmental Protection and Pollution Control notwithstanding; the Contractor shall observe and comply with all relevant environmental protection and mitigation, monitoring, and reporting requirements in the Environmental Management Plan (EMP) as stipulated in the Particular Specifications. In the event of any conflict between the foregoing sub-clauses and the environmental protection and mitigation measures and pollution control requirements of the EMP, the EMP shall take precedence.

The Contractor shall prepare and submit to the Employer's Construction Supervisor a SEMP demonstrating the manner in which the Contractor will comply with the requirements of the foregoing subclauses on Environmental Protection and Pollution Control, the EMP, and any

particular environmental mitigation measures as stipulated in the Particular Specifications or Technical Specifications forming part of the Contract Documents.

The SEMP shall be submitted within 15 working days of the Contractor receiving the Notice to Proceed with the Works, and shall include the set of management plan listed as part of the EMP (e.g. waste management plan, dust management plan, noise management plan, surface water management plan, emergency management plan, health and safety management plan, or any other management plan as stated in the EMP). Training shall be provided to workers about the appropriate implementation of the SEMP. Construction or rehabilitation works at the sites cannot start until the SEMP is approved by the EA.

Where stipulated in the Particular Specifications or Technical Specifications forming part of the Contract Documents, and provision has been made in the Bill of Quantities; payment for the implementation of the SEMP will be made in accordance with the Unit Rates, Lump Sum or Provisional Sum Items included in the Priced Bill of Quantities.

Annex 5: Template of Semi-annual Environmental Monitoring Report

SEMI-ANNUAL ENVIRONMENTAL MONITORING REPORT

Abbreviations

Include list of abbreviations used in the report

Introduction

Preamble

This report represents the Semi - Annual Environmental Monitoring Review (SAEMR) for INSERT PROJECT NAME.

This report is the (*insert number of report, i.e.* 1st, 2nd etc) EMR for the project.

Headline Information

Include a brief summary of significant outcomes of the project construction process and any specific areas of concern of which ADB should be informed.

Project Description

Provide a brief description of the project. – this should not vary from one report to the next.

Project Contracts and Management

Provide a list or table of main organisations involved in the project and relating to Environmental Safeguards. This should include lender, borrower, PIU, Main Contractor/s and significant sub-contractors, environmental staff of various organisations should be named, and contact details provided.

Provide a description of how the contracts are being managed and names of key personnel.

Project Activities During Current Reporting Period

Provide an outline of major activities which have been carried out during the current reporting period. Provide adequate information so the reader can understand what has been taking place on site. Include photographs (with date stamp) of activities where possible and relevant. Place bulk photographs into an annex to the main report or a separate photographic record.

Where multiple work sites are involved provide information on which work sites have been active during the current reporting period. Provide map of work site areas if relevant.

Provide details (chart) of worker numbers (maximum, Minimum) in the current reporting period and anticipated changes in staff in following period

Highlight any significant new activities commenced during the current reporting period.

For the above make maximum use of charts, images and tables.

Description of any Changes to Project Design

Describe any changes to the project design from that which was assessed in the Impact

Assessment phase of the project and is set out in the Initial Environmental Examination/ Environmental Impact Assessment. If none have taken place, please state – No changes.

Note if significant changes have occurred the PIU should have already informed ADB of this and made a decision on the need for updates to the EIA/IEE and/or Environmental Management Plans

Description of any Changes to Agreed Construction Methods

Provide a description and reason for changes to any construction processes, for example, blasting of rock rather than excavation, open channel rather than thrust boring at road crossings.

Environmental Safeguard Activities

General Description of Environmental Safeguard Activities

Please provide a summary of the routine activities undertaken by environmental safeguard staff during the current reporting period. This should include the work undertaken by the contractor's environmental manager, the Environmental Supervisor and any informal visits by the PIU environmental staff.

Site Audits

Please provide details (table form preferred) of any formal audits undertaken by environmental safeguard process staff during the current reporting period. This would include Contractors Environmental Manager, Environmental Supervisor, PIU Staff and ADB staff during review missions. Information required includes:

Date of Visit

Auditors Name

Purpose of Audit

Summary of any Significant Findings

Cross reference to Audit Report which should be included as an annex.

Summarise Findings of Audits undertaken in the current period, compare with previous periods and identify any trends or common issues.

Issues Tracking (Based on Non-Conformance Notices)

Provide an overview and description of issues tracked during the current period.

Provide commentary on key statistics based on graphs and tables which can be copied from the Environmental Safeguards Issues Tracing Workbook. For example:

Table 1: Summary of Issues-Tracking Activity for Current Period

Summary Table				
Total Number of Issues for Project	6			
Number of Open Issues	1			
Number of Closed Issues	5			
Percentage Closed	17%			
Issues Opened This Reporting Period	5			
Issues Closed This Reporting Period	4			

Figure 2: Summary of Issues by Non-Conformance

Non-conformance Level



Use data from workbook as required.

Trends

Use information from previous period reports and the current period information to identify trends in issues. For example:

Quarterly Report No	Total No of Issues	% issues Closed	% issues closed late
1	5	87	0
2	18	56	15
3	59	23	26

Provide a commentary on the trends, explain why they may be occurring and in the case of negative trends explain what steps have been taken to make corrections.

Provide a copy of all NCN's for all major Non-Conformances in an annex. If none state this.

Unanticipated Environmental Impacts or Risks

Document any unanticipated environmental impacts and risks which have been identified in the current period (as a reminder, these are impacts or risks which were not identified in the Impact Assessment process). State what actions were taken to mitigate the impacts and risks, were these successful.

Overview of Monitoring Conducted during Current Period

Provide a commentary on what environmental measurements have been undertaken during the current reporting period. Highlight any areas where agreed monitoring has not taken place. Include sub sections for the report on those environmental media which have been measured, for example:

Noise Air Quality Water Quality

The sections should present highlights of the outcomes of the monitoring focusing on a comparison of the results with the agreed standards as set out in the Specific Environmental Management Plan and/or Monitoring Plan. In particular make clear where exceedances in the standards have occurred and provide reasons and actions which have been implemented to

correct – refer to relevant NCN as appropriate.

Detailed monitoring results should be presented as an annex.

Trends

Based on the current and past periods of monitoring identify and discuss any trends which may be developing.

Summary of Monitoring Outcomes

Provide any recommendations on the need for additional monitoring, or requests for ceasing/altering monitoring if activities have been completed or monitoring is showing no significant effects over long period.

Material Resources Utilisation

Current Period

Provide values (tables, graphs etc) for current reporting period of utilisation of electricity, water and any other materials which have been include in the SEMP for monitoring.

Cumulative Resource Utilisation

Provide values (tables, graphs etc) for cumulative resource utilisation of power water etc, for whole project life. Identify trends or significant changes and provide reasons for any such changes.

Waste Management

Provide summary of waste management activities during the current period. Provide waste contractors/s names and location of waste sites.

Current Period

Provide breakdown using graphs, table etc, of waste streams during current reporting period. This information should include

Type of Waste (description and classification – e.g. hazardous – non-hazardous;

Waste Source – what activity generated the waste and where;

Quantity of waste generated;

Treatment/disposal route – provide information on quantities of waste reused, recycled and sent to landfill or incineration; and

Final disposal sites for waste.

Provide commentary on results.

Cumulative Waste Generation

Using the above bullet points for waste develop cumulative waste generation results. Discuss trends and provide suggestions for waste reduction, increase in reuse and recycling if possible.

Health and Safety

Community Health and Safety

Provide information on any incidents which have occurred during the reporting period which resulted in or could have resulted in Community Health and Safety issues. Include within this section traffic accidents.

Worker Safety and Health

Provide detailed statistics on accident rates, including Lost Time Incidents, Accidents and near misses.

Provide information on safety campaigns conducted during the reporting period.

Training

Provide information on all environmental safeguard related training activities undertaken in this period and cumulatively for project life to date. These may include specific training of environmental staff, HSE inductions of site workers etc.

Discuss the need for additional training and what training is planned for coming quarter. functioning of the SEMP

SEMP Review

Provide a commentary on the SEMP in terms of the ability of the contractor to implement fully the requirements set out. Highlight any areas where the contractor has not been able to implement mitigation or monitoring measures.

Is the SEMP effective, are mitigation measures set out still appropriate and are they working as intended – do they need changing?

Are there better alternative mitigation measures?

Can some mitigation measures be reduced or removed as the specific risk identified in the IEE/EIA and/or SEMP has not materialised?

Provide a table of requests for changes to the current mitigation measures for consideration by ADB. Note you can send these at any time during the project, there is no need to wait until the quarterly reporting period to be completed. If PIU has supplied requests to ADB, these should be listed along with ADB response. Where changes (additions/deletions and modifications) of mitigation or monitoring measures have been approved, the PIU shall ensure that the SEMP is updated to reflect these changes.

Good Practice and Opportunity for Improvement

Good Practice

Provide an overview with charts, images etc of examples of continuing good practice for the project. State why these have been implemented and how they are reducing environmental impacts or risks.

Opportunities for Improvement

Identify any areas which may be outside of the formal NCN process, but which changes to

construction techniques, mitigation etc would result in an improvement in environmental, health and safety performance of the project.

Summary and Recommendations

Summary

Provide a summary of the effective implementation of Environmental Safeguards during the reporting period and for the overall project construction period to date.

Recommendations

Provide any recommendations for consideration by the ADB for changes to the Environmental Safeguarding process for the project.

Annex 6: Public Consultation Meeting Record Formats

A. Format for the List of all Public Consultation Meetings

Instructions: Enter meeting information, one row per meeting. Add rows as needed.

Table _: List of Public Consultation Meetings

	Meeting description				Stakeholders		
	Date	Location			Conducted	participating	
Ν		Village	District	Province	by	Gender &	No
			District			Occupations	700
_1							
2							
3							
4							
5							

B. Format for Public Consultation Meeting Notes

Instructions: Enter meeting information, one table per meeting. Add tables as needed.

Table <n>: Meeting <meeting number> - <Subproject name> <location within Subproject>, <men or women>

Meeting date & time:	<enter and="" date="" time=""></enter>	
Place:	<enter and="" available="" coordinates="" district,="" gps="" if="" meeting="" place="" province,="" village,=""></enter>	
Topics: See agenda and questionnaire, Table <i><m></m></i>		
Attending:	Proponents: <pre>list of consultants, ministry/department staff, district government representatives and staff>Stakeholders: per sign-in sheet above</pre>	
	Concerns raised by stakeholders	
<pre><summary #1="" concern="" for="" phrase=""></summary></pre>	 <description as="" by="" concern="" of="" stakeholder(s)="" stated=""></description> 	
<pre><summary #2="" concern="" for="" phrase=""></summary></pre>	2. < Description of concern as stated by stakeholder(s)>	
<pre><summary #3="" concern="" for="" phrase=""></summary></pre>	3. <description as="" by="" concern="" of="" stakeholder(s)="" stated=""></description>	
	<add all="" as="" by<br="" concerns="" list="" many="" needed="" raised="" rows="" to="">stakeholders></add>	

Outcomes & conclusions

Stakeholder concern <number> <describe Project response or inability to respond.>

Action items for proponents

- 1. <List proponent action item for concern #1>
- 2. <List proponent action item for concern #2>
- 3. <List proponent action item for concern #3>
- 4. <List proponent actions for each concern>

Reported by:	<name and<="" facilitated="" meeting="" of="" p="" proponent's="" representative="" the="" who=""></name>
	took or checked the final notes>

<All stakeholder concerns, or Stakeholder concerns numbered (list of concern numbers)> will be accommodated by the Project.

<If some concerns cannot be accommodated, complete the following section>