

### **Ministry of Education**

### **Republic of Maldives**



ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

ATOLL EDUCATION DEVELOPMENT PROJECT – AEDP (P1777638, IDA)

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#### LIST OF ABBREVIATIONS

AEDP Atoll Education Development Project

BoQ Bills of Quantities

CLP Complex Learning Profile

CoC Code of Conduct

DoIE Department of Inclusive Education

DSA Daily Subsistence Allowance

EHS Environmental Health and Safety

EHSG Environmental Health and Safety Guidelines

EIA Environmental Impact Assessment
EPA Environmental Protection Agency

ERP Education Response Plan

ESA Environmental and Social Assessment

ESIA Environmental and Social Impact Assessments
ESMF Environment Social Management Framework
ESMP Environmental and Social Management Plan

ESF Environment Social Framework
ESS Environment and Social Specialist

GBV Gender Based Violence

GIIP Good International Industry Practice

GoM Government of Maldives

GPN Good Practice Note

GRM Grievance Redress Mechanism
HDI Human Development Index

ICT Information and Communication Technology

IDA International Development Agency
IEE Initial Environmental Examination
MDG Millennium Development Goals

MEMIS Maldives Education Management Information System

MoE Ministry of Education

M&E Monitoring and Evaluation

NALO National Assessments of Learning Outcomes

NGO Nongovernmental Organization
NIE National Institute of Education

NRRP National Resilience and Recovery Plan
OMSU Operations and Monitoring Support Unit

PPE Personal Protective Equipment
PPG Public and Publicly Guaranteed
PPRD Policy Planning Research Division

QA Quality Assurance

QAD Quality Assurance Department

SBPD School Based Professional Development

SDG Sustainable Development Goad SMP Social Management Plans

SPD Standard Procurement Documents

STEM Science, Technology, Engineering and Mathematics

TDP Teacher Development Programs

TRC Teacher Resource Centres
UAE United Arab Emirates
UK United Kingdom

VE Vocational Education

WB World Bank

#### **EXECUTIVE SUMMARY**

The Environmental and Social Management Framework (ESMF) is developed for the Atoll Education Development Project (AEDP). The project is funded by the World Bank and implemented by the Government of Maldives (GoM). The Ministry of Education (MoE) is the key implementation agency. Implementation partners for the project include the National Institute for Education (NIE), Quality Assurance Department (QAD), Department of Inclusive Education (DoIE) and the Policy Planning and Research Division (PPRD) and the School Administrative Section of the MoE. The project description is presented in the preceding sections.

The project applies the World Bank's Environmental and Social Framework (ESF) with the following standards being applicable to this project: ESS 1: Assessment and Management of Environmental and Social Risks and Impacts; ESS 2: Labor and Working Conditions; ESS 3: Resource Efficiency and Pollution Prevention and Management; ESS 4: Community Health and Safety; ESS 10: Stakeholder Engagement and Information Disclosure. These standards are applicable to all components and sub-components of the project.

# CHAPTER 1: INTRODUCTION TO THE ATOLL EDUCATION DEVELOPMENT PROJECT (AEDP)

#### 1.1 COUNTRY CONTEXT

Maldives is an upper-middle-income country with a robust growth trajectory prior to the COVID-19 pandemic. Annual real GDP growth averaged 5.7% from 2000 to 2019 and real GDP per capita rose from US\$5539 in 1995 to US\$10208 in 2019. The sustained growth has significantly reduced poverty and Maldives performs well on poverty outcomes compared to its regional, income, and small island peers. The economy is dependent on a small number of sectors. In 2019, tourism accounted for 25% of GDP, transport and communication for 13%, and construction and wholesale /retail trade each for 9%. The successful development of high-end tourism has been the main driver of economic growth in Maldives. However, the dependence on tourism makes the country highly vulnerable to macroeconomic and external shocks. The COVID-19 pandemic, for example, had a significant adverse impact on tourism and related sectors.

Maldives's economy contracted severely by 33.5% in 2020, but tourism has steadily been recovering in 2021. The economy has been hard hit by the COVID-19 outbreak, which induced a border closure for three months in April 2020 and led to a sudden stop in tourism. Only 555,494 tourists visited the country in 2020, equivalent to only 33% of 2019 levels. However, since Q2 2021, tourism has rebounded strongly. By the end of 2021, Maldives received over 1.3 million tourists, equivalent to 78% of 2019 tourists. A growing number of tourists from India and Russia have partially compensated for the absence of tourists from China. The momentum in the recovery of tourism has continued despite a new wave of COVID-19 infections due to the Omicron variant at the start of 2022.

Fiscal vulnerability has increased since 2019. Total public and publicly guaranteed (PPG) debt increased from 78% of GDP in 2019 to 144% in 2020 due to the sharp decline in nominal GDP and a high fiscal deficit caused by the COVID-19 shocks. As a result, Maldives' risk of overall and external debt distress remains high. The issuance of five-year Sukuk in 2022 reduced rollover risks from the US\$250 million Eurobond due in June 2022, but it came at an elevated cost with a yield of 10.5%, reflecting heightened fiscal vulnerabilities.

The political situation in the country remains fluid, with growing tensions within the ruling party and to an extent within the coalition. However, the current government is expected to remain in power until the elections in 2023, and the main ruling Maldivian Democratic Party's absolute majority in the parliament will likely remain intact as well. At the regional level, local councils that oversee the administration and provision of services at an atoll, island or city level have gained greater autonomy following amendments to the Decentralization Act in 2020 that guarantee greater independence in accessing finances, resources and drafting land-use plans. However, major decisions such as borrowings still need central government approval.

Maldives ranked 90 out of 191 countries in the Human Development Index (HDI) for 2021<sup>2</sup>. This is the second highest HDI rank in South Asia after Sri Lanka. It also has the lowest rate of multi-dimensional poverty (MPI)<sup>3</sup> in South Asia, with approximately 28% of its population classified as multi-dimensionally poor. The adult literacy rate is 99%, life expectancy is 80 years, the infant mortality rate is 6 per 1,000 live births, and the maternal mortality rate is 53 out of 100,000 live births. The Maldives was an early achiever of many of the UN's Millennium Development Goals

<sup>&</sup>lt;sup>1</sup> World Development Indicators, 2020.

<sup>&</sup>lt;sup>2</sup> https://www.undp.org/maldives/press-releases/human-development-report-2021/2022-launched.

<sup>&</sup>lt;sup>3</sup> The Multidimensional Poverty Index (MPI) identifies multiple deprivations at the household and individual level in health, education and standard of living (UNDP 2019).

(MDG's) and has now adopted the Sustainable Development Goal (SDG), including SDG 4 on the promotion of inclusive and equitable quality education and lifelong learning. The GoM is seeking to accelerate human capital accumulation, increase employment opportunities for young people, and promote equitable economic and human development in the country.

Maldives is highly vulnerable to climate change and other external shocks due to its fragile ecological profile and low elevation, combined with its economic dependence on fisheries and nature-based tourism. Nearly 80% of the total land area of the country, which is less than 300 square kilometers, is lower than one meter above mean sea level, and the country is at risk of inundation from rising sea levels, coastal storms, and flooding. The country's resultant high exposure to natural hazards and climate change poses a growing threat to lives and the economy. This vulnerability is exacerbated by the country's dependence on a narrow range of exports and strategic imports such as food and fuel, and for a large proportion of the population in the climate-sensitive fisheries sector.

#### 1.1A SECTORAL AND INSTITUTIONAL CONTEXT

Even with the several notable achievements in the education sector in terms of access to education over the past few decades in primary and secondary education, the country is still suffering from low enrollment rate at higher secondary education level. This is mainly due to the limited number of schools offering higher secondary education. The quality of general education needs to be strengthened, and with a special focus on the outer atolls. The most recent National Assessments of Learning Outcomes (NALO) conducted in 2017 showed that learning outcomes are moderate, with considerable regional disparities between Male' and the outer atolls.

The Maldives also needs to strengthen support for children with complex learning profiles (CLP). There is a shortage of adequately trained teachers for CLP, and the capacity of the MoE to develop CLP policy and programing needs improvement. Sufficient physical resources, such as space and equipment for CLP children, is a challenge in most schools. A critical aspect of improving the country's CLP program is the training of teachers.

In line with these developments, the Maldives Atoll Education Development Project (AEDP) focuses on providing support to enhance curriculum delivery, teacher development, and measure and improve system performance.

The GoM is implementing a comprehensive curriculum reform initiative for foundation (early childhood education), primary education and secondary education. Key areas of support under this Project include activities that focus on improving literacy and numeracy of students in primary and secondary education, and widening the curriculum options available to students in the secondary education. The Project aids the acquisition of education material and textbooks, enhancing teacher quality and performance, improving classroom assessments, and fostering the school learning environment. Special attention is also to be given to quality assurance and development of schools in the atolls where learning outcomes are lowest and/or have been most adversely affected by the COVID-19 pandemic.

Other areas being assisted under the Project are the implementation of Education Response Plan (ERP) for the COVID 19 pandemic and reinforcement of measures taken to re-start learning after the schools were shut down during the pandemic, to ensure a strong sustainable and resilient education system. This entails supporting the integration of ICT in education, and strengthening support to green concepts in the implementation of the Project areas taken from the National Recovery and Resilience Plan (NRRP).

#### **Project Development Objectives (PDOs)**

#### PDO statement

1. The project development objective is to enhance access to, and quality of, secondary education.

#### PDO Level Indicators

- Increased net male enrollment rate in higher secondary education (percentage)
- School level learning outcomes in English language, Mathematics and Science improved in secondary education grades (percentage)
- Improved teaching practices in secondary education grades (percentage)
- National assessments of learning outcomes completed and utilized for program development (number)

#### 1.1B PROJECT DESCRIPTION

The Government of Maldives (GoM) has developed the Maldives Atoll Education Development Project (AEDP) with the assistance of the World Bank. The Project is valued at USD 10m, of which USD 9m is IDA grant and 1m is counterpart funding. The objective of the project is to enhance access to, and quality of, secondary education across the country. It is a 5-year project being implemented by the Ministry of Education.

The Project is expected to directly benefit about 69,000 students, including around 4,000 children with complex learning profiles, approximately 8,000 teachers and 300 principals and education managerial, technical and administrative staff. Suppliers of education materials, equipment and technology, and tertiary education institutions stand to benefit indirectly from the project activities. Additionally, it is expected that employers will benefit from greater human capital produced by the enhanced education system.

AEDP consists of 4 components, which are detailed below.

## Component 1: Enhancing Curriculum Delivery and Increasing Participation in Higher Secondary Education:

The objective of this component is to promote strategic initiatives at the country level to strengthen and develop the general education system with a special focus on secondary grades. The activities under this component will be mainly implemented by schools with policy and technical support of the Ministry of Education (mainly the Policy and Performance Review Section and the School Administration Section), National Institute of Education (NIE), and the Department of Inclusive Education (DoIE). The following key sub-components will be supported under this component.

#### Sub-component 1.1: Improving learning in strategic subjects in secondary education grades

The delivery of the secondary education curriculum will be enhanced to improve the quality of secondary education in subjects of strategic importance for economic development. First, there will be a focus on improving the English language skills of students. This will help open a variety of future job opportunities for students, including the tourism industry and related services. Second, Mathematics and Science learning will be strengthened in the school curriculum to promote STEM

education. Mathematics and Science are increasingly important in the modern knowledge-based economy. Science will also increase environmental awareness amongst students as the Project will strengthen the learning on mitigation (e.g. food waste, energy efficiency, and recycling) and adaptation (e.g. changing patterns of rains and floods, natural defense mechanisms, and increased water stewardship). Improved English language, Mathematics, and Science learning levels will better prepare secondary school graduates for higher secondary education and tertiary education in the future. Third, the vocational education (VE) option will be strengthened in the school curriculum. This option will directly target the skills in demand in the local economy, defined at the atoll in which the school is located, as well as the national economy. Fourth, emphasis will be placed on developing green jobs skills that can advance sustainability transformations in key sectors, including tourism and allied services. The implementation of the Fehi Madharusa (green school) initiative will help raise awareness to reduce adverse environmental footprints, promote eco-literacy, enhance climate literacy, and support students' emergency preparedness and response measures. In addition, it will promote sustainable behaviors among youth and develop capacities for adaptation to climate change, as well as specific skills for green jobs to support low carbon economy and climate resilience. Improvements in the quality of education at the secondary education level will also enable more students to qualify for higher secondary education, enabling increased participation in higher secondary education.

The AEDP will increase the resources available for the teaching and learning of Science, Mathematics, English and vocational education (VE). The AEDP will support the development of Science laboratories and vocational education workshops through the refurbishment of classrooms and the provision of equipment and technology in secondary schools with large student populations in the atolls. In addition, the Project will assist the expansion of ICT equipment and technology in atoll schools. The Science laboratories, ICT facilities and vocational education workshops will incorporate green designs, such as rainwater harvesting systems and improved insulation that allows for energy efficiency and makes classrooms more resilient to rising temperatures. Schools will also be trained in measures to reduce e-waste. The refurbishment of facilities will take account of the learning needs of students with complex learning profiles (CLP). The Project will also support digitization efforts, including online teaching systems for English language, Mathematics, Science and vocational education subjects to support blended learning and uninterrupted learning during natural disasters (e.g., floods). Similarly, these efforts will enhance data recovery and backup systems of e-learning to prevent data loss in the event of such natural disasters.

Improving English Language Learning Outcomes: English-language skills are widely acknowledged as vital for success in the modern global knowledge economy. The Project will prioritize support for the development of a strong and effective program to improve English language learning outcomes in the secondary stage of education of the school curriculum. The focus will be on the vital language skills of vocabulary, reading, and writing. The Project will support the following activities in homes and schools: (a) create an acquisition-rich English language learning environment for students to learn the language, where day-to-day conversation and extracurricular and co-curricular activities will be in English during at least a part of the school week; (b) encourage and affirm students who read books in the English language and engage with English language technology, as appropriate to their ages; (c) encourage families to create an environment at home which fosters English language learning, including English language reading materials and TV programs, and discussion and conversation in English at home; (d) promote co-curricular and extra-curricular activities such as English literary, drama, and debating societies; (e) design other innovative activities to promote English language learning, with special attention to improving reading skills; and (f) support digitization efforts, including online teaching systems to facilitate English language learning.

**Improving Mathematics Learning Outcomes:** Mathematics is increasingly important in the modern knowledge-based economy and plays an important role in areas such as Science and technology and is vital to research and development in fields such as engineering, computer Science, medicine, and Science. It is an integral component of the Science, technology, engineering, and Mathematics (STEM) discipline. Several activities will be supported to strengthen

Mathematics learning in the secondary school curriculum and promote STEM education. The mathematics learning environment in schools will be improved by the provision of Mathematics educational material and technology. The use of technology will be promoted in appropriate and effective ways to support the curriculum. Innovative learning approaches will be encouraged through the curriculum to stimulate children and promote their enjoyment of Mathematics through planned active learning which provides opportunities to observe, explore, investigate, experiment, play, discuss and reflect and further develop problem-solving capabilities and critical thinking skills.

Improving Science Learning Outcomes: Science and its application are central to the economic future, health and wellbeing of individuals and society. Science is a vital subject in the Science. technology, engineering, and Mathematics (STEM) discipline. STEM subjects permeate nearly every dimension of modern life and are key to solving many of society's most pressing challenges, including those brought on by climate change. The Project aims to improve Science knowledge and promote STEM education in secondary grades by promoting learning approaches that will help capture students' interest and provide them with the necessary skills and knowledge to develop Science learning. The learning environment in schools will be improved through the provision of equipment and technology for science laboratories in secondary schools with large student populations in the atolls. The intervention will help students to focus on practical work which is a distinct feature of science education and essential for understanding how Science works. Different learning approaches will be encouraged through the curriculum by connecting children's learning to the real world. Students will be encouraged to make connections between the lesson and realworld experiences, current events, and/or students' lives. Furthermore, by linking with local industries and services, including those with links to adaptation and mitigation activities, schools can show Science and STEM in action. In addition, project-based learning approaches combining the individual disciplines within STEM will be promoted to create an exciting learning experience for children where they can work in teams to solve problems or tackle challenges. Technology will be used as a resource and a support system for the curriculum.

**STEM and Skills Education:** The focus on Science and Mathematics, combined with ICT, will provide a foundation for STEM education. The school curriculum will also explicitly include topics such as coding and robotics which are important for the labor market and, in addition, will be useful for disciplines such as engineering and technology at higher levels of education. By doing so, it sets the groundwork for the transition to green and blue economies and the growing demand for skills that will help Maldives better mitigate and adapt to climate change (e.g., design and build resilient critical infrastructure). The AEDP will support the refurbishment of physical spaces, contemplating green design features (e.g., improved roofing and drainage), and the provision of Science, Mathematics and ICT equipment for STEM education.

The school curriculum also seeks to promote skills education through vocational education subjects introduced as an integral part of the education system, addressing the mismatch between the workforce's current skills and the growing demand for green jobs skills, including those necessary for implementation of a nationally determined contribution to improve climate impacts through, for instance, eco-tourism, nature-based solutions, and mitigation and cleaner production. The AEDP will support the refurbishment of physical spaces and the provision of vocational equipment for skills education in areas such as boat manufacturing; electrical, metal and woodwork; food preparation; and hotel services.

#### Sub-component 1.2: Promoting participation of boys in higher secondary education

The Maldives has an atoll-wide network of schools that provides universal access to primary (grades 1-7) and lower secondary (grades 8-10) education. However, until recently access to higher secondary education (grades 11-12) was very limited, initially to one school in Male', and then to four more schools in the atolls. The government has now expanded access to higher secondary education through 37 strategically selected schools across the country. These schools serve as hubs for higher secondary education in the atolls and in Male'. However, as noted in the

sector context, there is high gender disparity in higher secondary education enrollment, with the participation rate of boys only about one-third the rate of participation of girls.

A key outcome of the AEDP is to increase the enrollment of boys in higher secondary education and reduce the gender disparity in higher secondary education participation. Under this subcomponent schools will provide good career guidance for male students and their families in secondary grades to increase the demand for higher secondary education. This will include information on the benefits of higher secondary education which will enable students to obtain better quality jobs with higher pay, as well as access university education and advanced technical education opportunities beyond schooling.

In addition, the higher secondary schools will be provided greater teaching-learning material and equipment, especially for IT and Science, but also for English, Mathematics and skills education. The improved quality of resources available to higher secondary schools is expected to increase the demand for higher secondary education among male students, as these will improve employment opportunities in the labor market. 28 locations across the Maldives have been identified for physical intervention (details given in Annex 11).

#### **Component 2. Continuing Teacher Development**

This component will assist GoM to implement a program of continuing teacher development. The activities under this component will be mainly implemented by schools with the policy and technical support of the National Institute of Education (NIE).

#### Sub-component 2.1. Improving the delivery of teaching services

This sub- component will assist the NIE, with the support of the Teacher Resource Centers (TRCs), to implement targeted teacher development programs (TDPs) for schools. The focus of these TDPs will be on improving subject content knowledge for English, Mathematics, Science and skills education where needed; strengthening pedagogical practices including differentiated learning needs and styles for male and female students; career guidance skills aligned with current and future labor market demands; learning needs of students with complex learning profiles; increase environmental awareness, promote eco-literacy, and enhance climate literacy among teachers; and improve their climate change preparedness / natural disaster emergency response. The NIE, with support from the Project, will identify the professional development needs of teachers on a regular basis and organize a menu of capacity building and training activities. Teachers will select from this menu of TDP options according to their professional development needs.

Through the learning outcomes defined in English, Mathematics, and Science subjects, teachers will be guided to use a skillful mix of learning and teaching approaches and instructional strategies, including activity-based learning and project-based learning, to stimulate children and promote an exciting and enjoyable learning experience. Teachers will also be guided in developing curricular materials and pedagogical practices for skills education, including techniques such as hands-on problem solving, cooperative and team-based project learning, and activities that draw on knowledge and skills from various domains. An effective classroom assessment system to identify and assess the knowledge, understanding and skills of students in each curriculum area will be incorporated, and teachers trained well for this classroom assessment. Teachers will also be trained to provide career guidance to students. Special attention will be given to guiding students, and especially male students, to participate in appropriate higher secondary education subjects. The TDPs will be informed by the COACH<sup>4</sup> principles to tailor the support to individual teachers to improve their pedagogical skills for teaching. COACH is a World Bank initiative to assist countries enhance in-service TDP programs and systems to accelerate learning by aiding countries to align

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<sup>&</sup>lt;sup>4</sup> <u>https://www.worldbank.org/en/topic/teachers/brief/coach-helping-countries-accelerate-learning-by-improving-in-service-teacher-professional-development.</u>

their programs and systems with the COACH principles; tailored, practical, focused and ongoing. Innovative approaches for the delivery of TDP, including blended approaches through online/ apps on smartphones will also be supported under the Project. Additionally, the World Bank's Teach<sup>5</sup> tool will be used as part of this evaluation to track and improve teaching quality.

#### Sub-component 2.2. School-based Professional Development (SBPD) of teachers.

The SBPD program will focus on: (a) raising the ability of school principals and senior management teams to establish a learning culture within the school with specific reference to English, Mathematics, Science and vocational education and green job skills; (b) improve teacher motivation for their work; (c) enhance teacher performance by achieving required teacher competencies and improving their pedagogical practices; and (d) link teacher development activities to addressing student learning needs, including the needs of CLP students. The NIE will measure (a) to (d) above through SBPD reports provided by the SBPD focal points in schools. The component will also support research to evaluate the SBPD practices in schools and their effectiveness in relation to improving student learning in Science, Mathematics, English, vocational education and green job skills in the atoll schools.

At each school, a competent Professional Development (PD) coordinator will be identified by the principal to work as a focal point. Teacher Resource Center (TRC) coordinators are expected to provide guidance and support to PD coordinators. In order to apply the SBPD activities and develop schools to become learning communities, there is a need for on-going capacity building of the PD coordinators and TRC coordinators.

The AEDP will assist the MoE, especially the National Institute of Education (NIE), to further develop the system for SBPD by improving the capacity of PD coordinators and TRC coordinators, helping schools undertake SBPD activities, and assisting the NIE to monitor the implementation of SBPD in schools. All schools in Male' and the outer atolls will implement SBPD programs according to an annual cycle.

The range of SBPD activities can include school-based mentoring, peer learning, peer coaching, individual consultations, visits to classrooms in other schools and islands, and online interactions, including social media, apps, and cloud computing, for networking among teachers. Under SBPD:

- teachers can receive useful lessons on teaching techniques and observe demonstrations, including in differentiated learning for classes with children with varying learning needs;
- teachers can practice and discuss new techniques and new materials with colleagues and senior teachers on a regular basis;
- leading teachers can give classroom demonstrations using SBPD activities;
- the activities can increase communication and sharing of ideas among teachers;
- provide a focus for classroom observation and meetings with teachers across atolls and islands;
- leading teachers can mentor and coach other teachers using SBPD activities frequently and regularly; and
- can link centralized in-service training programs at national level and the specific teacher needs at school level through intermediary training.

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<sup>&</sup>lt;sup>5</sup> https://www.worldbank.org/en/top<u>ic/education/brief/teach-helping-countries-track-and-improve-teaching-quality.</u>

The specific type of SBPD that will be implemented each year in a school, drawing on the menu above, will be decided by the school at the beginning of the year. The choice of SBPD activities will be based on the schools' annual self-assessment and contained in the school development plan.

#### **Component 3: Measuring and Enhancing School and System Performance**

The component will assist GoM to measure the performance of the school system through quality assurance activities and national assessments of learning outcomes. The activities under this component will be mainly implemented by the Quality Assurance Department (QAD), and by schools with the policy and technical support of the QAD.

#### **Sub-component 3.1. Modernizing Quality Assurance for School Improvement**

Quality assurance (QA) is a key feature of education systems in many high-income countries, such as Scotland, Singapore, the United Kingdom (UK), and the United Arab Emirates (UAE), and several Asian middle-income countries, including Malaysia and Sri Lanka. Quality assurance provides a framework for the systematic review and monitoring of an education system to determine whether an acceptable standard of quality is being achieved over the medium-term and enhanced over the long-term in line with global developments in education.

The sub-component will help GoM to carry out a program of activities designed to support measurement of school performance through quality assurance (QA) reviews consisting of both self-evaluation by schools and external evaluations by QAD. The AEDP will help the MoE to establish a regular, annual QA system for schools, with the main emphasis on internal self-evaluations. The school self-evaluations (SSEs) will, in turn, feed into the School Improvement Plans for the following year. QAD has prepared QA standards to facilitate the assessment of education inputs, processes and outcomes by schools (self-assessment) and by regional and national level authorities (monitoring and supervision). External evaluations of schools will be conducted by the QAD with special emphasis on the weaker schools which have lower student learning levels or lower transition of especially male students from lower secondary to higher secondary education.

The school self-evaluations will be conducted by stakeholders such as principals, teachers, students, parents and local communities. This will enable extensive citizen engagement, including consultations, collection of stakeholder feedback, community participation in planning and decision making, and grievance redress mechanisms. The QA process also provides opportunities for stakeholders to participate in planning and implementation of school development plans. The results of the quality assurance process will feed back into the school development plan that would include the availability of potable water, water and sanitation services, energy efficiency, and the development of safe shelters in schools as part of the community disaster management plan, when necessary. The relevant information on the implementation of these plans will be shared with the stakeholders. This QA process constitutes the citizen engagement mechanism for the Project. The QAD will also prepare a central QA report which summarizes the main findings of the school level QA reports, to feed into the external QA reviews conducted by the QAD and inform education program development at the national level. The central QA report will be uploaded into the Maldives Education Management Information System (MEMIS).

## Sub-component 3.2. National Assessments of Learning Outcomes for Policy and Program Development

National assessments of learning outcomes (NALO) have become one of the main vehicles for assessing education systems and formulating education policies in OECD countries and middle-income countries. National assessments are useful to analyze: (a) the quality of learning in the education system; (b) the particular strengths and weaknesses in the knowledge and skills of students; (c) the education performances of different atolls and islands; (d) educational and socio-economic factors associated with student learning outcomes; and (e) the evolution of learning achievements over time.

The AEDP will support the MoE to implement national assessments of learning outcomes in grades 4 and 7 according to a regular cycle for key subjects such as English, Mathematics, Dhivehi and

Science, and also for grade 9 for English, Mathematics and Science, and use the results and findings for education program development. The AEDP will help build the technical capacity within the MoE, especially the QAD, to undertake rigorous, state-of-the-art national assessments. The Project will also build the capacity of policy makers and education specialists within the MoE, including NIE and the PPRD, to use the results and findings from national assessments for strategic policy and management decisions. The national assessments under the Project will help monitor learning outcomes over time. In addition, the Project will support the administration of contextual questionnaires to stakeholders to enable the analysis of factors that contribute to learning outcomes, such as school-related, classroom-related, and child-related factors. International assessments are useful to analyze the quality of learning in the education system in relation to international levels. National and international assessments provide complementary information about the performance of education systems. The national assessments will be aligned to the UN's global proficiency framework<sup>6</sup> and will include modules of test items drawn from international assessments such as PISA and/or TIMSS and/or PIRLS. The NALO reports will be uploaded into the MEMIS.

#### **Sub-Component 3.3. School-Based Learning Enhancement Grants**

The Project will provide school-based learning enhancement grants (SBLEGs) of 15,000 rufiyaa (about US\$1,000) per school per year to enable schools to improve learning outcomes and socio-emotional skills of students, and to increase higher secondary enrolment of boys, especially through measures identified from QA reviews, feedback from SBPD programs, and from the NALOs. All schools with secondary grades are eligible for the grants. Special attention will be paid to improving learning in English, Mathematics, Science and VE, and the green schools initiative, in secondary education. Also, attention will be paid to measures to increase boys' enrollment in higher secondary education. Part of the SBLEGs can be used for school level teacher development activities such as SBPD to improve teacher effectiveness, with a special focus on the teachers at secondary education level in the priority disciplines. A further part of the school grants can be used to enable schools to implement the recommendations of QA reviews to improve learning and increase higher secondary enrolment. The School Administration (SA) section of the MoE will assist the Operations and Monitoring Support Unit (OMSU) to monitor the efficient utilization of the SBLEGs by including it in the annual performance review of the school principals.

#### Component 4: Coordination, Monitoring, Capacity Building and Technical Assistance

Under this component the Project will help the MoE to coordinate and monitor the Project's activities, as well as provide technical assistance and knowledge support to the MoE agencies and to schools. Project coordination would be through a team of experts in operations, monitoring, procurement, financial management, and environment and social safeguards, who would assist the MoE, including atoll level officials such as the Teacher Resource Center (TRC) Coordinators, to implement and monitor project activities efficiently. This monitoring will include observing and measuring all outcomes and intermediate outcomes of the Project. The monitoring activities will take place at three levels: national, atoll and school. The purpose of monitoring will mainly be formative, and support implementation at each level by identifying problems and taking action to resolve issues and remove bottlenecks to implementation. A Maldives education management information system (MEMIS) is in place and the statistics generated through it will be used for monitoring purposes.

The resources from the Project will also support policy and program development in areas relevant for the education system. In addition, the Project will support communication and dissemination of information to education stakeholders, including political authorities, policy makers, academics and researchers, principals and teachers, students, and the general public.

#### Cross-cutting areas

The human resources in the education sector need to be developed urgently. The majority of education staff members in the MoE and the Atoll Education Offices have not had adequate

 $<sup>^{6} \</sup> https://www.edu-links.org/resources/\underline{global-proficiency-framework-reading-and-Mathematics}.$ 

management and leadership training. Therefore, the AEDP will assist the MoE to develop the human resources in the education sector, with a special focus on the staff of the MoE and associated institutes and departments. MoE staff, including from the Atoll Education Units, will be provided with tailored short-term courses and/or programs to develop their administrative, managerial, and technical skills for work in the MoE and Atolls. The types of courses in which short-term Human Resource Development activities will take place are summarized in *Table 1* below.

Table 1: Indicative List of Short-Term Training Programs

Type of Short-Term Training Program	Staff from MoE Agencies to Participate
Education Planning and Program Development	MoE
National Assessment of Learning Outcomes	MoE, QAD
Quality Assurance	QAD
Models of Continuing Teacher Development	NIE, QAD, DoIE
Statistics and statistical software	MoE, NIE, QAD
Use of MEMIS	MoE, NIE, QAD
Computer applications (e.g. Microsoft office, accounts packages)	MoE
Procurement	MoE
Environmental management	MoE
Climate resilience through education	MoE, NIE

*Note:* this is an indicative list. New areas for short-term training can be included during project implementation. Funds for short-term training can come under different components.

#### **Project cost allocations**

Table 2 presents the distribution of project funds across the 4 components.

Table 2:

Project Components	Total	IDA	GoM
Component 1: Enhancing Curriculum Delivery and	6.50	6.25	0.25
Increasing Participation in Higher Secondary			
Education			
Component 2: Continuing Teacher Development	0.75	0.50	0.25
Component 3: Measuring and Enhancing School and	1.75	1.50	0.25
System Performance			
Component 4: Coordination, Monitoring, Capacity	1.00	0.75	0.25
Building and Technical Assistance			
Component 5: Contingency Emergency Response	0.00	0.00	0.00
Total	10.00	9.00	1.00

*Note:* The above numbers are indicative. There is flexibility to move funds across components, as needed to meet the overall objectives of the Project, during implementation.

#### **Project Beneficiaries**

The Project is expected to directly benefit about 69,000 students, including around 4,000 children with complex learning profiles, approximately 8,000 teachers and about 300 principals and education managerial, technical and administrative staff. In addition, the Project will indirectly benefit suppliers of education material, equipment and technology, tertiary education institutions

that will receive better qualified secondary school completers, and later, employers who will benefit from greater human capital produced by the education system.

#### Anticipated Environmental and Social Risks and Impacts.

The overall environmental and social risk rating for the Project is moderate. Environmental impacts are expected to be limited to (i) the management of construction level impacts at the rehabilitation /construction sites (waste water, solid waste, e-waste, rejection and elimination of wastes such as oils and paints), soil erosion, loss of vegetation, as well as dust and noise during the works, occupational and public health and safety and associated nuances; (ii) issues around the water supply, sanitation and solid waste management in with regard to the operation of such facilities are also envisioned; (iii) high demand of material for construction, such as wood for furniture and windows, sand, etc.; (iv) structural integrity of the facilities; and (v) issues related to use and disposal of solid waste and effluents such as sewerage and waste water.

There may be rehabilitation activities related to waterproofing of roofs, replacement of broken fittings, repairing malfunctioning drainage, water and electrical installations, painting, etc. that may give rise to environmental issues. The extraction of construction materials, particularly sand and coral aggregates could constitute a source of potential impacts on the natural environment.

As for the social impacts, the planned rehabilitation activities will not require land acquisitions. Hence, involuntary displacements or livelihood impacts due to project activities are not expected. Further, during rehabilitations, there is a possibility that the required labour force and associated goods and services cannot be fully supplied locally for a number of reasons, among them worker unavailability and a lack of technical skills and capacity. In this case, the labour force (total or partial) would need to be brought in from outside the project area. The rapid migration to the project area can affect project areas negatively, in terms of increased risks of social conflict, illicit behaviour, burden on and competition for public service provision, risk of communicable diseases and burden on local health services, including sexually transmitted diseases, and gender-based violence, particularly in the form of inappropriate behavior. Risks of GBV, SEA and SH also may persist as a result of the public accessing project areas.

Overall, AEDP is expected to create positive social impacts such as fostering access to quality jobs oriented vocational, technical, and STEM skills at the secondary education level, laying a strong foundation for the students before they move on to the higher education and tertiary education levels.

The project aims to create a number of beneficial outcomes such as (i) enhancing curriculum delivery and increasing participation of students in higher secondary education, (ii) improving learning in strategic subjects in secondary grades, (iii) promoting participation of boys in higher secondary education, (iv) improving the delivery of teaching services, (v) improving school-based professional development programs (SBPD) of teachers, (vi) measuring and enhancing school and system performance, modernizing quality assurance of schools for improvement; and (vii) conducting national assessments of learning outcomes for policy and program development.

#### **Project Locations**

Project activities are expected to take place across the Maldives. For support for physical interventions under Component 1, 28 locations have been identified across 20 administrative atolls (detailed in Annex 11).

#### **Institutional Arrangements**

The Ministry of Finance will be the executing agency and the Ministry of Education will be in overall charge of implementing the Project. The MoE will implement the project through its institutions/bodies, such as NIE, QAD, Physical facilities and infrastructure section and OMSU based on their respective mandates and responsibilities.

The OMSU to be established within the MoE will hire environmental and social specialists to focus on the tasks and responsibilities outlined in the ESMF. The institutional arrangements are detailed in Chapter 10.

# 1.1C OBJECTIVE OF ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

Projects and Programs financed with World Bank's resources need to fulfil the environmental and social requirements for Investment Project Financing. Therefore, components and related activities eligible for funding under this project will be required to comply with the World Bank's Environmental and Social Framework (ESF), in addition to conformity with environmental and social legislation of the GOM.

28 locations for physical intervention, under Component 1 have been identified (detailed in Annex 11). Site specific and comprehensive environmental and social screening will be conducted in each of these locations, and some generic issues that are typically associated with proposed activities have been identified in this document.

Therefore, the purpose of this document is to outline a framework for environmental and social assessment and management, giving details of potential environmental and social issues and guidelines on what type of environmental and social assessment tools to be applied for various sub-project activities. This will serve as the basis in the preparation of, site-specific specific Environmental and Social Assessments (ESAs), Environmental and Social Management Plans (ESMPs) or Code of Conducts (CoCs) as necessary. As stated earlier, it is being submitted in lieu of a project environmental and social assessment and has formed the basis for appraising the environmental and social aspects of the project. It will be made available for public review and comment in appropriate locations and in a language understood by the people in the Maldives and in IDA's Public Information Center in accordance with World Bank's policy of Access to Information.

It is expected that detailed environmental and social assessments (ESAs, ESMPs) for sites and/or for activities will be carried out (in accordance with this Framework) by the implementing agencies and will be reviewed and cleared by the Environmental Protection Agency (EPA), or any other agency, as applicable, under prevailing national environmental legislation in the Maldives. Additionally, all clearances will be sought from The World Bank for all physical activities prior to the approval of disbursement of funds.

The objectives of this Environmental and Social Management Framework (ESMF) are:

- ✓ To establish clear procedures and methodologies for environmental and social planning, review, approval and implementation of subprojects to be financed under the Project
- ✓ To carry out a preliminary assessment of environmental and social risks and impacts from project investments and propose generic mitigation measures.
- ✓ To specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social concerns related to subprojects
- ✓ To determine the training, capacity building and technical assistance needed to successfully implement the provisions of the ESMF
- ✓ To provide practical resources for implementing the ESMF

#### 1.1D DUE DILIGENCE PRINCIPLES

This ESMF considers and incorporates principles of due diligence that will be applied during project preparation and implementation in managing potential environmental and social risks that may be encountered under the Project. The key due diligence principles are as follows:

**Principle 1: Review and Categorization.** All project interventions will be subject to a social and environmental review and shall be categorized based on the magnitude of potential impacts and risks in accordance with environmental and social screening criteria.

**Principle 2: Social and Environmental Assessment.** As per the GoM regulatory requirements and ESS1 of the World Bank's ESF, where necessary, Environmental and Social Assessments, Initial Environmental Examination (IEE), Environmental and Social Impact Assessments (ESIAs) will be undertaken to address, the relevant social and environmental impacts and risks. The Assessment will also propose mitigation and management measures relevant and appropriate to the nature and scale of the proposed project as described earlier.

**Principle 3: Applicable Social and Environmental Standards.** The ESMF will refer to the applicable World Bank ESF Environmental and Social Standards (ESSs) and Environmental Health and Safety (EHS) Guidelines, as well as policies and standards of the GoM and international best practice. The applicable ESSs for the Project are ESS1, ESS2, ESS3, ESS4 and ESS10. The Assessment will establish the project's overall compliance with, or justified deviation from, the respective World Bank ESSs, and EHS Guidelines where applicable. The assessment will address compliance with relevant Maldivian laws, regulations and permits that pertain to social and environmental matters.

**Principle 4: Environmental and Social Management System.** For all physical activities, an Environmental and Social Management Plans (ESMPs) and monitoring indicators will be developed which addresses the relevant findings, and draws on the conclusions of the assessments. The ESMPs will describe and prioritize the actions needed to implement mitigation measures, corrective actions and monitoring measures necessary to manage the impacts and risks identified in the assessments. These actions will be costed and reflected as part of the contractual documents of the civil works contracts.

**Principle 5: Consultation and Disclosure.** For all activities, affected communities will be consulted within a structured and culturally appropriate manner. If principle project activities or subproject activities are assessed to have significant adverse impacts on affected communities, the process will ensure their free, prior and informed consultation as a means to establish whether those activities have adequately incorporated affected communities' concerns. In order to accomplish this, this framework as well as all other safeguard instruments will be made available to the public by the borrower for a reasonable minimum period. The process will be documented, and account will be taken of the results of the consultation, including any actions agreed resulting from the consultation. For projects with adverse social or environmental impacts, disclosure will occur early in the assessment process, and on an ongoing basis.

**Principle 6: Grievance Redress Mechanism.** To ensure that consultation, disclosure and community engagement continues throughout project implementation, a grievance redress mechanism will be established, scaled to the risks and adverse impacts of the project or subproject, as part of the management system. The grievance redress mechanism will allow for concerns and grievances about the project's social and environmental performance raised by

individuals or groups from among project-affected communities to be received and to facilitate resolution of those concerns and grievances.

**Principle 7: Monitoring and Reporting.** All ESMPs will be monitored based on the monitoring schedule identified in the ESMP by the relevant responsible party. The Environmental and Social focal points of the OMSU, will be responsible to ensure that the monitoring activities have taken place and prepare the consolidated monitoring report bi-annually.

**Principle 8: Training.** Training for project staff, staff of civil contracts and other parties who would play a role in managing environmental and social impacts is provided to ensure successful implementation of this ESMF. Necessary budget should be allocated to carry out the training plan.

#### 1.1E IMPLEMENTATION OF ESMF

This ESMF shall be used as a guiding document and shall be followed during the entire project cycle starting with project screening followed by site assessment, design considerations, impact assessment, mitigation measures selection, regulatory compliance, capacity building, project construction and sustainable operation. Institutional arrangement shall ensure that ESMF is integrated into planning of each project/subproject.

#### 1.1F THE ESMF AS A LIVING DOCUMENT

ESMF shall be maintained as a dynamic document and shall be updated based on the following considerations time to time:

- Any aspects not envisaged at the project preparation stage and thus not covered in ESMF. Such aspects shall be assessed and appropriate measures shall be included in the ESMF.
- Unexpected situations and/or changes in the project or sub-component design.
- Change in policies, new regulations, change of safeguard policies of funding agencies, international treaties
- Experience gained from implementation of ESMF and need for improvement in the ESMF
- Changes in the Government setup and institutional framework requiring appropriate alignment in ESMF

Any change and modification in ESMF shall be shared with World Bank and agreed upon by both parties and then communicated to targeted beneficiaries and other stakeholders.

## CHAPTER 2: INTRODUCTION TO PREVAILING SALIENT ENVIRONMENTAL AND SOCIAL CONDITIONS IN THE MALDIVES

#### 2.1 INTRODUCTION TO THE MALDIVES

The Republic of Maldives is a South Asian island country, located in the Indian Ocean about 671 km southwest of Sri Lanka. It is one of the world's most geographically dispersed countries, as well as the smallest Asian country by both land area and population. Malé is the capital and most populated city, traditionally called the "King's Island" for its central location. The chain of twenty-six atolls stretches from Ihavandhippolhu Atoll in the north to the Addu City in the south with 1190 coral islets stretching over an area of 90,000 km.

The atolls are composed of live coral reefs and sandbars, situated atop a submerged ridge 960 km long that rises abruptly from the depths of the Indian Ocean. The islands consist of coral, sea grass, seaweed, mangrove and sand dune ecosystems which are of great ecological and socioeconomic significance. Generic physical characteristics across the atolls, including topographic, geographic and climatic conditions across the atolls do not vary on great scale. Similarly, the terrestrial ecosystems and marine ecosystems across the atolls are similar, except for minor variations such as the presence of mangroves, wetlands and sensitive marine protected areas. Maldives is home to a number of ecologically sensitive marine habitats in shallow and intertidal zones which have been designated as protected areas by the Ministry of Environment.

With global warming and the shrinking of the polar ice caps, the Maldives is directly threatened, as none of its islands rises more than six feet above sea level. In 1987, the Maldives got a preview of this threat when one-third of the nation was flooded. To stave off flooding as much as possible, the Government has banned the collection of coral and the use of anchors on the coral reefs that protect the islands. Due to degradation of natural reef around Male, the GoM has constructed artificial breakwaters made of concrete tetrapods at a cost of US\$10 million per kilometer in recent past, an expense which Maldives can ill afford. While atoll specific data availability is limited, the project specific assessment will determine the baseline condition of the sub project area. The detail outline based on country specific information which is largely common to all Atolls is given in the following sections.

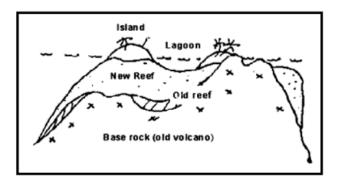
#### 2.2 THE PHYSICAL ENVIRONMENT

#### 2.2.1 GEOGRAPHIC AND TOPOGRAPHIC CHARACTERISTICS

The islands of the Maldives are flat, with topographic variations generally less than two meters at highest elevation across. Over 80% of the total land area of the country is less than one meter above mean sea level and the highest point recorded in the country is a beach storm ridge at Fuvahmulah, in one of the southernmost atolls with an elevation of four meters above mean sea level. Historically the Maldives is divided into 26 natural atolls, however based on scientific evidence concluded in 2004 the Maldives is classified into 16 complex atolls, five oceanic faros and four oceanic platform reefs. The 2008 Constitution of the Maldives, in its Schedule Two, divides the Maldives into 20 administrative atolls, and the capital Island of Male. Administratively 04 cities have been identified in Maldives; Male', Addu, Fuvahmulah and Kulhudhuhfushi.

The coral atolls of the Maldives are formed upon minor elevations on the Chagos-Lacadive submarine plateau, which ascends from the deep Indian Ocean. This plateau has provided a base for reef building corals, from where they have risen to the surface as illustrated in *Figure 1*. Most of the atolls have a number of channels or openings in the outer reef which provide access to the islands in the enclosed interior sea or lagoon of the atoll. The shape of the atolls vary from circular

and oval, to pear shaped. Some are fairly large such as Huvadhu Atoll in the south, which has approximately 250 islands and a lagoon area covering approximately 2,800 sq. km. Other atolls are very small and contain only a single island, such as Kaashidhoo and Gaafaru in the North Male' Atoll.



The islands can be divided physio graphically into three zones namely: i) the foreshore or lower beach, ii) the beach crest (beach top) and iii) the inner island. The foreshore or lower beach zone, which includes the beach area between the high tide line and the beach crest, is totally exposed to wave action, wind and salt spray. It is unstable and composed mainly of coarse coral sand in the lower portion and shingle. The beach crest or beach top rises

gradually and sometimes abruptly to a height of 0.8 to 1 m above the high tide line and includes a stable beach frontage composed of coral sand and rubble. It is exposed to winds and salt spray and its lower margin is occasionally or, in the case of an eroding beach, regularly inundated by seawater during spring tides. The beach crest may extend 5 to 20 m. The microclimate of the inner islands protected by the beach-crest communities makes them good environments for growth of larger trees.

Out of 1,192 coral islands, 1,074 are vegetated islands and approximately 450 un-vegetated islands. Vegetated islands comprise both natural vegetated islands and artificial vegetated islands. The unvegetated islands include natural sand banks (Finolhu), natural coral conglomerates above High Tide Level (Huraa) and artificial un-vegetated islands. Inhabited Islands in all 3 zones are built up with housing units, either one (most commonly) or two stories and small home garden plots as well as buildings such as restaurants, office buildings and shops. The islands are planned out with designated areas for industry and harbors.

#### 2.2.2 COASTAL ZONE AND BEACHES

Land is the scarcest resource in the Maldives, comprising only 1% of the total reef area 21,436 km. Given the small size of the islands (> 96% of the islands are less than 1km in area), the whole land area can be considered a coastal zone. Coastal zones and beaches are naturally dynamic with accretion and erosion patterns depending on complex interplay of oceanographic, climatic, geological, biological and terrestrial processes compounded by human activities.

Coastal ecosystems provide products and services that underpin people's well-being, such as the role they play in the provision of food security, livelihoods and health. These contributions to human wellbeing are made both directly through the products (provisioning services such as through fisheries, tourism, medicine and fuel etc.) provided by marine and coastal ecosystems, as well as indirectly through the variety of life support and production support functions they generate (regulating and supporting services such as fisheries productivity and shoreline protection etc.), and their intrinsic worth (or existence value) to people (cultural, spiritual, aesthetic services).

#### 2.2.3 LAND USE

Land use in the Maldives revolves around 6 main types of utilization: human settlements, infrastructure islands (e.g., airport, waste disposal, oil storage), economic (tourism, agriculture, fisheries, aquaculture), stewardship or varuvaa, recreation and administrative (e.g., defense). Population increase remains the main pressure on land, despite consistently falling population growth rates, for instance: 3.4 in the 1990s to 1.4 in 2021. The impacts of population increases are more pronounced due to the small land area of the islands, leading to increased competition for the

utilization of the little available land and encroachment of beaches for human settlements and other needs.

#### 2.2.4 SOILS

The soils in the islands of the Maldives are geologically young. They consist of substantial quantities of the unweathered coral parent material, coral rock and sand. Soils are coarse in texture and shallow in depth with a top layer of brown soil (0 to 40 cm in depth) followed by a transition zone on top of the underlying parent material of coral reef limestone. In some low-lying areas and areas subjected to significant mechanical breakdown from human activity, fine deep soils are found with accumulated deposits of clay. In the wetland environment called kulhi the depth of the clay is substantial due to the accumulation of material from marine and biological sources over a long period, however as the limited wetlands in the Maldives are protected this material is not used for building purposes. In many places, top layers of the soils have a weakly developed structure and at times a 30 cm thick hard-pan layer cemented with calcium carbonate is present, preventing penetration of the roots of most plants except large trees. The water-holding capacity of the soil is very poor due to high porosity and very high infiltration rates. The soils of the Maldives are generally alkaline with pH values between 8.0 and 8.8. This high alkalinity is due to the presence of excess calcium. The soils that contain higher levels of humus, as found in depressions and wetlands, are less alkaline. The quality of the soils in the small islands is generally poor with marked deficiency in nitrogenous nutrients, potassium and several micronutrients particularly iron, manganese and zinc. Though the phosphorus content of the soils is high it is unavailable to plants as it is present mostly in the form of calcium phosphate.

#### 2.2.5 WATER RESOURCES

Freshwater resources are scarce in the Maldives. There are no rivers or streams in the islands. The main source of freshwater in the islands is the groundwater aquifer. Increased extraction exceeding natural recharge through rainfall over the years, has dramatically depleted the freshwater availability in inhabited islands. Sewerage contamination and saltwater intrusion have made the water in inhabited islands unfit for portable sources thus many inhabited islands obtain water by reverse osmosis of sea water or rain water harvesting for potable uses and drinking water consumed is usually bottled and transported to the Islands.

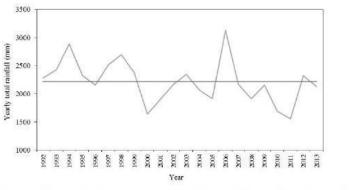
#### 2.2.6 CLIMATE

The Maldives, in general, has a warm and humid tropical climate with average temperatures ranging between 24°C to 33°C and relative humidity ranging from 73% to 85%. The country receives an annual average rainfall of 1,948.4 mm. There is some variation in climatic conditions between northern and southern atolls.

#### 2.3 GENERAL CLIMATIC CONDITIONS

#### 2.3.1 RAINFALL

Climatic conditions in the Maldives belong to the tropical-monsoon category with temperatures ranging between 24°C and 33°C throughout the year. Climatic conditions in the Maldives are



Yearly total rainfall data for the period 1992-2013 (the dark grey line shows the yearly mean rainfall for the 22 years).

predominantly affected by the large landmass of South Asia situated to north. the presence of this landmass causes differential heating of land and water. These factors set off a rush of moisture-rich air from the Indian Ocean over South Asia, resulting in the southwest monsoon. Two seasons dominate Maldives' weather: the dry season associated with the winter northeastern monsoon and the rainy season which brings strong

#### winds and storms.

The shift from the dry northeast monsoon to the moist southwest monsoon occurs during April and May and the southwest monsoon Maldives in the beginning of June and lasts until the end of August. Annual rainfall averages 254 cm in the north and 381 cm in the south, with the southern region experiencing more rain. Average monthly rainfall analysis shows a general increase in rainfall as the year progressed from January to December. February and March are the driest months while the month of October is the wettest month. Last four months of the year from September through to December, the average rainfall is significantly higher than the rest of the months except in the month of May. Moreover, in general south of Maldives receives more rainfall than the north of Maldives. Southern atolls receive on average 2280 mm of rain per year while the northern atolls receive on average 1790 mm of rain per year. *Figure 3* shows the rainfall distribution by month from the three main weather stations in Maldives.

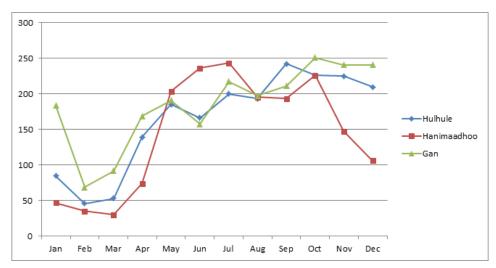


Figure 3: Rainfall distribution over Maldives (Source: Maldives Meteorological Service, Data since 2000)

#### 2.3.2 WIND

The winds that occur across Maldives are mostly determined by the monsoon seasons. The two monsoons are considered mild given that Maldives is located close to the equator. As a result, strong winds and gales are infrequent although storms and line squalls can occur, usually in the period May to July. During stormy conditions gusts of up to 60 knots have been recorded at Male'.

Wind speed is usually higher in the central region of Maldives during both monsoons, with a maximum wind speed recorded at 18 ms-1 for the period 1975 to 2001. Mean wind speed is highest during the months May and October in the central region. Wind analysis indicated that the monsoon was considerably weaker in the south. During the peak months of the SW monsoon, southern regions have a weak wind blowing from the south and south-eastern sectors.

Winds recorded at the National Meteorological Center in Hulhule' indicate that heavy windy conditions occurred during south-west monsoons (Figure 4).

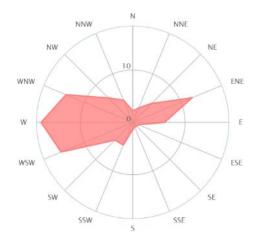
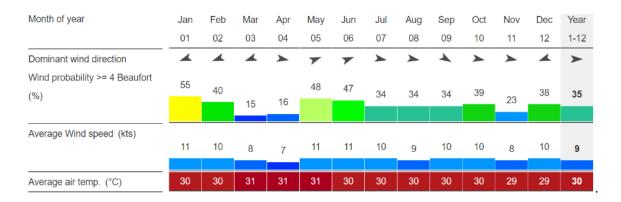


Figure 4: Windrose Diagram based on Data from Hulhule' (data from 2002 to 2017)

Wind gusts of 35 mph to 45 mph were occasionally recorded when effects of cyclones from Arabian Sea were felt in the country. Direction of wind changes predominantly from north-east in the northeast monsoon to west and south-west in the southwest monsoon and variable direction of wind are experienced in the monsoon transition periods (Table 3).

Table 3: Summary of general wind conditions in Malé region



#### 2.3.3 TEMPERATURE

The temperature of Maldives varies little throughout the year with a mean daily maximum temperature of about 32°C and mean low of 26°C and are rarely below 25°C or above 33°C. The highest temperature ever recorded in the Maldives was 36.8°C, recorded on 19 May 1991 at Kadhdhoo Meteorological Office. Likewise, the minimum temperature ever recorded in the Maldives was 17.2°C, recorded at Hulhule' on 11th April 1978. The highest recorded temperature

for Male' was 34.1°C on 16th and 28th of April 1973. The hottest month of the year is usually April reaching a peak around 24 April. The figure below (*Figure* 5) shows the maximum and minimum average temperature pattern across the three weather stations in Maldives, Hulhule' in central, Hanimaadhoo in north and Gan in South.

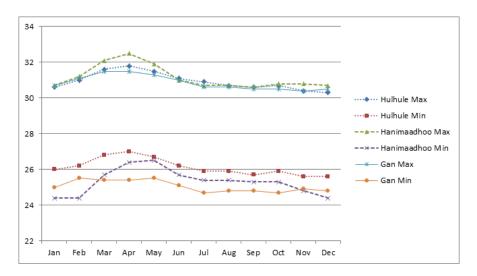


Figure 5: Average maximum and minimum temperature by month (source: Maldives Meteorological Service, Data since 2000)

#### 2.4 HYDROGRAPHY

#### 2.4.1 TIDES

Tides affect wave conditions, wave-generated and other reef-top currents. Tide levels are believed to be significant in controlling the amount of wave energy reaching an island, as no wave energy crosses the edge of the reef at low tide under normal conditions. In the Maldives where the tidal range is small (1m), tides may have significant influence on the formation, development, and sediment movement process around the island. Tides also may play an important role in lagoon flushing, water circulation within the reef and water residence time within an enclosed reef highly depends on tidal fluctuations.

Semidiurnal tides are experienced in the Maldives that are two high tides and two low tides a day. The tide varies slightly from place to place, depending on the location and on the shape and depth of the basin, channels and reefs and also time of the year.

The following *Figure 7* shows the astronomical tidal variation recorded in the country with respect to the mean sea level. Astronomical tides are related to the motion of the earth-moon-sun system, and have a range of periodicities. The highest astronomical tide was recorded as 0.64 cm above the mean sea level and the lowest astronomical tide was recorded as 0.56 below the mean sea level. Tidal variation of 1.2m from lowest to the highest tide levels were recorded in the country.

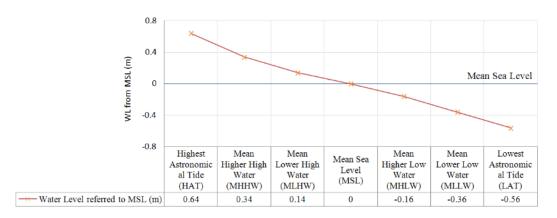


Figure 7: Astronomical tidal variation in the Maldives

#### 2.4.2 CURRENTS

Studies on current flow within a reef flat in Malé Atoll suggests that wave over wash and tides generate currents across the reef platforms, which are also capable of transporting sediments. However, available information suggests that tidal currents are not strong due to the small tidal range.

Generally current flow through the Maldives is driven by the dominating two-monsoon season winds. Westwardly flowing currents are dominated from January to March and eastwardly from May to November. The change in current flow pattern occurs in April and December. In April, the westward currents flow are weak and eastward currents flow will slowly take place. Similarly, in December eastward currents flows are weak and westward currents will take over slowly.

#### **2.4.3 WAVES**

Wave energy is important for sediment movement and settlement, and it is also a crucial factor controlling coral growth and reef development. Waves have been attributed to the diversity and the abundance of coral and algal species. These aspects have implications for the type and perhaps the supply of sediments into the island.

Studies by Lanka Hydraulics (1988 & 1989) on Malé reef indicated that two major types of waves on Maldives coasts: waves generated by local monsoon wind and swells generated by distant storms. The local monsoon predominantly generates wind waves which are typically strongest during April-July in the south-west monsoon period. During this season, swells generated north of the equator with heights of 2-3 m with periods of 18-20 seconds have been reported in the region. Local wave periods are generally in the range 2-4 seconds and are easily distinguished from the swell waves.

Distant cyclones and low-pressure systems originating from the intense South Indian Ocean storms are reported to generate long distance swells that occasionally cause flooding in Maldives. The swell waves that reached Malé and Hulhule' in 1987, thought to have originated from a low-pressure system of the west coast of Australia, had significant wave heights in the order of 3 metres.

In addition, Maldives has recently been subject to earthquake-generated tsunami reaching heights of 4.0m on land. Historical wave data from Indian Ocean countries show that tsunamis have occurred on more than one occasion, most notable being the 1883 tsunami resulting from the volcanic explosion of Karakatoa.

Table 4: Summary of Wave Conditions in Male Region

Season	Total	Long Period	Short Period
NE - Monsoon	Predominantly from E-S.	From SW-W	Mainly E-NE.
Transition Period 1	Mainly from SE	From E-SE	Mainly from NE-SE
SW - Monsoon	From W-NW. Mainly from W. High Waves also from W	From W	Mainly from W. High waves from W
Transition Period 2	As SW monsoon	From W and WNW	From W-NW. Higher waves from W and WNW

#### 2.5 BIOLOGICAL ENVIRONMENT

#### 2.5.1 TERRESTRIAL FLORA

The tropical vegetation of Maldives differs in the inhabited and in the uninhabited islands. Inhabited islands have small groves of *coconut*, banana, papaya, drumstick and citrus trees by the homesteads, while breadfruit trees and coconut palms are grown in available patches of land. On the other hand, uninhabited islands have mostly different kinds of bushes (magū, boshi) and mangroves (*kuredi, kandū*) along the waterline as well as some coconut trees.

Despite the poor and infertile soils, and lack of different habitats, the Maldives has a relatively diverse vegetation cover. The plant communities in the islands grow as per the physiographic morphology of the Islands. According to the Fifth National Report to the United Nations Convention on Biological Diversity, the flora of the country consists of 583 vascular plants of which 323 (55%) are cultivated plant species, while 260 are native and naturalized plants. Of the 260 native or naturalized plant species, fewer than 100 are truly indigenous.

Each physiographic zone in an Island provides a relatively uniform environment with its own associated plant community. As a result of the harsh environmental of the foreshore conditions, this zone supports no vegetation except occasional creeping sand-binders such as Ipomoea littoralis and I. biloba along with a few individuals of Launaea pinnatifida and Portulaca alata in the upper portion. Due to the extension inland that beach crests form it provides a suitable environment for strand plant communities including a distinct association of trees and shrubs and a few sandbinding creepers and herbaceous plants. These strand plant communities include: the Scaevola taccada scrub community (the most common scrub community found on beach crests of both northern and southern islands of the Maldives), \ the PESMPhis acidula scrub community, which is commonly found on elevated reef rock, coral conglomerate beach rock or hard pan coral in open sites at or above the high tide level and can also be seen growing in association with a similar looking plant, Suriana maritima; the Tournefortia argentea community is found as a dominant strand community of the beach crest particularly in drier places in some of the northern islands. It is sometimes associated with Pandanustectorius and Scaevola taccada, the Guettarda speciosa community is normally found only on highly elevated beach crests and is characterized by the presence of other species such as Scaevola taccada, Pandanus tectorius and a scattering of Pisonia grandis and Cordia subcordata trees. The microclimate of the inner islands, protected by the beach-crest communities, supports the growth of a number of trees and shrubs, which occur either in pure stands or as a mixed forest. In many islands coconut grows abundantly in the areas immediately adjacent to beach crest vegetation and in moist areas the shelter provided by a complete coconut tree canopy supports the growth of understory tree species such as *Morinda citrifolia* and *Guettarda speciosa*. In some places, *Pandanus odoratissimus*, *Calophyllum inophyllum* and *Hibiscus tiliaceus* are also found in low numbers within coconut groves. In moist areas small pure stands of *Hernandia nymphaeifolia*, *Cordia subcordata* and *Barringtonia asiatica* are present.

#### 2.5.2 WETLAND ECOSYSTEMS

There are at least 75 islands with wetland or mangroves in the Maldives. The wetland or mangrove areas cover a total area of approximately 8.01 km<sup>2</sup> according to a survey conducted by the Ministry of Planning and National Development in 2007. Wetland areas in the Maldives are protected and thus no development activities are allowed in close proximity to these areas on inhabited islands, except for eco-tourism-based activities.

#### 2.5.3 FAUNAL DIVERSITY

The islands of the Maldives are not known for their abundant wildlife and demonstrate a rather small proportion of the representatives in comparison to the rich terrestrial faunal diversity of the region. Maldivian reptilian fauna including: gecko (Hemidactylus spp) commonly seen throughout the country; agamid lizard including the common garden lizard or blood sucker Calotes versicolar; the snake skink, Riopa albopunktata; and two species of snakes including the common wolf snake Lycodon aulicus, and Typhlops braminus. One species of frog is known, the short-headed Rana breviceps, and a larger toad, Bufo melanostictus has also been found. Among the reptiles of the Maldives, the Maldivian Black Turtle (*Melanochelys trijuga thermalis*) is a species of turtle listed on the International Union for Conservation of Nature (IUCN) Red List as 'near threatened'. The Maldivian black turtle is currently found in only three islands which are protected: Kaashidhoo (Kaafu Atoll in Zone III), Muli (Meemu Atoll in Zone IV) and Kunburudhoo (Haa Dhaalu Atoll). Maldives has also been noted to be particularly rich in spider species. Some 130 insect species including scorpions, centipedes, rhinoceros beetles and paper wasps were identified during scientific investigations across the Islands. The only native mammals endemic to the country are the two subspecies of fruit bats, Pteropus giganteus ariel and Pteropus hypomelanus maris. The latter is very rare and has been recorded only once in the Maldives, in Addu Atoll (Holmes et al, 1994). Other mammals, all likely to have been introduced, are the house mouse, black rat, Indian house shrew and cats (Webb, 1988). In the homestead, the domesticated animals reared are chickens and goats.

Over 167 bird species have been recorded in the Maldives including seabirds, shorebirds and terrestrial birds, a majority include breeding residents, southern winter visitors (shearwaters and storm-petrels), and northern winter visitors (mostly waders, raptors, passerines, as well as some terns). For some of the latter, the Maldives lies at the southern end of the major Indus-Valley -West Indian flyway. A few are introductions and imported as pets. Very few bird species reside in the country, most of which are seabirds. Terrestrial birds are very minimal compared to other tropical islands and most are likely to be introduced. At least 40 to 50 species of seabirds are seen in the Maldivian waters, of which only 13-15 are known to nest and breed in the country. Some of them are terns including Sterna sumatrana, S. albifrons, S. anaethetus, S. dauglli, S. bergi, S. bengalensis, and S. fuscata, S. saundersi; others include two species of noddies, Anous stolidus and A. tenuirostris, as well as the white tern Gygis alba monte which is known to breed only in Addu Atoll (Anderson, 1996). Others such as frigate birds, white-tailed tropic birds, boobies and some shearwaters are also known to breed in the Maldives (Shafeeg, 1993). Most of the shorebirds found are common winter visitors to the Maldives; however, there are some resident and immigrant species. Four subspecies of bird have been identified as endemic to the Maldives (MHAHE, 2002). The bird subspecies endemic to the Maldives are Maldivian pond heron (Ardeola graii phillipsi), Maldivian little heron (Butorides striatus albidulus), central Maldivian little heron (Butorides striatus didii phillipsi), and the Maldivian water hen (Amouronis phoenicurus maldivus).

#### 2.5.4 MARINE BIODIVERSITY

In contrast to the terrestrial biological diversity found in the country, marine biological diversity shows an outstanding richness, especially in the coral reefs. Indeed, the marine biodiversity of the archipelago is among the richest in the entire region, and the Maldives' has been recognized as having one of the world's most diverse marine ecosystems.

More than 250 different species of hermatypic corals exist, belonging to 41 genera from the north and 55 from the south. Over 1200 reef fish species have been recorded15 (Pernetta, 1993). As many as 5000 different shell species, 100–200 sponge species, more than 1000 species of marine crustaceans and over 100 species of echinoderms exist. A large range of different types of marine algae16 have also been documented. In addition, a variety of sharks, eels, rays, dolphins, whales and aquarium fish are commonly observed throughout the archipelago. Five species of endangered turtles, namely loggerhead turtles, green turtles, hawksbill turtles, olive ridley turtles and leatherback turtles, are also known to live in Maldivian waters (Frazier and Frazier, 1987).

A recent research study, carried out by the Marine Research Section (MRS) of the Ministry of Fisheries and Agriculture, has documented economically important fish species in the Maldives. Some 900 species have been identified, nearly 300 of which were completely new records for the Maldives, and 7 of which had never before been recorded anywhere in the world. A second study records some 899 species of pelagic and shore fish, including 201 records new to the Maldives (Randall and Anderson 1993).

At one time, the Maldives was the only country harvesting tuna from the Indian Ocean. Tuna fishing remains particularly important to the economy of the Maldives. Eight different types of tuna and similar fish are harvested commercially from the open seas. Tuna fishing requires live bait fish which are caught in lift nets near the reef and kept alive in the flooded hull of the dhoani. Bait fish are composed of species associated with the reef, and are dependent on a thriving reef environment. Twenty different species, regularly caught and used as bait fish, may be classified into this group.

Over the last few decades many efforts have been made to ensure the protection of marine biodiversity and the most sensitive reef ecosystems and habitats of vulnerable charismatic marine species, along with wetlands and mangrove ecosystems have been demarcated as protected areas.

#### 2.5.5 CLIMATE HAZARD VULNERABILITY

The primary sources of natural hazard risks in Maldives are strong winds during monsoons or freak storms, earthquakes, island interior flooding caused by heavy rain, coastal flooding caused by high surf, storm surge, prolonged strong monsoonal wind, high astronomical tides or tsunamis, and sea level rise. Coastal flooding related flooding and wind damage can be considered as the most frequent natural hazards that occur in Maldives (Most of these risk factors (apart from earthquake, wind damage and rainfall flooding), stems from the extremely low elevation of all Maldivian islands: the average elevation is 1.5 meters above sea level. In spite of the occasional natural hazards, Maldives in general is relatively safe from high-risk natural disasters.

Spatial variations in hazards are evident across Maldives. Northern atolls are more exposed to intense storm systems, increasing the risk of wind damage in these atolls. In comparison, southern atolls experience less storm systems, but are more exposed to flooding events, probably as a

result of exposure to intense South Indian Ocean storm surges and wind-waves during south west monsoons.

#### 2.6 SOCIO-ECONOMIC PROFILE

#### 2.6.1 POPULATION

The total population enumerated in Census 2014 is 407,660. For the first time, in Census 2014, a distinction was made between the resident population and non- resident population. Hence, for analytical purposes, reference to the respective population would be made as given in the table below.

Table 5: Total population by sex

Population	Both Sexes	Male	Female
<b>Total Population</b>	407,660	230,453	177,207
Resident	402,071	227,749	174,322
Population			
Maldivian	338,434	171,962	166,472
Foreign 1_/	63,637	55,787	7,850
Non-Resident	5,589	2,704	2,885
Maldivian			

<sup>1</sup>\_/ Foreign population enumerated in Census 2014 is less than the official figures recorded in Immigration documents (Source: Census, 2014)

#### 2.6.2 POPULATION GROWTH

Of this total, the Resident Population is 402,071, which consists of 338,434 as Resident Maldivians and 63,637 foreigners. Census 2014 captured 5,589 Maldivians as living abroad, and hence following the notion of previous censuses, the 'Total Maldivian Population' in Census 2014 was 344,023. Between 2006 and 2014, the total Maldivian population had increased by 45,076, i.e., a 15% increase. Over the past two decades, however, the population growth rate continued to decline due to decreasing fertility. The total fertility rate declined from 6.4 to 2.2 children per women during this period. The rate of decline has slowed down since 2000 and remains under 2%.

#### 2.6.3 POPULATION DISTRIBUTION

Maldives is one of the world's most geographically dispersed countries and poses a wide range of development constraints. The population is distributed within the country among administrative and non-administrative islands. Administrative islands are those that have been designated for the population to reside in, with functioning state institutions in place, whereas non-administrative islands include those that have been allocated, and are being utilized for a specific purpose such as tourist resorts, industrial or agricultural islands. Census 2014 enumerated the population from 188 inhabited islands, 109 resorts and 128 industrial and other islands. *Table 6* gives a picture of Total Maldivian population distribution by these major categories.

Census Year	1985	1990	1995	2000	2006	2014
Maldivian population						
Both Sexes	180,088	213,215	244,814	270,101	298,968	344,023
Male	93,482	109,336	124,622	137,197	151,459	174,666
Female	86,606	103,879	120,192	132,904	147,509	169,357

Maldivian Population in Administrative Islands (including Male')						
Both Sexes	175,854	208,423	239,212	262,186	288,101	330,468
Male	89,319	104,622	119,070	129,407	140,914	161,518
Female	86,535	103,801	120,142	132,779	147,187	168,950
Maldivian Population in Resorts and Industrial Islands						
Both Sexes	4,234	4,792	5,602	7,915	10,867	13,555
Male	4,163	4,714	5,552	7,790	10,545	13,148
Female	71	78	50	125	322	407

Table
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#### 2.6.4 POPULATION IN MALE' AND ATOLLS

The Maldives population is vastly distributed across atolls consisting of small islands. Administratively there are 20 Atolls. Though there is no official categorization of urban and rural areas, capital Male' is widely referred to as the urban center. Census 2014 showed that 38% of the population lives in Male'. In Maldives, as in other small island states, internal migration and growth of urban areas can be attributed to inequalities between the Capital and the rest.

Male' population has increased rapidly over the past decades. Male' remained as the country's fastest growing and most populated island. The development of tourism within Male' Atoll, rapidly expanding government and private sector, and establishment of major health and educational facilities in Male', have created significant disparities between Male' and the rest of the country. In addition, developments in Male' attract migration from all parts of the country. It passed the threshold of 100,000 population in 2006, making it one of the most densely populated cities in the world. Today, with the resident population, this rate stands at 65,201 per km (population density of Male' exclude Hulhumale' and Villimale').

#### 2.6.5 POPULATION STRUCTURE

The population growth and the changing age-sex composition of the Maldives resembles that of a developing country with a relatively large proportion of people in the adult age categories (between the ages 35-60), and a relatively small proportion of people in the older age categories (above 60 years).

The population pyramid of the country is bottom heavy, meaning that there is a larger population of children and youth relative to the elderly. A youthful population opens many opportunities for the country's future development, given the right investments in the key sectors.

#### 2.6.6 STRUCTURE OF THE ECONOMY

The economy of the Maldives is based on the principal industries of tourism, fisheries and shipping. The government has played a central role in the rapid growth of fisheries and tourism sectors, which are the main foreign exchange earners of the country. With a per capita income of US\$ 19,151 in 2017, Maldives is considered an upper middle-income country. Furthermore, the island nation of Maldives has made impressive socio-economic progress as shown by improvements in socioeconomic indicators and poverty reduction.

In the early 1980s, Maldives was amongst the world's 20 poorest countries, with a population of 156,000. The total population enumerated in the 2014 Census was 407,660 and this is expected to reach 440,000 in 2020. Migration (including immigration and emigration) increases the population

by 1,952 people yearly in the Maldives. On average there are 7,105 births and 1,420 deaths per year. Rate of natural increase is approximately 1.31% per year. The population density of Maldives has changed from 528 people /km2 in 1980 to 1,506 people / km in 2019. Among the 1,190 islands in the Maldives, only 198 are inhabited. The population is scattered throughout the country, and the greatest concentration is on the capital island, Malé.

The livelihood of the Maldivian population was impacted by the COVID-19 pandemic. The first positive case of community transmission in the Greater Male' Region was reported on 15 April 2020. The tourism sector absorbed the largest portion of the economic shock from the crisis. JobCenter statistics identified the tourism industry having been the most affected in terms of employment, followed by transport, wholesale and retail trade, and education. The groups most vulnerable to the impact of immediate effects on employment were young people, employees on probation contracts, third-party contract employees of resort establishments, migrant casual workers, self-employed, freelancers, and community vendors. Furthermore, restricted operating hours and lockdown in the Greater Malé Region affected several formal and informal micro, small and medium enterprises, particularly, cafes, restaurants, taxi service providers, education services, event planners, dressmakers, suppliers and freelancers in art and entertainment areas<sup>7</sup>.

Since the pandemic, the Maldives' economy continues to recover, driven by a rebound in the tourism sector. However, public debt is at unprecedented levels, exceeding the size of Maldives' entire economy, and remains a major concern in the medium term. Restoring fiscal and debt sustainability is critical for sustainable long-term growth<sup>8</sup>. At a household level, there is a huge disparity between the capital and the atolls. According to the Household and Income Expenditure Survey (HIES)<sup>9</sup> conducted by the National Bureau of Statistics in 2019, the average monthly income per household for Male' was MVR 38,596 and the Atolls was MVR 19,633; almost half the figure for Male'. This disparity was also projected on to household expenditure. The average monthly household expenditure is MVR 28,251 per month for the country in 2019. When Male' and Atolls are compared, households in Male' spent MVR 37,013 per month which is higher than the national figure while a household in Atoll spent MVR 20,177 per month.

#### 2.6.7 LABOR MARKETS

Several aspects of Maldives' recent development pattern highlight imbalances between labor supply and demand. For example, increasing educational attainment among the younger generation and expectations of an "office job" has coincided with the rapid growth in low-skilled service jobs associated with tourism and construction. This has (or seems to have) resulted in unmet expectations of Maldivian job seekers vis-à-vis available jobs. Unrealistic expectations have been exacerbated by the rapid expansion of the civil service in the 1990s and 2000s. More recent improvements in the overall household wealth, declining poverty and the introduction of generous social pensions, have further deterred young people from entering the labor force due to the mismatch between expectations and reality.

The enclave model of tourism development – one resort, one island – has increased the imbalance between labor supply in the inhabited islands and the demand for skilled and unskilled labor in nearby island resorts. The growth of mostly luxury tourism services has outpaced the capacity of the Maldivian labor market to provide internationally competitive skills required by Employers – both technical and soft skills. The persistence of traditional gender roles and the narrow scope of occupations deemed acceptable by young women and especially their parents have limited the

<sup>7</sup> https://www.undp.org/publications/rapid-livelihood-assessment-impact-covid-19-crisis-maldives

<sup>&</sup>lt;sup>8</sup> https://thedocs.worldbank.org/en/doc/49141824db6f3a3b812bad33d5779541-0310062022/original/MDU-Oct-22-Final.pdf

<sup>&</sup>lt;sup>9</sup> https://statisticsmaldives.gov.mv/hies-2019/

female labor supply, particularly for many job openings in tourism-related services. The demand for labor has been easily met by foreign workers, who are present throughout the Maldives in great supply and accept significantly lower wages.

As a result, many Maldivian youth are discouraged workers who have effectively exited the labor force and are best characterized as "NEETs" (Not in Employment, Education or Training). About 22% of working-age Maldivian youth fall into this category. Whereas official youth unemployment rates (i.e., those actively looking and available for work) are around 12%, when NEETs are included, the share of youth failing to find work or continue education jumps to 25% for 15-24 year old's, and 37% for 15-19 year old's (the age group with the largest number of new labor force entrants due to low enrolment in higher secondary education and above)<sup>10</sup>. From the total Maldivian youth population of 67,000 potential workers in 2014, nearly 31,000 were employed. Over 10,000 were not employed, of which 6,000 had stopped looking for work. The largest number of unemployed and discouraged youth (44%) lives in Male', and the second highest number live in the south of Maldives<sup>11</sup>.

Between 2006 and 2014, the NEET rate for female youth decreased, while that for male youth increased, indicating that labor market conditions for young females have improved. This reflected a rise in the female youth employment rate from 34% to 38% among the working-age population. This increase was primarily driven by added female employment in the education sector, services and public administration.

Female youth have a higher propensity to exit the labor force compared to males: 22% of female youth are NEET, compared to 17% of male youth. It is unfortunate that Maldivian women (especially youth) are more likely to be discouraged than men; this is likely to be partly due to cultural factors related to perceptions of a "good" job, which are slower to evolve compared to attitudes on the importance of education for both girls and boys.

There is emerging concern over discouraged male youth due to their rising NEET rate, an indication of the youth who are at risk of being excluded from the social fabric and being drawn to undesirable activities. The reasons for being out of school and unemployed vary by gender. Male youth indicate that the biggest reasons for unemployment are the lack of economic opportunities in the island of residence and inability to find suitable employment that matches their respective education or training while the low percentage of female employment can often be linked to the burdens of household chores and childcare responsibilities<sup>12</sup>.

The main challenge of unemployment in Maldives is not the lack of jobs, but the limited linkages with employment opportunities and perceptions that limit job uptake by young Maldivians. The tourism and construction sectors are the largest Employers besides public administration jobs, but these sectors also register the greatest numbers of foreign labor participation. According to the government, there are significant job opportunities in the tourism and construction sectors. However, fewer Maldivians are interested in jobs within resorts or in construction.

<sup>&</sup>lt;sup>10</sup> United Nations, 'Maldives Common Country Analysis', 2020, p.12, https://maldives.un.org/sites/default/files/2020-11/3.%20Maldives%20CCA%20Final.pdf

<sup>&</sup>lt;sup>11</sup> United Nations, 'Maldives Common Country Analysis', 2020, p.12, https://maldives.un.org/sites/default/files/2020-11/3.%20Maldives%20CCA%20Final.pdf

<sup>&</sup>lt;sup>12</sup> Asian Development Bank, 'Maldives:Gender Development Assessment', 2007, https://www.adb.org/sites/default/files/institutional-document/32235/gender-and-development-assessment.pdf

Employment choices are affected by misinformed social perceptions, and unrealistic job expectations and aspirations<sup>13</sup>. Given the improved educational outcomes, educated youth only expect to undertake middle and high level managerial jobs. However, most jobs in mid- and high-levels require some level of experience besides the certificates. In addition, the limited understanding of career progression opportunities in resorts hinders the youth to accept entry level jobs like housekeeping. Tourism and hospitality are some of the sectors where employees can start at the lowest level and climb up the ladder to the top level. Moreover, parents have a strong perception about work ethic and behaviors in resorts. Therefore, they discourage their children to opt for jobs in the tourism sector. They are concerned that the youth might develop behaviors that are contrary to their cultural expectations.

From the demand side, employers indicate that there are significant challenges when hiring Maldivian youth. The absence of proper work ethics that are required, the lack of discipline and commitment, and inadequate socio-emotional skills, interpersonal, customer service and communication skills, and inadequate technical/vocational skills are cited as some of the key challenges to recruiting Maldivian employees. Jobs are available in the tourism sector. However, there are misperceptions. The combination of a lack of skills, social norms, and perceptions deter Maldivian youth, especially females from applying for the jobs. Maldivians also tend to have a high level of job turnover relative to foreign labor. Job preferences among women center around desk work in front offices, administration, and human resource management, over other jobs like housekeeping and room service in the resorts. In addition, gender-stereotyping narrows the opportunities for women compared to men.

#### 2.6.8 HOUSING

There was a total of 68,249 resident households in the census 2014, out of which 55,949 were Maldivian households and 12,300 as other households. Out of the total households 39% of households are in Male' and 60% of households are found in administrative islands of the Atolls and 1% in the non-administrative islands of the atolls.

The types of Household types are divided into 2 categories, which are housing units and collective living quarters. A nationwide total of 65,765 fall into the category of housing units. Out of this 96% are house/flats/apartments. A total of 2,484 have been recorded as collective living quarters which consist of labour quarters / staff quarters and other collective living quarters. These account for 4% of all households.

Table 7: Total Households by type of housing, by locality, 2014

Type of Household s	Republic	Male'	Atolls	Administrati ve Islands	Non- Administrative Islands
Housing Units	65,765	25,673	40,092	39,919	173
Collective living quarters	2484	1066	1418	968	450

Source: Census, 2014

<sup>&</sup>lt;sup>13</sup> Musset, et al., 'Working it out: Career Guidance and Employer Engagement', 2018, p. 28, https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=EDU/WKP(2018)11&docLanguage =En

Given that 38% of the total population resides in Male', the average household size in Male' for a Maldivian household is 5.5 and non-Maldivian households is 6.1. Household size for the whole nation for Maldivian households was at 5.4% and 8.1% for non-Maldivian households.

### 2.6.9 EDUCATION AND EDUCATION FACILITIES

Education is treated as a human right in the Maldives and the government provides free schooling for every child up until grade 12 (higher secondary). It has now extended to higher education and training with the introduction of the free degree programme, and various technical and vocational training programmes that are available at no cost to the student. The country has achieved almost universal levels of enrollment at foundational, primary and lower secondary levels. However, gender disparity and low net enrollment remains a major challenge in the upper/higher secondary level<sup>14</sup>.

At the stage of primary education (grades 1 to 7), the net enrolment rate among both female and male students was almost 100 percent in 2019. At the lower secondary education stage (grades 8 to 10), the net enrolment rate among female students and among male students was again nearly 100 percent. At the stage of higher secondary education (grades 11 and 12), the overall net enrollment rate was 37%. Among female students, the net higher secondary education enrollment rate was 56% and among male students, it was 21%. The low enrollment rates at higher secondary education level are mainly due to an inadequate number of students successfully completing secondary education to obtain places in higher secondary education, and to a limited number of schools that offer higher secondary education in the country<sup>15</sup>. The gender disparity could also be the result of preference of male students to undertake alternate educational pathways (such as TVET courses), or seek employment early on, especially in the tourism sector. However, the underlying cause for the differences in enrollment rates of male and female students in higher secondary student are not known or supported by research as of now.

As of June 2022, there are 217 schools with less than 500 students enrolled and 54 schools with more or equivalent of 500 students enrolled, spread across the country. Of these, 13.65% of the schools are located in Male'. There are 94,192 students in the Maldives, 48,171 male and 46,021 female. This includes 9,428 male students and 9,006 female students in lower secondary grades (grades 8 to 10) and 1,479 male students and 1,932 female students in higher secondary grades (grades 11 and 12). There are 9,835 teachers, and the average student teacher ratio in the country is 10:1, whereby the ratio for Male' is 20:1 and in the atolls is 60:7<sup>16</sup>.

### 2.6.10 HEALTH AND HEALTH FACILITIES

The country's overall health care delivery system is a three-tier system which includes island level primary health centers, higher level of health facilities at atoll/regional level with maternal, newborn care, and specialty care available and tertiary level facilities. Healthcare facilities are accessible in every island, regardless of the population size. There are currently four tertiary level hospitals in the country, of which 2 are government owned. These are Indira Gandhi Memorial Hospital (IGMH) located in Male' City and Addu Equatorial Hospital (AEH) located in Addu City<sup>17</sup>.

Over the years, Maldives has made significant strands in the healthcare sector. Maternal and child mortality rates have reduced impactfully. The national health insurance scheme (Aasandha) has increased accessibility of healthcare across the country. Child morbidity and illnesses are at a low,

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<sup>&</sup>lt;sup>14</sup> https://www.unicef.org/maldives/what-we-do/education#:~:text=Education%20is%20now%20seen%20as,percent%20are%20literate%20in%20English.

<sup>&</sup>lt;sup>15</sup> https://www.moe.gov.mv/assets/upload/AEDP SEP 14 June 2022 .pdf

<sup>&</sup>lt;sup>16</sup> https://www.moe.gov.mv/assets/upload/STAT\_BOOK\_2021\_2022.pdf

<sup>&</sup>lt;sup>17</sup> https://health.gov.mv/en/ministry-of-health

owing to the expansion of immunization programmes. However, there is a high percentage of expatriate healthcare professionals which has meant high turnover. The shortage of healthcare workers was evident during the COVID-19 pandemic as the country had to bring in international experts, and medical students to address the staff shortage<sup>18</sup>.

#### 2.6.11 POVERTY

The sustained growth of the country prior to the pandemic had significantly reduced poverty. The country performs well across poverty indexes relative to its regional, income and small island peers. In 2019, 3.9% of the population earned below the international poverty line (USD 6.85 per person per day). Of these, over 90% were in other islands outside of the capital Male'. It is forecasted that this number would have risen to approximately 19.8% during the COVID-19 pandemic due to the major economic shocks and increased layoffs in key industries. However, with the speedy economic rebound, the poverty rate is estimated to have returned to pre-pandemic levels by the end of 2022 <sup>19</sup>.

When looking at multidimensional poverty, the disparity between the regions is evident. A comparison of the multidimensional poverty index shows that just 10% of the population in Male' was multidimensionally poor compared to 40% in the atolls. The highest percentages were seen in K Atoll, Aa Atoll, ADh Atoll and V Atoll. The principal contributors to this disparity were years of schooling, dimensions of health and living standard.<sup>20</sup>

Maldives' development challenge is not simply just "Atolls versus Malé" – this could lead one to overlook the differences in socio-economic outcomes within the Atolls. Atolls that are more remote from Malé do not necessarily have higher monetary poverty rates. Rather, there are clusters of better-off and worse-off Atolls in each zone. Involvement in primary activities such as fisheries and agriculture or secondary activities such as manufacturing and construction is associated with a higher incidence of poverty, as is any type of self-employment. Poverty does not vary with employment in the public or formal private sector. Persons in informal employment are twice as likely to be impoverished as those in formal employment. Nationally, households that have migrated to their present location are three times less likely to be poor than households native to their location.<sup>21</sup>

Maldives economy is rebounding, mainly due to tourism. However, this economic and social progress has yet to be fully inclusive. Achieving growth and shared prosperity in the Maldives is especially vulnerable to risks stemming from lack of inclusion, especially of the youth: The increase in the working age population, with a shift toward a relatively more educated young labor force, puts enormous pressure on the absorption capacity of Maldives labor market. Indeed, youth unemployment reached 17.7% in 2021<sup>22</sup>. Unemployment is high among young men, who also increasingly are alienated from society and family. This alienation, combined with a lack of strong alternative social structures to replace the traditional family structures whose breakdown has accompanied Maldives' development trajectory, appear to be propelling young men towards greater social conservatism, participation in gangs, drug use, and violence.

Gender inequality endures for women who are slightly more likely than men to be unemployed. Very few women are employed in the fisheries sector. Despite gender-equal primary schooling,

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<sup>&</sup>lt;sup>18</sup> https://www.unicef.org/maldives/what-we-do/health

<sup>19</sup> https://www.worldbank.org/en/country/maldives/overview

<sup>&</sup>lt;sup>20</sup> https://statisticsmaldives.gov.mv/nbs/wp-content/uploads/2021/12/Multidimensional-Poverty-in-Maldives-2020 4th-june.pdf

<sup>&</sup>lt;sup>21</sup> WB Maldives Poverty Assessment (2022)

<sup>&</sup>lt;sup>22</sup> WB WDI

girls' access to tertiary and professional education is hampered by beliefs about girls' and women's mobility, and primacy of household roles over others. Within the home, women face challenges that men do not, such as high risks of domestic violence and little control over household assets. Finally, women have limited presence in politics and governance<sup>23</sup>.

Robust investments in physical and social infrastructure have contributed to poverty reduction and better living standards for the population over the years. On the other hand, heavy financing through external non-concessional sources and sovereign has increased fiscal and debt vulnerabilities. Additionally, the impact of the GST increase from 6% to 8% at the beginning of 2023 is yet to be seen.

#### 2.6.12 GENDER RELATED ISSUES

Much like most societies, deep-rooted gender inequalities exist in the Maldives. According to the *Gender-Based Violence during the COVID-19 Pandemic in the Maldives: An Analysis of Reported Cases* published by the UNFPA in 2021, 1 in 3 women experience some form of violence intensified by their gender<sup>24</sup>. Of those who experience violence, very few sought assistance from formal services. Several factors contribute to this including low trust in police and courts, and traditional norms preventing them from speaking out against violence<sup>25</sup>.

The 2016/2017 *Demographic and Health Survey* report showed that sexual violence is most often committed by former husbands or partners (27%) or by a close relative (25%). Spousal abuse shows a tendency to decline as wealth quintile increases, suggesting that there is a weak correlation between wealth and violence. The country has one of the highest divorce rates in the world; 10.97 per 1000 inhabitants per year<sup>26</sup>.

Despite the setbacks brought on by the pandemic in addressing gender related issues such as gender-based violence, sexual harassment, and sexual exploitation and abuse, several advancements can be seen. This is particularly the case in the justice system with the enforcement of new laws and amendments to strengthen existing regulations to protect the disadvantaged. The prevalent legislation is discussed in Chapter 3.

As for the education sector, there are no institutional discrimination along gender lines in access to education in the public sector<sup>27</sup>. Issues concerning gender-based violence and harassment in the education are not very significant in the context of Maldives<sup>28</sup>.

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https://documents1.worldbank.org/curated/en/099956312022224443/pdf/IDU0a2be669708cc204a170ad9e0cce8fb511448.pdf

<sup>&</sup>lt;sup>23</sup> WB Understanding gender in Maldives (2016)

<sup>&</sup>lt;sup>24</sup> https://maldives.unfpa.org/sites/default/files/pub-pdf/gbv\_analysis\_final.pdf

 $<sup>^{25}\</sup> https://www.unafei.or.jp/publications/pdf/RS\_No108/No108\_15\_IP\_Maldives\_2.pdf$ 

<sup>&</sup>lt;sup>26</sup> https://www.dhsprogram.com/pubs/pdf/FR349/FR349.pdf

 $<sup>^{\</sup>rm 27}$  https://www.adb.org/sites/default/files/institutional-document/32235/gender-and-development-assessment.pdf

## CHAPTER 3: ENVIRONMENTAL AND SOCIAL LEGISLATION, REGULATORY AND INSTITUTIONAL FRAMEWORK IN THE REPUBLIC OF MALDIVES

### 3.1 SOCIAL LEGISLATION, REGULATORY AND INSTITUTIONAL FRAMEWORK IN THE MALDIVES

Over the last decade or so, the Government of Maldives has enacted several laws and policies relating to working conditions, promotion of safety and health at work, fair treatment and non-discrimination, prevention of forced labor and child labor and protection of vulnerable workers. The key legislatures governing labor and other key social aspects relevant to the project are summarized below. Additionally, this chapter addresses international conventions adopted by the Republic of Maldives.

Act/Policy/Rule	Objectives
Constitution of the Republic of Maldives	The Constitution guarantees fundamental rights and freedoms of the citizens. Some key rights and freedoms ensured in the Constitution are related to equality (article 20), economic and social rights (article 23), labour (article 25), freedom of acquiring and imparting knowledge (article 29), special protection to children, young, elderly and disadvantaged people (article 35), right to education (article 36), right to work (article 37).
The Employment Act (2008)	This Act specifies the rights and duties of employers and employees. An employer is defined in the Act as, "any person, company, government or association of persons providing employment pursuant to an employment agreement which includes the use of services of non-independent contractors, successors, assigns of such employers, and any person to whom the rights of such employers are transferred in accordance with the law". An employee is any person seeking to work pursuant to an employment agreement. The Act prohibits forced employment, and discrimination in granting of employment, increase in remuneration, provision of training, determination of conditions and manner of employment, dismissal and resolution of other employment related issues; based on race, color, social standing, religion, political beliefs or affiliation with any political party, sex, marital status, family obligations, age or disability.
Maldives Pension Act (18/2016)	Employers must enroll their employees in the Maldives Retirement Pension Scheme, and it is obligatory on the employees to participate in the scheme, under Article 12 of the Maldives Pension Act (18/2016). Failure to do so would amount to an offense under the Act. And as such the employment agreement is required to have provisions for deductions for pension contributions by the employee. Each person who is considered a participant of the Retirement Pension Scheme of the Maldives, is required to pay a minimum of 7% of the employee's pensionable wage, and the employer must also pay a minimum of 7% of the pensionable wage to the scheme.
Health and Safety Regulation for Construction Industry	The aim and objective of this regulation is to provide a minimum standard for safety and security of the community and labour force. The regulation suggests that if the value of the project exceeds 1.5

#### (2019/R-156)

million Maldivian Rufiyaa, health and safety aspects regarding the project need to be defined and training given to the labour force. It states that safety nets need to be installed and other precautionary measures taken such that the neighbouring households are not impacted as a result of the project. It also stipulates that Personal Protective Equipment (PPE) that is relevant to the work undertaken should be worn. In this regard, it states that safety helmets, safety shoes, safety goggles, welding masks and gloves need to be used where required. The same article stipulates that it is the responsibility of the employer to provide PPE to the employee, the steps needed to be undertaken during excavation to ensure damage to nearby properties are avoided and that appropriate safety signs need to be installed on the construction site.

The regulations also have the following provisions for the supply and installation of electricity.

- 1. All electric equipment should be connected to a supply that does not exceed 230 V.
- 2. To install an earth circuit monitor on the electricity supply line.
- 3. Use of equipment that has double insulation.
- 4. Utilize earth leakage circuit breaker.
- 5. The switchboard installed to provide temporary power should be covered to prevent weather damage.

The regulation stipulates that all electrical equipment used on the site needs to be tested every 03 months to ensure functionality and safety. The regulation also highlights that where chemicals and hazardous materials are used each contractor needs to identify a plan to handle such material and the identified plan needs to be implemented in the work site. It is also suggested when handling hazardous materials, the workers need to be fully covered.

If any flammable materials are on site firefighting equipment and fire protection clothing should be available. The regulation suggests that heavy machinery like cranes should not be used in any areas where the public could access. The same article states that cranes should operate 04 meters away from any overhead electric lines. Moreover, cranes should be inspected every 12 months and the records of the inspection should be kept available in the crane.

To keep log records of any accidents that occur on site and reporting any such incident to police is also specified in the regulation. The regulation identifies non-compliance penalties.

### Prevention of Sexual Harassment Act (16/2014)

Prevention of Sexual Harassment Act (16/2014) prohibits employers and employees from subjecting those who work under them or their co-workers to any extent any type of sexual harassment. Sexual Harassment is defined in the Act as, any sexual act committed against a person without their consent. A sexual act, for the purposes of the Act, is any action, whether physical, verbal or otherwise, which according to a reasonable person, suggests a sexual intent towards the victim. Any such act is to be proven on the balance of probability. It

is the duty of the employer to take reasonable steps to ensure that the work environment is an environment that is free from sexual harassment and one in which such acts does not negatively affect the work of employees. Employers are obliged to establish policies to prevent sexual harassment and have such policies published.

Every government office including the presidents' office, independent institutions, parliament, the courts and all workplaces with more than 30 employees must have, under the Act, a Sexual Harassment Prevention Committee, with the function, among other things, of hearing complaints, investigating potential acts of harassment and take proper action against perpetrators in accordance with the Employment Act. The Committee consists of 03 members out of which one must be a female. The Committee can, depending on the gravity of the action, take disciplinary actions ranging from cautioning, suspension, demotion and dismissal. Decisions must be taken within 60 days of receiving a complaint. Decisions of the Committee can be appealed at the Employment Tribunal.

### Gender Equality Act (18/2016)

Employers are further mandated under the Gender Equality Act (18/2016), to ensure non-discrimination based on gender. The Act stipulates that all government offices and private businesses must take appropriate measures to achieve the following goals;

- Abolish gender-based discrimination, including direct and indirect discrimination.
- Abolish all systemic discrimination caused through established systems with unequal practices.
- Promote equal opportunities for men and women.
- Promote notions and ideas of gender equality to eliminate undesired preconceptions against a certain gender.

Providing equal opportunity under the Act includes, (a) eliminating weaknesses or difficulties caused by inequality between men and women, (b) reducing the negative effects of inequality between men and women, (c) facilitating the special needs of a particular gender to achieve ease of attainment of services, and (d) evaluating the degree of participation of each gender in public life and public services and take appropriate steps to balance such participation.

Public and private sector employers are further mandated under the Act to;

- a) Provide equal opportunity to men and women in the employment, training and advancement of position.
- b) Provide equal wages to men and women who perform the same responsibilities at the same place of employment.
- c) Men and women at the same place of employment with work adequately equal in value and weight shall be given equal wages, overtime compensation, benefits and allowances.
- d) Employment opportunities shall not be offered or advertised to restrict a particular gender, except in

- circumstances where the work is required to be undertaken by a particular gender.
- e) Announcements and advertisements for work that is likely to attract more men than women must be designed to invite and not to exclude women.
- f) Take all possible steps to eliminate obstructions to employment of women and to create conducive work environments for women.
- g) Establish a complaints mechanism.

### Regulation on Employment of Expatriates in Maldives (2011/R-22)

Under the Regulation on Employment of Expatriates in Maldives (2011/R-22), the government issues a specific number of "Quotas" for companies, upon request in order to employ expatriates. No foreigner is allowed to work in the Maldives without a valid work permit and a work visa. Employers are required to treat their foreign employees in accordance with the Employment Act and other applicable law. They are responsible for paying any fees related to the work permit or visa accordingly and of returning the worker to their home country once the work permit expires, or if for any reason the government decides that the worker should leave the country. Employers are also required to, upon the death of a worker, to return the body to their family in their home country.

The Regulation also requires foreign migrant workers to obtain employment approval as per applicable law and deposit a security deposit with the relevant government agency. This deposit is to be used by the government for costs incurred to remedy an employers' default of their responsibilities under relevant Regulation on Employment of Expatriates in Maldives (2011/R-22), or as payment for any unpaid fees related to work permit or work visa, or for travel expenses of the worker, where government decides to deport such worker. Article 62 of the Employment Act gives the minister with the relevant government mandate to issue regulations related to the employment of foreigners.

### Decentralization Act (7/2010)

The Decentralization Act governs the powers and responsibilities of the local authorities empowered to carry out certain functions as set out in the Act. The Act lists the public services that are to be provided by the local government sub-divisions to the people, the composition of the city, atoll and island councils and the responsibility of the councils to formulate and carry out plans for development of its constituencies in an equitable manner. The Act broadly addresses the financial management of local councils, specifically relating to revenues, allocation of funds, financial grants, borrowing and management of accounts.

### Children's Rights Protection Act (19/2019)

The Act outlines an extensive set of rights for children in the Maldives, including prohibition of child marriage, setting the age of criminal responsibility to 15 and prohibiting death penalty for offenses committed as a minor. The Act also articulates responsibilities of parents and formulates the State's responsibilities to ensure child protection in the Maldives, including through principles of decentralization, prevention and deterrence. It identifies vulnerable groups of children and provides frameworks to ensure their protection while criminalizing certain acts such as grooming and failure to report

	instances of harm to a child.
Juvenile Justice Act (18/2019)	The Juvenile Justice Act addresses areas concerning criminal and penal law, elimination of child labor and the protection of children and young persons.
Education Act (24/2020)	The Act establishes the legal framework required to ensure that the right to education enshrined in the Constitution of the Republic of Maldives is provided to its full extent, it determines the fundamental pillars of the Maldivian education system, establishes the rights of pupils and educators in relation to education, establishes the responsibilities of the State, parents and educators, and establishes various other general principles with regard to providing education in the Maldives.
Right to Information Act (1/2014)	The Act guarantees every citizen's right to access information as a fundamental human right. It determines the principles by which the scope of the right to information in the Maldives is defined; and the principles by which providing the right to access information produced, held or maintained by a State Institute is granted to any member of the general public, in order that the matters of the State are conducted with transparency and accountability.

### 3.2 ENVIRONMENTAL LEGISLATION, REGULATORY AND INSTITUTIONAL FRAMEWORK IN THE MALDIVES

The Ministry of Environment, Climate Change and Technology holds the mandate for protection and preservation of the environment. The Environmental Protection Agency (EPA) established under the Ministry, is responsible for implementation and enforcement of all laws and regulations relevant for environment protection.

The GoM has a number of environmental policies, regulations and standards of specific relevance to environmental protection. The main legal instrument pertaining to environmental protection is the Environmental Protection and Preservation Act (Law No. 4/93) of the Maldives, passed in April 1993. This Act provides the Ministry of Environment, Climate Change and Technology with wide statutory powers pertaining to environmental regulation and enforcement. This umbrella law focuses on issues such as environmental impact assessment, protected areas management and pollution prevention. In addition, the GoM also enforces the Environmental Impact Assessment Regulations, which came into force in May 2007, as per the statutory requirements of the EPPA. The EIA Regulations have been the basis for Environmental Impact Assessment in the Maldives and since its advent it has helped to improve the quality of EIAs undertaken in the country. All solid waste management projects have been categorized as types of projects that will require the preparation and subsequent environmental clearance from the EPA Maldives has a sound track record of implementing the Environmental Impact Assessment process. The technical capacity of the EPA is reasonably good in terms of ensuring the adequacy of EIAs and their implementation.

The Project will be required to comply with the national environmental legislation, in particular that relating to protected areas, EIA for all civil works, compensation for loss of land and the cutting down of trees. The key aspects of the policies, legislations and regulations are described in the following sections.

### THE ENVIRONMENT PROTECTION AND PRESERVATION ACT (4/93)

The basic environment law, Law No.4/93 Environment Protection and Preservation Act (EPPA) was enacted in April 1993 as an umbrella law to protect and preserve the environment of the country. The main elements of the EPPA are as follows:

Introduction: The natural environment and its resources are a national heritage that needs to be protected and preserved for the benefit of future generations. The protection and preservation of the country's land and water resources, flora and fauna as well as the beaches, reefs and lagoons and all-natural habitats are important for the sustainable development of the country.

Environmental Guidance: The concerned government authority shall provide the necessary guidelines and advice on environmental protection in accordance with the prevailing conditions and needs of the country. All concerned parties shall take due considerations of the guidelines provided by the government authorities.

Environmental Protection and Conservation: The Ministry of Environment, Climate Change and Technology shall be responsible for formulating policies, as well as rules and regulations regarding the environment in areas that do not already have a designated government authority already carrying out such functions.

Protected Areas and Natural Reserves: The Ministry of Environment, Climate Change and Technology shall be responsible for identifying protected areas and natural reserves and for drawing up the necessary rules and regulations for their protection and preservation. Anyone wishing to establish any such area as mentioned in (a) of this clause, as a protected area or a reserve shall register as such at the Ministry and abide by the rules and regulations laid by the Ministry.

Environmental Impact Assessment (EIA): An impact assessment study shall be submitted to the Ministry of Environment, Climate Change and Technology before implementing any development project that may have a potential impact on the environment. The Ministry of Environment, Climate Change and Technology shall formulate the guidelines for EIA and shall determine the projects that need such assessment as mentioned in paragraph (a) of this clause.

The Termination of Projects: The Ministry of Environment, Climate Change and Technology has the authority to terminate any project that has any undesirable impact on the environment. A project so terminated shall not receive any compensation.

Waste Disposal, Oil and Poisonous Substances: Any type of waste, oil, poisonous gasses or any substance that may have harmful effect on the environment shall not be disposed within the territory of the Maldives. In cases where the disposal of the substance stated in paragraph (a) of this clause becomes absolutely necessary, they shall be disposed of only within the areas designated for the purpose by the government. If such waster is to be incinerated, appropriate precautions shall be taken to avoid any harm to the health of the population.

Hazardous / Toxic or Nuclear Wastes: Hazardous / Toxic or Nuclear Wastes that are harmful to human health and the environment shall not be disposed of anywhere within the territory of the country. Permission shall be obtained from the relevant government authority at least 3 months in advance for any trans-boundary movement of such wastes through the territory of the Maldives.

The Penalty for Breaking the Law and Damaging the Environment: The penalty for minor offenses in breach of this law or any regulations made under this law shall be a fine ranging between MVR 5.00 (five Rufiyaa) and MVR 500.00 (five hundred Rufiyaa) depending on the actual gravity of the offense. The fine shall be levied by the Ministry of Environment, Climate Change and Technology or by any other government authority designated by the Ministry. Except for those offenses that are stated in (a) of this clause, all major offenses, under this law shall carry a fine of not more than Rf 100,000,000.00 (one hundred million Rufiyaa) depending on the seriousness of the offense. The fine shall be levied by the Ministry of Environment, Climate Change and Technology.

Compensation: The Government of Maldives reserves the right to claim compensation for all the damages that are caused by the activities that are detrimental to the environment. This includes all the activities that are mentioned in clause 7 of this law as well as those activities that take place outside the projects that are identified here as environmentally damaging.

Definitions: Under this Law: (a) The "environment" means all the living and nonliving things that surround and affect the lives of human beings; and (b) A "project" is any activity that is carried out with the purpose of achieving a certain social or economic objective.

### THE REGULATION ON ENVIRONMENTAL LIABILITIES (REGULATION NO. 2011/R-9)

The objective of this regulation is to prevent actions violating the Environmental Protection and Preservation Act 4/93 and to ensure compensations for all the damages that are caused by activities that are detrimental to the environment.

The regulation sets mechanisms and standards for different types of environmental liabilities and equal standards that shall be followed by the implementing agency while implementing the regulation.

According to this regulation the Government of Maldives reserves the right to claim compensation for all the activities which have breached the Environmental Protection and Preservation Act 4/93.

### ENVIRONMENTAL IMPACT ASSESSMENT REGULATION (NO. 2012/R-27) AND AMENDMENTS

EPA stipulates under Article 5, any development work or project that has a significant impact on the environment should have an Environmental Impact Assessment consented to by the Ministry of Environment, Climate Change and Technology.

The EIA regulation defines the procedure to follow when attaining environmental approval for development projects. 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 as per the mitigation plan provided by EPA (Schedule U).

All the other projects need to go through a screening process identified in article 08 of the regulation. Following screening, EPA decides the level of assessment required. In this regard, an EIA may be required, EMP may be required, a project may be undertaken with a mitigation plan or a project can be undertaken with no assessment.

For projects that require EIA the regulation details the scoping process that needs to be followed in article 11. Following scoping a terms of reference will be issued which will guide the level of assessment required.

EIA can be prepared by a consultant who is registered in EPA under article 16 of the regulation. The consultant registration process is administered by a consultant registration board. The functions and composition of this board is detailed in article 17 of the regulations.

Once the EIA report is submitted, EPA sends the review to two independent reviewers as per article 13 of the Regulation. The review period depends on the amount paid by the proponent for review. In this regard the following payment structure is specified in the regulations (article 07 and article 13):

- 1. For a review fee of MVR 5000 15 days for review
- 2. For a review fee of MVR 10,000 10, days for review
- 3. For a review fee of MVR 20,000 05 days for review

Following the review, EPA informs the proponent if any additional information is required, or approval can be given for the project, or the EIA report needs to be rejected or the project needs to be rejected due to irreversible damage to the environment.

Article 15 lists procedures for appealing the decision. The appeal decision will be made by the Minister of Environment, Climate Change and Technology. Article 20 lists fining mechanism for non-compliance.

### REGULATION GOVERNING RECLAMATION AND DREDGING OF ISLANDS AND LAGOONS OF MALDIVES 2013/R-15

The Article 22 of the Constitution states that the State shall undertake and promote desire based economic and social goals through ecologically balanced sustainable development and shall take measures necessary to foster conservation, prevention of pollution, the extinction of any species and ecological degradation from any such goals and this regulation is constituted for the purpose of pursuing this undertaking. It determines the guidelines that would minimize the damage caused to the environment due to reclamation and dredging pursuant to Article 3 of Environment Protection and Preservation Act. This regulation is enforced by the Environmental Protection Agency.

The aim of this regulation is to minimize environmental damage associated with dredging and reclamation activities. All dredging and reclamation activities require EPA approval through this regulation. The regulation identifies the following conditions:

- Beach replenishment is restricted to a maximum extent of 10 m from the registered shoreline.
- The following restrictions apply to dredging:
  - > 500 m from the ocean side reef edge
  - > 50 m from the shoreline
  - > An environmentally sensitive site
- Reclamation cannot take place within 200m of an environmentally sensitive or protected area.
- Reclamation should not exceed 30% of the house reef.

### STONE, CORAL AND SAND MINING REGULA TION

This regulation addresses sand mining from islands and bird nesting sand bars. Sand and aggregate mining from beaches of any island whether inhabited or uninhabited is banned for protection of the islands. Permissions for sand and aggregate mining from other areas shall be obtained from the relevant authorities.

There is another similar regulation named "Regulation on Coral Mining (1990), which is only applicable to coral mining from the 'house reef' of islands and the atoll rim reefs.

### WASTE MANAGEMENT REGULATION (NO. 2013/R-58)

The Waste Management Regulation of the Maldives was enacted based on Article 22 of the Constitution of the Republic of Maldives and under powers vested in the Ministry of Environment, Climate Change and Technology under the Article 3 of the Environmental Preservation Act 4/93 in relation to Article 7 and 8 of the same Act. The regulation is implemented by the Environmental Protection Agency. This regulation focus on following five areas:

- 1. Waste management standards: Defines standards for waste collection, transfer, treatment, storage, waste site management, landfills and managing hazardous waste;
- 2. Waste management permits: Defines approval procedures for waste sites;
- 3. Waste transfer: Standards and permits required for waste transport on land and sea, including transboundary movements;
- 4. Reporting requirements: Defines reporting and monitoring requirements and procedures; and
- 5. Enforcement: Defines procedures to implement WMR and penalties for non-compliance.

### DEWATERING REGULATION (213/R-1697)

This regulation is constituted for the purpose of ensuring that the drainage of water in the islands of the Maldives in the process of dewatering and subsequent dumping of discharge water into the soil or to the sea, is conducted with minimal impact to the environment. Given water is the source of life and one of the essential elements forming the environment, the purpose of this regulation is to avoid contamination of the groundwater table, to mitigate the damage caused to the water table; and to protect the habitat, the environment, the public and all living organisms from the impact of dewatering.

This regulation is enacted from the rights vested on the Ministry from article 3 of Act 4/93(Maldives Environment Protection and Preservation Act). This regulation is enforced by the Environment Protection Agency on behalf of the Ministry.

In addition to the institutions of the state, it is a responsibility of every individual to protect the groundwater table of the islands of the Maldives and to manage it in a sustainable manner. The process of dewatering for any industrial purpose shall be conducted on any island pursuant to the guidelines prescribed in this regulation and after having obtained permission in writing from the implementing agency or from their delegate.

#### REGULATION ON PROTECTION OF OLD TREES

The regulation is made under article 04 of EPPA. Article 03 of the regulation lists four categories of trees that can be protected. This includes:

- All trees above 50 years of age
- Unique and threatened species in Maldives in general or in a specific island
- Trees of environmental significance
- Trees of cultural significance

As per article 04 of the regulation, all protected trees need to be advertised by the Ministry. The list needs to be updated every 05 years. Article 06 of the regulation states that the boundary of a protected tree is within a radius of 02 meter of the tree. Article 05 suggests that trees that are located within a private boundary are exempted from this regulation. Moreover, those trees that are grown for the purpose of agriculture are exempted from this regulation. The regulation also defines responsible parties for maintenance of such trees and also activities like trimming of old branches that can be undertaken for maintenance purposes.

### BY-LAW - CUTTING DOWN, UPROOTING, DIGGING OUT AND EXPORT OF TREES AND PALMS FROM ONE ISLAND TO ANOTHER

This regulation is enacted under Act 4/93 (Environment Protection and Preservation Act). As such, this regulation is a compilation of guidelines to be adhered towards cutting-down, uprooting, removing and transfer between islands, of palms and trees in the Maldives.

Palms and trees may only be cut, uprooted, removed or transferred between islands out of mere necessity. No one shall be exempted from this regulation except the parties / exemptions mentioned in Article 4 of this regulation.

Article 8 of the regulation requires permission to be obtained if more than ten coconut palms that have grown to height of 15ft or if more than 10 plants that have grown to a height of 08ft are to be removed.

### REGULATION ON MIGRATORY BIRDS (2014/R-126)

The aim of the regulation is to ensure that the migratory birds and their habitat are protected from damage and destruction. Article 06 of the regulation stipulates that it is prohibited to catch, use as pets, trade of birds or any parts and harm the birds or their nests in any way. Article 07 of the regulation lists all birds, except migratory birds found in the Maldives. The regulation also stipulates exemptions. In this regard, as per article 08, research purpose and spread of diseases are identified as exemptions.

### PROTECTED AREA REGULATION (2018/R-78)

The overall aim of the regulation is to specify mechanisms to protect, conserve and manage areas designated as protected areas under article 04 of EPPA. Article 05 of the regulation stipulates that for each of the designated protected areas, the following information needs to be announced:

- The name of the protected area
- The boundaries of the protected area with GPS coordinates
- Zonation plan of the area
- Activities that can and cannot be undertaken at a particular location
- The designated level of protection
- The reason for protection and the special significance

The regulation identifies 07 levels that could be designated to protected areas (article 06):

- Areas of International Significance
- Strict Nature Reserves
- Wilderness Area
- National Park
- National Monument
- Habitat Species Management Area
- Protected Area with Sustainable Use

A list of all protected areas needs to be maintained by EPA, and the list needs to be gazetted as per article 7. With an agreement in place, as per article 09 management of protected areas can be handed over to any public or private party. As per article 12, each protected area should have a management plan in place for the management of the area.

### 3.3 INTERNATIONAL TREATIES

The Maldives have ratified a number of International Labour Organization Conventions on 04th January 2013. These are given below:

1. Forced Labour Convention, 1930 (No. 29): This fundamental convention prohibits all forms of forced or compulsory labour. Exceptions are provided for work required by compulsory military

service, normal civic obligations, as a consequence of a conviction in a court of law, in cases of emergency, and for minor communal services performed by the members of a community in the direct interest of the community. The convention also requires that the illegal extraction of forced or compulsory labour be punishable as a penal offence, and that ratifying states ensure that the relevant penalties imposed by law are adequate and strictly enforced.

- 2. Freedom of Association and Protection of the Right to Organize Convention, 1948 (No. 87): This fundamental convention sets forth the right for workers and employers to establish and join organizations of their own choosing without previous authorization. Workers' and employers' organizations shall organize freely and not be liable to be dissolved or suspended by administrative authority, and they shall have the right to establish and join federations and confederations, which may in turn affiliate with international organizations of workers and employers.
- 3. Right to Organize and Collective Bargaining Convention, 1949 (No. 98): This fundamental convention provides that workers shall enjoy adequate protection against acts of anti-union discrimination. Workers' and employers' organizations shall enjoy adequate protection.
- 4. Equal Remuneration Convention, 1951 (No. 100): This fundamental convention requires ratifying countries to ensure the application of the principle of equal remuneration for men and women workers for work of equal value. The term 'remuneration' is broadly defined to include the ordinary, basic or minimum wage or salary and any additional emoluments payable directly or indirectly, whether in cash or in kind, by the employer to the worker and arising out of the worker's employment.
- 5. Abolition of Forced Labour Convention, 1957 (No. 105): This fundamental convention prohibits forced or compulsory labour as a means of political coercion or education or as a punishment for holding or expressing political views or views ideologically opposed to the established political, social or economic system; as a method of mobilizing and using labour for purposes of economic development; as a means of labour discipline; as a punishment for having participated in strikes; and as a means of racial, social, national or religious discrimination.
- 6. Discrimination (Employment and Occupation) Convention, 1958 (No. 111): This fundamental convention defines discrimination as any distinction, exclusion or preference made on the basis of race, colour, sex, religion, political opinion, national extraction or social origin, which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation. It requires ratifying states to declare and pursue a national policy designed to promote, by methods appropriate to national conditions and practice, equality of opportunity and treatment in respect of employment and occupation, with a view to eliminating any discrimination in these fields. The Convention covers discrimination in relation to access to education and vocational training, access to employment and to particular occupations, as well as terms and conditions of employment.
- 7. Minimum Age Convention, 1973 (No. 138): This fundamental Convention sets the general minimum age for admission to employment or work at 15 years (13 for light work) and the minimum age for hazardous work at 18 (16 under certain strict conditions). It provides for the possibility of initially setting the general minimum age at 14 (12 for light work) where the economy and educational facilities are insufficiently developed
- 8. Worst Forms of Child Labour Convention, 1999 (No. 182): This fundamental Convention defines a "child" as a person under 18 years of age. It requires ratifying states to eliminate the worst forms of child labour, including: all forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom and forced or compulsory labour, including forced or compulsory recruitment of children for use in armed conflict; child prostitution and pornography; using children for illicit activities, in particular for the production and trafficking of drugs; and work which is likely to harm the health, safety or morals of children. The Convention requires ratifying states to provide the necessary and appropriate direct assistance for the removal of children from the worst forms of child labour and for their rehabilitation and social integration. It also requires states to ensure access to free basic

education and, wherever possible and appropriate, vocational training for children removed from the worst forms of child labour.

Some other Conventions that the Maldives is party to are given below<sup>29</sup>.

- 1. International Convention on the Elimination of All Forms of Racial Discrimination (1994)
- 2. Convention on the Rights of the Child (1991)
- 3. International Covenant on Economic, Social and Cultural Rights (2006)
- 4. Convention on the Rights of the Child (1990)
- 5. International Convention on the Elimination of All Forms of Racial Discrimination (1984)
- 6. Convention on the Rights of Persons with Disabilities (2007)
- 7. Convention on the Elimination of All Forms of Discrimination Against Women (1993)
- 8. Optional Protocol to the Convention on the Rights of the Child on the sale of children, child prostitution and child pornography (2002)
- 9. Convention Against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment (2004)
- 10. Optional Protocol to the Convention on the Rights of the Child on the involvement of children in armed conflict (2004)
- 11. Optional Protocol to the International Covenant on Civil and Political Rights (OPICCPR) (2006)
- 12. International Covenant on Economic, Social and Cultural Rights (ICESCR) (2006)
- 13. Optional Protocol to the Convention on the Elimination of All Forms of Discrimination Against Women (2006)
- 14. Optional Protocol to the Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (2006)
- 15. The Convention on the Rights of Persons with Disability (CRPD) (2010)

<sup>&</sup>lt;sup>29</sup> https://www.gov.mv/en/files/treaties-list-december-2020.pdf

# CHAPTER 4: OVERVIEW OF THE WORLD BANK'S ENVIRONMENTAL AND SOCIAL FRAMEWORK, RELEVANT ENVIRONMENTAL AND SOCIAL STANDARDS

### 4.1 ENVIRONMENTAL AND SOCIAL FRAMEWORK

ESMF is an instrument that provides the framework to follow in examining and assessing the risks and impacts when a project consists of a program and/or series of sub-projects, and the risks and impacts cannot be determined until the program or sub-project details have been identified. The ESMF sets out the principles, rules, guidelines and procedures to assess the environmental and social risks and impacts. It contains measures and plans to reduce, mitigate and/or offset adverse risks and impacts, provisions for estimating and budgeting the costs of such measures, and information on the agency or agencies responsible for addressing project risks and impacts, including on its capacity to manage environmental and social risks and impacts. It includes adequate information on the areas in which sub-projects are expected to be sited, including any potential environmental and social vulnerabilities of the area; and on the potential impacts that may occur and mitigation measures that might be expected to be used.

The World Bank's Environmental and Social Framework sets out the Bank's commitment to sustainable development, through a Bank Policy and a set of Environmental and Social Standards that are designed to support Borrowers' projects, with the aim of ending extreme poverty and promoting shared prosperity.

E&S Framework comprises of (1) Vision for Sustainable Development, which sets out the Bank's aspirations regarding environmental and social sustainability; (2) The World Bank Environmental and Social Policy for Investment Project Financing, which sets out the mandatory requirements that apply to the Bank; and (3) The Environmental and Social Standards, together with their Annexes, which set out the mandatory requirements that apply to the Borrower and projects.

The World Bank Environmental and Social Policy for Investment Project Financing sets out the requirements that the Bank must follow regarding projects it supports through Investment Project Financing. The Environmental and Social Standards set out the requirements for Borrowers relating to the identification and assessment of environmental and social risks and impacts and mitigation measures associated with projects supported by the Bank through Investment Project Financing. The E&S standards are expected to: (a) support Borrowers in achieving good international practice relating to environmental and social sustainability, (b) assist Borrowers in fulfilling their national and international environmental and social obligations; (c) enhance nondiscrimination, transparency, participation, accountability and governance; and (d) enhance the sustainable development outcomes of projects through ongoing stakeholder engagement.

There are ten Environmental and Social Standards (ESSs) that the Borrower and the project need to meet through the project life cycle:

- ESS 1: Assessment and Management of Environmental and Social Risks and Impacts;
- ESS 2: Labor and Working Conditions;
- ESS 3: Resource Efficiency and Pollution Prevention and Management;
- ESS 4: Community Health and Safety;
- ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement;
- ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources;
- ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities;
- ESS 8: Cultural Heritage;

#### ESS 9: Financial Intermediaries; and

ESS 10: Stakeholder Engagement and Information Disclosure.

Environmental and Social Standard ESS1 applies to all projects for which Bank Investment Project financing is sought. ESS1 establishes the importance of: (a) the Borrower's existing environmental and social framework in addressing the risks and impacts of the project; (b) an integrated environmental and social assessment to identify the risks and impacts of a project; (c) effective community engagement through disclosure of project-related information, consultation and effective feedback; and (d) management of environmental and social risks and impacts by the Borrower throughout the project life cycle.

The Bank requires that all environmental and social risks and impacts of the project be addressed as part of the environmental and social assessment conducted in accordance with ESS1. ESS2–10 set out the obligations of the Borrower in identifying and addressing environmental and social risks and impacts that may require particular attention. The World Bank Access to Information Policy, which reflects the Bank's commitment to transparency, accountability and good governance, applies to the entire Framework and includes the disclosure obligations that relate to the Bank's Investment Project Financing. Borrowers and projects are also required to apply the relevant requirements of the World Bank Group Environmental, Health and Safety Guidelines (EHSGs). These are technical reference documents, with general and industry specific examples of Good International Industry Practice (GIIP).

Table 8: Applicable Environmental and Social Standards to this project

Environmental and Social Standards (ESS)	Relevance
ESS 1: Assessment and Management of Environmental and Social Risks and Impacts	V
ESS 2: Labor Working Conditions	V
ESS 3: Resource Efficiency and Pollution Prevention and Management	V
ESS 4: Community Health and Safety	V
ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Х
ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	Х
ESS 7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Х
ESS 8: Cultural Heritage	Х
ESS 9: Financial Intermediaries	Х
ESS 10: Stakeholder Engagement and Information Disclosure	V

### ESS 1 - ASSESSMENT AND MANAGEMENT OF ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

ESS1 sets out the Borrower's responsibilities for assessing, managing and monitoring environmental and social risks and impacts associated with each stage of a project supported by the Bank through Investment Project Financing, in order to achieve environmental and social outcomes consistent with the Environmental and Social Standards (ESSs).

The ESSs are designed to help Borrowers to manage the risks and impacts of a project, and improve their environmental and social performance, through a risk and outcomes-based approach. The desired outcomes for the project are described in the objectives of each ESS, followed by specific requirements to help Borrowers achieve these objectives through means that are appropriate to the nature and scale of the project and proportionate to the level of environmental and social risks and impacts.

Borrowers will conduct environmental and social assessment of projects proposed for Bank financing to help ensure that projects are environmentally and socially sound and sustainable. The environmental and social assessment will be proportionate to the risks and impacts of the project. It will inform the design of the project and be used to identify mitigation measures and actions and to improve decision making.

Borrowers will manage environmental and social risks and impacts of the project throughout the project life-cycle in a systematic manner, proportionate to the nature and scale of the project and the potential risks and impacts.

The objectives of this ESS are:

- To identify, evaluate and manage the environment and social risks and impacts of the project in a manner consistent with the ESSs.
- To adopt a mitigation hierarchy approach to:
  - Anticipate and avoid risks and impacts;
  - Where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels:
  - o Once risks and impacts have been minimized or reduced, mitigate; and
  - Where significant residual impacts remain, compensate for or offset them, where technically and financially feasible.
- To adopt differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable, and they are not disadvantaged in sharing development benefits and opportunities resulting from the project.
- To utilize national environmental and social institutions, systems, laws, regulations and procedures in the assessment, development and implementation of projects, whenever appropriate.
- To promote improved environmental and social performance, in ways which recognize and enhance Borrower capacity.

ESS1 applies to all projects supported by the Bank through Investment Project Financing.

#### ESS 2 – LABOR AND WORKING CONDITIONS

ESS2 recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. Borrowers can promote sound worker-management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions. ESS2 applies to project workers including fulltime, part-time, temporary, seasonal and migrant workers.

The objectives of this ESS are:

- To promote safety and health at work.
- To promote the fair treatment, nondiscrimination and equal opportunity of project workers.
- To protect project workers, including vulnerable workers such as women, persons with disabilities, children (of working age, in accordance with this ESS) and migrant workers, contracted workers, community workers and primary supply workers, as appropriate.
- To prevent the use of all forms of forced labor and child labor.
- To support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law.
- To provide project workers with accessible means to raise workplace concerns.

The Borrower will develop and implement written labor management procedures applicable to the project. These procedures will set out the way in which project workers will be managed, in accordance with the requirements of national law and this ESS. The procedures will address the way in which this ESS will apply to different categories of project workers including direct workers, and the way in which the Borrower will require third parties to manage their workers in accordance with ESS2. The standard will apply to the direct project workers and the contracted workers in the context of this Project.

### ESS 3 – RESOURCE AND EFFICIENCY, POLLUTION PREVENTION AND MANAGEMENT

This ESS sets out the requirements to address resource efficiency and pollution prevention and management throughout the project life-cycle consistent with GIIP. Objectives of this standards are:

- To promote the sustainable use of resources, including energy, water and raw materials.
- To avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities.
- To avoid or minimize project-related emissions of short and long-lived climate pollutants.
- To avoid or minimize generation of hazardous and non-hazardous waste.
- To minimize and manage the risks and impacts associated with pesticide use.
- The applicability of this ESS will be established during the environmental and social assessment described in ESS1. The ESMF includes provisions for screening and management of such risks.

#### RESOURCE EFFICIENCY

The Borrower will implement technically and financially feasible measures for improving efficient consumption of energy, water and raw materials, as well as other resources. Such measures will integrate the principles of cleaner production into product design and production processes to conserve raw materials, energy and water, as well as other resources. Where benchmarking data are available, the Borrower will make a comparison to establish the relative level of efficiency.

### POLLUTION PREVENTION AND MANAGEMENT

The Borrower will avoid the release of pollutants or, when avoidance is not feasible, minimize and control the concentration and mass flow of their release using the performance levels and measures specified in national law or the EHSGs, whichever is most stringent. This applies to the

release of pollutants to air, water and land due to routine, non-routine, and accidental circumstances, and with the potential for local, regional, and transboundary impacts.

#### **CLIMATE ADAPTATION**

Inspired by the vision for Sustainable Development, the World Bank Group is globally committed to environmental sustainability, including stronger collective action to support climate change mitigation and adaptation, recognizing this as essential in a world of finite natural resources.

It recognizes that climate change is affecting the nature and location of projects, and that World Bank- financed projects should reduce their impact on the climate by choosing alternatives with lower carbon emissions. The World Bank works on climate change because it is a fundamental threat to development in our lifetime.

At a project level, the WB seeks to address project-level impacts on climate change and consider the impacts of climate change on the selection, siting, planning, design and implementation and decommissioning of projects. This issue is addressed as part of the environmental and social risks and impacts assessment. This aspect is mainly considered mainly within ESS1 and ESS3.

#### ESS 4 - COMMUNITY HEALTH AND SAFETY

ESS4 recognizes that project activities, equipment, and infrastructure can increase community exposure to risks and impacts. In addition, communities that are already subjected to impacts from climate change may also experience an acceleration or intensification of impacts due to project activities.

ESS4 addresses the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of Borrowers to avoid or minimize such risks and impacts, with particular attention to people who, because of their particular circumstances, may be vulnerable. The ESMP will outline impacts from the project related activities on health, safety of the project-affected communities. It is not expected that there will be significant security related risks to the communities.

### ESS 10 - STAKEHOLDER ENGAGEMENT AND INFORMATION DISCLOSURE

This ESS recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of good international practice. Effective stakeholder engagement can improve the environmental and social sustainability of projects, enhance project acceptance, and make a significant contribution to successful project design and implementation. A stakeholder engagement plan is prepared to meet the requirements of this standard.

The objectives of this standard are:

- To establish a systematic approach to stakeholder engagement that will help Borrowers identify stakeholders and build and maintain a constructive relationship with them, in particular project-affected parties
- To assess the level of stakeholder interest and support for the project and to enable stakeholders' views to be taken into account in project design and environmental and social performance.

- To promote and provide means for effective and inclusive engagement with project-affected parties throughout the project life cycle on issues that could potentially affect them.
- To ensure that appropriate project information on environmental and social risks and impacts is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner and format.
- To provide project-affected parties with accessible and inclusive means to raise issues and grievances and allow Borrowers to respond to and manage such grievances.

#### 4.2 WORLD BANK EHS GUIDELINES

The World Bank Groups Environmental, Health, and Safety (EHS) Guidelines are technical reference documents with general and industry specific examples of Good International Industry Practice (GIIP). EHS Guidelines are applied as required by their respective policies and standards. These industry sector EHS guidelines are designed to be used together with the General EHS Guidelines document, which provides guidance to users on common EHS issues potentially applicable to all industry sectors.

The EHS Guidelines contain the performance levels and measures that are generally considered to be achievable in new facilities by existing technology at reasonable costs. Application of the EHS Guidelines to existing facilities may involve the establishment of site-specific targets, with an appropriate timetable for achieving them. The applicability of the EHS Guidelines should be tailored to the hazards and risks established for each project on the basis of the results of an environmental assessment in which site-specific variables, such as host country context, assimilative capacity of the defined as the exercise of professional skill, diligence, prudence and foresight that would be reasonably expected from skilled and experienced professionals engaged in the same type of undertaking under the same or similar circumstances globally. The circumstances that skilled and experienced professionals may find when evaluating the range of pollution prevention and control techniques available to a project may include, but are not limited to, varying levels of environmental degradation and environmental assimilative capacity as well as varying levels of financial and technical feasibility. Environment, and other project factors, are taken into account.

The applicability of specific technical recommendations should be based on the professional opinion of qualified and experienced persons. When host country regulations differ from the levels and measures presented in the EHS Guidelines, projects are expected to achieve whichever is more stringent. If less stringent levels or measures than those provided in these EHS Guidelines are appropriate, in view of specific project circumstances, a full and detailed justification for any proposed alternatives is needed as part of the site-specific environmental assessment. This justification should demonstrate that the choice for any alternate performance levels is protective of human health and the environment.

The **World Bank Group General EHS Guidelines** contain information on cross-cutting environmental, health, and safety issues potentially applicable to construction and can be downloaded via the following link.

### https://www.ifc.org/wps/wcm/connect/topics\_ext\_content/ifc\_external\_corporate\_site/sustainability-at-ifc/policies-standards/ehs-quidelines

The World Bank Group ESH Guidelines for Construction Materials Extraction is also applicable to the project and used as key guidance provided to contractors on the management of environmental health and safety during construction material extraction in addition to specific

guidance provided in the ESMF. This document includes information relevant to construction materials extraction activities such as aggregates, limestone, slates, sand, gravel, clay, gypsum, feldspar, silica sands, and quartzite, as well as to the extraction of dimension stone. It addresses stand-alone projects and extraction activities supporting construction, civil works, and cement projects. Although the construction materials extraction guidelines emphasize major and complex extraction schemes, the concepts are also applicable to small operations and should be used for guidance. These guidelines can also be downloaded via the link provided above.

### 4.3 GAPS BETWEEN WORLD BANK REQUIREMENTS AND THE NATIONAL REQUIREMENTS

Based on the discussions in this chapter, several gaps can be identified between the World Bank procedure and the national requirements. In general, the World Bank requirements appear to be more stringent than the national requirements. The stricter option will always be preferred during project implementation. However, with the implementation of many new legislations and regulations there are fewer differences between local and World Bank requirements. Described below are the gap analysis for the World Bank Environment and Social Standard (ESS) relevant to the project and the subsequent national requirements.

### ESS1: ASSESSMENT AND MANAGEMENT OF ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

The equivalent national legislation is Environmental Impact Assessment Regulations (No. 2012/R-27) identified and described in chapter 3. The focus of the National regulation is very much focused on the environmental aspect when compared with the social aspect. When identifying impacts and mitigation measures as well the focus is on environmental impacts and mitigation measures rather than social impacts and mitigation measures. However, the ESS1 give equal importance to both environmental and social impacts which is even apparent in the introduction of ESS1:

"ESS1 sets out the Borrowers responsibilities for assessing, managing and monitoring, environmental and social risks and impacts associated with each of the project supported by the Bank through Invest Project Financing in order to achieve environmental and social outcomes consistent with the Environmental and Social Standards (ESS)"

Moreover, under the local regulation, the involvement of the affected public is only limited during the report preparation phase. However, the World Bank's procedures highlight the importance of public/stakeholder participation throughout the project lifecycle from site selection, project development, project implementation and monitoring/evaluation.

In addition, as one of the objectives of ESS1, it is stated:

"To avoid differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable, and they are disadvantaged in sharing development benefits and opportunities resulting from the project"

Local regulations on the other hand, do not commonly mention disadvantaged/vulnerable groups. However, despite not being specified in the Environmental Impact Assessment Regulations as identified in Chapter 3, recent amendments to the Decentralization Act requires public consultation on development activities undertaken in each island by the council. Moreover, as per this amendment, Women's Development Committees are required to be consulted on all development activities undertaken. Furthermore, the ESS specifies that the relevant environmental and social requirements need to be incorporated into relevant tender documents and contracts with the

contractors. This is often not practiced locally when awarding contracts and contractors are not often aware of environmental and social commitments.

This ESMF has been prepared in compliance with ESS 1 and includes measures for carrying out screening as well as assessment of social risks and impacts alongside those relating to the environment. Consultations, including with vulnerable groups, are key aspects of the procedures laid out in the ESMF as well as the separate Stakeholder Engagement Plan (SEP) and Labor Management Procedure (LMP) prepared under the project. Further, as mentioned in the ESMF, the relevant environmental and social requirements will be incorporated into the relevant tender and contract documents, and the contractor will also be required to prepare a separate contractor's ESMP in accordance with this ESMF.

### ESS2: LABOUR AND WORKING CONDITIONS

Employment related matters are mainly governed under the Maldives Employment Act (2008) which addresses issues pertaining to the employment agreement, minors, working hours, dismissals, leaves, breaks, wages and deductions, overtime work, training, occupational health and safety, and collective bargaining and dispute resolution.

Similar to the WB provisions, the occupational health and safety component of the Act covers the obligations of both employers and employees to ensure safety and protection at work. Further, the Health and Safety Regulation for Construction Industry (2019/R-156). The regulation sets out minimum standards for safety and security of the community and the labour force. Unlike ESS2, the regulation suggests training on health and safety aspects of the project if the value of the project exceeds 1.5 million Maldivian Rufiya. This is a possible gap and can be addressed by complying with the measures set out in ESS2.

The Prevention of Sexual Harassment Act (16/2014) prohibits both employers and employees from subjecting those working under them, or even co-workers of any type, any extent of sexual harassment. Employers are additionally mandated under the Gender Equality Act (18/2016) to ensure non-discrimination based on gender and take appropriate measures to abolish gender-based discrimination, abolish all systemic discrimination caused through established systems with unequal practices and to promote equal opportunities for men and women.

The Regulation on Employment of Expatriates in Maldives (2011/R-22), prohibits any foreigner to work in the country without a valid work permit and work visa. The Employment Act is extended to foreign nationals working in the country. Additionally, the Maldives have ratified several International Labour Organization Conventions, of which the details can be found in the Project's Labour Management Plan.

This ESMF has been prepared in compliance with ESS 2 and key aspects of the relevant procedures are laid out in the separate Stakeholder Engagement Plan (SEP) and Labor Management Procedure (LMP) prepared under the project. Further, as mentioned in the ESMF, the relevant labour requirements will be incorporated into the relevant tender and contract documents, in accordance with this ESMF.

### **ESS3: POLLUTION PREVENTION AND MANAGEMENT**

Pollution prevention and management locally is primarily governed by Waste Management Regulation (2013/R- 58). As identified in Chapter 4, the regulation covers aspects related to defining waste management standards for waste collection, transfer, treatment, storage, waste site management, landfill management and hazardous waste management. Moreover, waste transfer standards are defined for land and sea transfer. The areas that are lacking regulatory backing

regarding resource efficiency with regards to energy use, water use, and raw material use are not defined in terms of project management under any regulation or standard. Furthermore, air quality standards are not established in the Maldives and air quality emissions are not regulated strictly while ESS3 requires in addition to other emissions, to measure gross GHG emissions from the project.

The project will apply the World Bank Group Sectoral Guidelines on Solid Waste Management and follow the criteria on producer management of waste, including the transport of decommissioned systems out of the country as part of the investments via mandatory provisions in contracts with suppliers and contractors. These will be in line with both national legislation and applicable international conventions, including measures such as a buy back arrangement of hazardous waste by the suppliers.

### ESS4: COMMUNITY, HEALTH, SAFETY AND SECURITY

The regulations relevant to this aspect locally is the Construction Site Health and Safety Regulation (2019/R-156). As identified in Chapter 3, this regulation has safety provisions that ensure public safety while construction activities are undertaken. In addition, recently formulated regulation, Construction Material Testing Regulation (2019/R-105) ensures that the material used for construction is tested and safe to use for the designated purpose. However, the World Bank's ESS4 specifies that structural design should take into account climate change risks. This aspect is not covered in these regulations implemented locally. Moreover, notably quality and safety related regulatory requirements are lacking. Furthermore, there are no regulations that deal with the community level impacts that arise due to influx of migrant workers into the population.

The project will integrate various safety measures into the project design to meet the requirements of the World Bank Group's Environmental Health and Safety Guidelines. Further, measures to manage the risks associated with labor influx will be clearly laid out in the LMP prepared for the project.

#### ESS 10 - STAKEHOLDER ENGAGEMENT AND INFORMATION DISCLOSURE

Disclosure of relevant project information will help affected communities understand the risks, impacts and opportunities of the Project. The implementing agency will publicly disclose the ESMF and all Environmental and Social Assessment documentation, including any ESMPs and/or ESIAs for public review and comment in appropriate locations in the Project area. The documentation will also be made available on the implementing agencies website both in English and in local languages, ie Dhivehi. Newspapers, social media and other media outlets will alert the community to the availability of the documentation. All safeguards Documentation will also be made available in the World Bank info shop and Maldives World Bank external website.

Consultations, including with vulnerable groups, are a key aspect of the procedures laid out in the ESMF as well as the separate Stakeholder Engagement Plan (SEP) and Labor Management Procedure (LMP) prepared under the project. This is further supported by the Decentralization Act, which outlines requirements for townhall meetings for Councils, and the Right to information Act (1/2014), which guarantees every citizen's right to access information and empowers citizens to seek information from state institutions. Additionally, any project with the potential to have an impact on the environment is required to undertake an EIA study prior to the approval of the project. This process is regulated and managed by the Environmental Protection Agency (EPA), and the Ministry of Tourism for all tourism related projects. Examples of projects requiring EIAs include land reclamation projects, channel deepening and dredging projects, establishment of process industries like fish processing and establishment of sewerage systems. EIAs include a public consultation component.

### CHAPTER 5: ASSESSMENT OF ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS AND MITIGATION MEASURES

This ESMF provides for initial risk assessment and classification based on the available documentation and data. The environment and social risks are rated as moderate by the World Bank as per the following rational, in line with the World Bank's Environmental and Social Policy and ESF.

**Environmental Risk Rating** Moderate

Social Risk Rating Moderate

The overall project objective supports the improvement and enhancement of learning in strategic subjects for secondary school students and teacher training, development and capacity building. The project is expected to finance physical interventions associated with refurbishment of existing infrastructure to enhance STEM education, vocational education/skill development, Science education and ICT in education both in the Greater Male Region and outer atolls. It is expected that these activities will take place on existing inhabited islands. The nature of the expected infrastructure development works is assessed to be of medium scale and in potential locations where anthropogenic activities have already altered the natural environment. Therefore, the project activities do not anticipate major, irreversible environmental risks and impacts.

The potential risks and impacts and issues are predictable and expected to be temporary and or reversible since the identified risks and impacts are mostly construction phase related; low in magnitude, site specific, without likelihood of impacts beyond the actual footprint of the project. Potential key environmental risks and impacts expected due to the nature of proposed physical interventions will relate to impact due to poor design, potential pollution of soil and water resources, resource extraction and transportation of materials, momentary interference to neighbouring settlements through various operational activities, erosion and sedimentation from earthworks and run off, generation and disposal of waste/spoil, occupational and community health and safety, air pollution and noise emissions from machinery.

The anticipated risks and impacts are mainly construction related, and can be mitigated and managed through proper screening, mitigation measures and adequate due diligence procedures for each of the identified sites and locations as per Annex 11.

The project promotes positive impacts through the adaptation and promotion of sustainable green infrastructure via the implementation of green school concept "fehi madharusa" supported through science and vocational education subjects.

In order to address the risks described above, the following instruments have been prepared:

- Environment and Social Management Framework (ESMF)
- Stakeholder Engagement Plan (SEP)
- Labor Management Procedures (LMP)
- Grievance Redress Mechanism (GRM)

Further, this ESMF is based on applicable ESF Standards and the World Bank Group's Environmental Health and Safety Guidelines. The ESMF has outlined procedures, elaborated in Chapter 5 for determining where and when site specific Environment and Social Impact Assessments (ESIAs)/Management Plans (ESMPs) via Environmental and Social Screening.

The following risk management instruments in line with each of the applicable ESSs and specific measures or actions are planned to prevent, avoid, minimize, reduce or mitigate the environmental and social risks and impacts of the projects over the project cycle:

The ESMF will guide the preparation of the appropriate instruments required and the process of environmental and social due diligence and management in line with ESS1 and all relevant ESSs.

### 5.1 AN OVERVIEW OF POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS ASSOCIATED WITH THE PROPOSED PROJECT.

### ESS 1: ASSESSMENT AND MANAGEMENT OF ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

The environmental impacts are expected to be limited to (i) the management of construction level impacts at the rehabilitation / construction sites (waste water, solid waste, rejection and elimination of wastes such as oils and paints, demolished material), soil erosion, loss of vegetation, as well as dust and noise during the works, occupational and public health and safety and associated nuances; (ii) issues around the water supply, sanitation and solid waste management in with regard to the operation of such facilities are also envisioned; (iii) high demand of material for construction, such as wood for furniture and windows, sand, etc.; (iv) structural integrity of the facilities; and (v) issues related to use and disposal of solid waste and effluents such as sewerage and waste water during the operation of training institutes and boarding facilities.

There may be refurbishment activities related to waterproofing of roofs, replacement of broken fittings, repairing malfunctioning drainage, water and electrical installations, painting, etc. that may give rise to environmental issues. The extraction of construction material particularly sand and coral aggregates could constitute a source of potential impacts on the natural environment.

Overall environmental impacts are expected to be temporary and of minimal if appropriate mitigation and management measures are adopted. Potential impacts that are likely are presented below.

On the social side, AEDP is expected to create positive social impacts such as fostering access to quality jobs oriented vocational, technical, and STEM skills at the secondary education level, laying a strong foundation for the students before they move on to the higher education and tertiary education levels. This will prepare the students adequately with the skills needed for the 21st century.

The project aims to create a number of beneficial outcomes such as (i) enhancing curriculum delivery and increasing participation of students in higher secondary education, (ii) improving learning in strategic subjects in secondary grades, (iii) promoting participation of boys in higher secondary education, (iv) improving the delivery of teaching services, (v) improving school-based professional development programs (SBPD) of teachers, (vi) measuring and enhancing school and system performance, modernizing quality assurance of schools for improvement; and (vii) conducting national assessments of learning outcomes for policy and program development.

As identified, only renovations on existing facilities are planned under AEDP. These will not require land acquisitions. Hence, involuntary displacements or livelihood impacts due to project activities are not expected. Further, during rehabilitations, it is likely to be the case that the required labour force and associated goods and services cannot be fully supplied locally for a number of reasons, among them worker unavailability and a lack of technical skills and capacity. The labour force (total

or partial) needs to be brought in from outside the project area. the rapid migration to the project area can affect project areas negatively, in terms of increased risks of social conflict, illicit behaviour, burden on and competition for public service provision, risk of communicable diseases and burden on local health services, including sexually transmitted diseases, and gender-based violence, particularly in the form of inappropriate behavior. Risks of GBV, SEA and SH also may persist as a result of beneficiaries attending onsite training, and project areas.

### **ESS 2: LABOR AND WORKING CONDITIONS**

Drinking Water Supply Issues: Use of contaminated / non-purified water sources can cause health issues to the workers.

Poor Sanitation Facilities: Poor maintenance of sanitation facilities can cause health issues to the workers.

OHS/Safety: Safety of workers, students and residents will be an issue. However, rehabilitations of this scale may not generate major safety risks to workers. Given the work will be on premises, rehabilitation sites that are not cordoned off can contribute towards potential safety hazards to students, staff and residents who are located close to the construction site.

### ESS 3: RESOURCE EFFICIENCY AND POLLUTION PREVENTION MANAGEMENT

**Poor Designs:** issues such as inadequacy of sanitation facilities, water supply and waste management on-sight and improper placement of sanitation facilities will contribute to the already existing issues such as water and air pollution. Loss of vegetation, flooding, soil erosion, etc. as a result of poor designs is not envisaged in this project as there would be no new construction of buildings happening. New water supply may create conflicts between water users. Building design issues may lead to safety issues due to poor structural integrity and energy loss.

Thus designing of any new facilities should ensure the adequacy of potable water in the proposed project location, the adequacy for the existing sewerage and waste water management system to undertake the associated increase in need for the use of these systems, structural integrity and incorporation of green building elements such as the use of alternate energy and means of using climate resilient building materials and architectural designs that incorporate the adequate use of light and ventilation to reduce the demand on sources of energy and ensure energy efficiency during facility operations.

Soil Erosion and Water Contamination: During site clearing, any vegetation that is not properly disposed can block drains and waterways and contaminate the water. Gravel/soil brought for any filling purposes if not properly stored and is exposed to the natural elements can be washed off to low lying areas and sea causing sedimentation. Storm water congestion on site can create inconveniences to existing activities and construction work. Also waste water generated during construction and from labor camps can also contaminate drinking water sources if not properly treated, particularly in islands where groundwater is still utilized for drinking purposes. The use of machines working with fuel, oils and lubricants on work sites can pose a risk of contaminating groundwater through infiltration. Accidental spillage of oil and chemicals are also possible during construction, which will impact groundwater, as well as uncontrolled site runoff to nearby

mangrove areas and/or coastal waters will impact the water quality due to suspended solids and other contaminants.

**Waste Generation:** Various types of waste such as litter, human waste, food waste, electronic waste, etc. from labor camps, site, as well as construction-related wastes will be generated that can create an inconvenience to public and users, as well as contribute negatively towards public health if not properly managed.

In addition, wastes that are not disposed of properly can become breeding grounds for vector borne diseases and can contribute to groundwater and coastal water contamination. Unsafe disposal of asbestos from degraded roofs may cause public health issues.

**Resource Extraction:** The rehabilitation work is not likely to create a huge demand for construction materials such as sand, timber, coral aggregates, etc. and hence, will not place a burden on these natural resources.

**Noise:** During site preparation and construction work noise will be generated due to rehabilitation works. During daylight hours, this may create disturbances to other classrooms, sensitive receptors and to residents living close to the rehabilitation site. Construction-induced traffic movement from pick-ups, excavators, dump trucks, etc., use of powerful mechanical equipment, and demolition of existing buildings will not be happening under the rehabilitations of this scale and would not contribute to much noise pollution.

**Dust:** Dust generated during excavation work, backfilling, reinstatement work, cement mixing, handling construction material, truck movement in the site area in addition to wind erosion can impact the air quality during construction. Dust generated during clearing and construction work can cause difficulties for students who have respiratory problems and become a nuisance during daylight hours. Soil/ gravel kept for long periods without proper cover can generate dust and become an inconvenience during operational hours and for surrounding residents. Transportation of materials to the site will also generate dust. Decommissioning of existing structures can also create dust that is potentially hazardous.

**Other Air Quality Impacts:** The possibilities of removing and burning vegetation is not foreseen in this project. However, gaseous emissions from construction plants, paint and vehicles are also possible.

Waste Generation: With the potential increase of facilities, the number of users (students and teachers) will also increase causing the amount of solid waste generated. This will contribute towards the already existing issue of storage and disposal.

#### ESS 4: COMMUNITY HEALTH AND SAFETY

**Economic Impact and Livelihoods:** The project is expected to garner a positive impact on the livelihoods of the beneficiaries, through physical interventions, upgrading and strengthening the education sector.

**Transport:** Transportation of material to and from the site will create disturbances during operational hours; can cause injury to children and increase traffic congestion in the area. Transportation of construction material on open vehicles and the high speed of vehicle running can generate dust and will cause potential safety issues.

**Potential Social Conflicts:** Potential social conflict may arise between workers brought in to undertake the refurbishments, and the users of the establishment (teachers, parents and students). If labor camps are required, location of camps and worker interactions with students may lead to negative impacts. There is also an increased risk of SEA/SH and GBV. As school students are involved, careful processes need to be put in place to prevent and manage such potential conflict.

**Drinking Water Supply Issues:** Use of contaminated / non-purified water sources can cause health issues to users of the facilities.

Poor Sanitation Facilities: Poor maintenance of sanitation facilities will likely cause health issues.

**Diminishing Aesthetics of the Existing Facility Environment:** This is not envisaged in the project.

### ESS 5: LAND ACQUISITION, RESTRICTIONS ON LAND USE AND INVOLUNTARY RESETTLEMENT

As the scale of the proposed rehabilitation work under the Project is minor, and confined to within schools, it is unlikely to require any land acquisitions, or resettlements.

### ESS 6: BIODIVERSITY CONSERVATION AND SUSTAINABLE MANAGEMENT OF LIVING NATURAL RESOURCES

As the scale of the proposed rehabilitation work under the Project is minor, and confined to within schools, it is unlikely to have any negative impact on biodiversity and living natural resource management.

### ESS 7: INDIGENOUS PEOPLES/SUB-SAHARAN AFRICAN HISTORICALLY UNDERSERVED TRADITIONAL LOCAL COMMUNITIES

As the scale of the proposed rehabilitation work under the Project is minor, and confined to within schools, it is unlikely to have any impact on any indigenous peoples.

### **ESS 8: CULTURAL HERITAGE**

As the scale of the proposed rehabilitation work under the Project is minor, and confined to within schools, it is unlikely to have any impact on cultural heritage.

### **ESS 9: FINANCIAL INTERMEDIARIES**

As this ESS is only applicable to Financial Intermediaries (FIs) that receive financial support from the Bank, it is not relevant to this Project.

#### ESS 10: STAKEHOLDER ENGAGEMENT AND INFORMATION DISCLOSURE

Effective mechanisms will be put in place to promote inclusive engagement with project-affected parties throughout the project life cycle on issues that could potentially affect them.

### CHAPTER 6: PROCEDURES FOR ENVIRONMENTAL AND SOCIAL MANAGEMENT DURING PROJECT IMPLEMENTATION

#### 6.1 ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

The Environmental and Social Management Plan outlined as a framework below consists of a set of measures to ensure sound implementation of environmental and social safeguards from planning through to operation and eventual decommissioning (where applicable) of the activities to be financed by AEDP. It outlines a plan for determination of adverse environmental and social impacts through a system of screening, assessment, management and monitoring to ensure that project interventions are implemented with zero/minimal impacts.

#### 6.2 ENVIRONMENTAL AND SOCIAL SCREENING

Environmental and social screening is counted to be a useful tool in identifying safeguard issues in large investment programs consisting of many sub-projects. The main objective of environmental and social screening of sub-projects will be to (a) determine the anticipated environmental / social impacts, risks and opportunities of the sub-project (ii) determine if the anticipated impacts and public concern warrant further environmental / social analysis, and if so to recommend the appropriate type and extent of assessments needed.

At the national level, screening is the process by which proposed developments are reviewed to determine the level of environmental assessment to which they should be subjected, which could range from none up to a full Environmental and Social Impact Assessment (ESIA). At the project level, screening is the process of reviewing a proposed activity against a checklist of factors to determine whether it is likely to have adverse environmental and social effects, and if so, what mitigation measures should be applied. The present ESMF is largely concerned with the project level, but some notes are provided on national screening for completeness.

#### 6.3 NATIONAL LEVEL SCREENING

The Maldives national requirements for environmental assessment are set out in the Environmental Impact Assessment (EIA) Regulations, 2012. Part III of those regulations includes a description of the Screening Process applied to development proposals. Schedule D of the Regulations is a screening list of all development types for which full EIA is mandatory. According to Schedule D included in Amendment 2 to the EIA regulation 2012, fisheries and aquaculture practices that require preparation of an EIA are:

- ✓ Development of new tourist hotel
- ✓ Building structures, with more than ten (10) stores (excluding the foundation raft) or higher than thirty-one (31) meters.
- ✔ Buildings with foundation structures that cater for more than ten (10) stores
- ✓ Buildings with basements
- ✔ Buildings with foundations deeper than five (5) feet or a foundation of a unique structure

Proposed developments that do not fall within Schedule D are subject to manual screening by the EPA, for which a Screening Form (**Annex 1**) must be submitted providing relevant development details. Within 10 days, the EPA will decide whether the proposed development is approved, or needs further study, which may be required in the form an EIA or ESMP

The National level screening should be conducted if any sub-projects selected for finalizing fall within the above-mentioned thresholds. In practice, all reports are required to be submitted to EPA and a copy of EIA is sent to the respective councils for their contentment. Relevant councils are also invited to scoping meetings. However, EPA should be consulted at the outset, to determine whether the formal national screening process should be applied. A specific TOR for the ESMP is issued by the EPA post a scoping meeting which is conducted post the emulation of the screening form once submitted.

### 6.4 PROJECT LEVEL SCREENING

At the project (component) level, proposed sub-component activities need to be subjected to screening to determine whether they should be subject to an Environmental / Social Review. (This is a simple review, by the OMSU environmental and social specialist, of the likely implications of the activity, to determine whether it is acceptable, and if so, whether any particular mitigation measures should be applied). The objective here is to provide a level of environmental / social review that is appropriate to the small scale of the sub-component activities, i.e., without the need to conduct an EIA.

All interventions identified under the project that do not undergo national screening and subsequent preparation of safeguard instruments will be subject to a project level environmental and social screening with the objective to: (a) determine the anticipated environmental and social impacts, risks and opportunities of sub-project; and (b) determine if the anticipated impacts and public concern warrant further environmental and social analysis, and if so to recommend the appropriate type and extent of Environmental and Social Assessment needed as per the set criteria in the ESMF.

The Environmental and Social screening questionnaire to be used for this purpose is presented in **Annex 2**. An outcome of the above environmental and/or social reviews will, in most cases, be the development of Environmental and Social Management Plans (ESMPs).

### 6.5 INCLUSION OF ENVIRONMENTAL SPECIFICATIONS AND ENVIRONMENTAL MANAGEMENT PLAN IN BID DOCUMENTS

It is important to ensure the environmental specifications and ESMPs are included in the bid documents prior to commencement of the bidding process. An ESMP consists of the set of mitigation, monitoring, and institutional measures to be taken during implementation and operation of a project to eliminate adverse environmental and social risks and impacts, offset them, or reduce them to acceptable levels. It will be necessary to include a provisional sum for the ESMP as part of the Bill of Quantities for those mitigation measures that are not part of the engineering costing. The environmental specifications should also include penalty clauses for non-compliance, specifically for complex and large contracts. The procurement staff of the relevant implementing agency and OMSU together with environmental officer(s) will be responsible for this step. The minimum requisite conditions to be included in contracts is presented in **Annex 6**.

### 6.6 GUIDANCE ON INCORPORATION OF ESHS REQUIREMENTS FOR CONTRACTS

#### 6.6.1 STANDARD BIDDING DOCUMENTS

With the revision to the World Bank's Standard Bidding Documents in January 2017, Environmental and Social Health and Safety (ESHS) requirements are now more clearly defined

in the document and there is also the need for a ESHS Performance Security to be incorporated in to the requirements from potential bidders for implementation of works under project financing. This revision incorporates changes to enhance environmental, social, health and safety performance. A positive measure that is intended to enhance the commitment of a given contractor towards sound environmental and social management which clearly defines what the expectation is from them as an implementing entity during project execution and reporting.

The following guidance will facilitate the tailoring of these ESHS requirements during the use of the World Bank Groups Standard Bidding Documents for procurement activities. The Environmental Specialist and team will be required to liaise with the Procurement Specialists of the project on ensuring the following guidance is incorporated accordingly.

All standard language on ESHS and guidance is presented in the Standard Bidding Documents on what expectations are there from the contractor's side and what information should be provided from the client's side during procurement, implementation and reporting in terms of ESHS. The Environmental and the Social Specialists and team should conduct a thorough review of these requirements and ensue the following.

- All sections are to be reviewed in detail and cross reference will need to be made to the safeguards policies and instruments relevant to the specific sub-projects which have been prepared as per the requirements of this ESMF.
- Where required, the Environmental and Social Specialists may need to update recommendations in the respective ESIA / ESMP to match the language in the Bid Document where major discrepancies have been noted to facilitate consistency in all documents.
- In projects where safeguards documents for environment and social are prepared independently, it is recommended that the project Environmental and Social teams work together to ensure that social safeguard requirements are incorporated and Social Management Plans (SMPs) and ESMPs are merged and represented as ESMP.
- This ESMF already includes guidance for ESMPs that incorporate the requisite measures for labor management, labor working conditions, worker health and safety, public health and safety and grievance redressal in line with the project's parallel social safeguards instruments.
- The ESHS Performance Security, is to be maintained between 1-3% of the total contract value as per the Guidance provided supplementing the World Bank's Standard Bidding Document, depending on the associated risks of the project. The total performance security for contracts will typically be 10% of the total contract value of which 3% should be allocated to the ESHS performance security, where a contract has a performance security of 20% the ESHS performance security is to be maintained at a maximum of 5% of the total contract value.

While it is recommended that indicative costs should be presented with ESMP measures, on the addition of ESMP related costs to the BOQ, if indicative costing have not been done on individual ESMP implementation items at the time of ESMP preparation, due to the difficulty of estimating indicative costs in the context of Maldives the following is to be undertaken. A Lump Sum **amount of 5% of the total contract value** should be maintained as the allocation for ESMP implementation. The percentage may be revised with consideration of the project scale and potential risks identified.

The contractor is required to provide a costing at minimum within this amount in his BOQ, listing itemized values for ESMP implementation. The language should indicate that the contractor will be required to provide an itemized costing with the BOQ within this allocation.

In addition, for large scale contracts that are assessed as high risk during environmental and social screening, it is also requested for the contractors to have the following certifications in the Eligibility and Qualifications Subsection, in Section III of the Standard Bidding Documents, under Contractor Requirements.

### 6.6.2 CLEARANCE PROCEDURES WITH THE WORLD BANK

All safeguards instruments listed below will be subject to World Bank prior review and clearance by the World Bank safeguards specialists assigned to both environment and social, to the AEDP Project. Only cleared safeguards instruments can be included in bidding documents and other procurement instruments. No work can commence on project sites without due clearance of the respective safeguards instrument.

- ✔ All Environmental and Social Screening Reports
- ✔ All TORs for ESIAs
- ✓ All ESIAs, and ESMPs

Upon project commencement, the environmental and social specialists of OMSU will be required to prepare a table, tracking all requisite safeguards instruments for sub-projects as outlined in the generic template and have the tracking sheet format cleared by the World Bank's Environmental Specialist and Social Specialist assigned by the project task team. This sheet should be continuously updated and managed by the OMSU and shared with the World Bank safeguards specialist every quarter or when requested.

#### 6.7 GENDER

At the sub project level, gender analysis will be part of the social assessment and the analysis will be based on findings from gender specific queries during primary data collection and available secondary data. The quantitative and qualitative analysis will bring out gender disaggregated data and issues related to gender disparity, needs, constraints, and priorities; as well as an understanding of whether there is a potential for gender based inequitable risks, benefits and opportunities. During the gender analysis, close attention needs to be paid to factors that may be contributing to the large gender disparity in enrolment rates among young females and males.

In addition, the overall monitoring framework of the project should include gender disaggregated indicators and gender relevant indicators.

### 6.7.1 GENDER BASED VIOLENCE, SEXUAL HARASSMENT, EXPLOITATION AND ABUSE

The AEDP has been assessed as having a "low risk" rating with regards to gender-based violence risks. Based on the guidance given in the Bank's Good Practice Note (GPN) for addressing GBV risks, where the project's GBV risk rating is considered "Low Risk" the following mitigation measures are recommended at key stages of the project.

The project will incorporate initiatives at the school level which will impact TVET and STEM programs as well as influence learning institutions and teacher training. Interventions include educating students, staff, parents, and communities on gender equality, GBV, and SEA/H. Protocols will be established to address biases, harassment or violence. Vulnerable groups, especially females, will be empowered to report any cases encountered, and made aware of GRM

system. All contracts and staffing will be subject to Code of Conduct clauses which will include gender issues, equality, prevention of GBV and SEA/H.

Identification / Appraisal Stage: Sensitization of project staff regarding GBV issues and a GBV risks assessment is required at the onset of the project. GBV risks are to be adequately reflected in safeguards instruments. Also, the mapping of GBV prevention and response actors in project adjoining communities needs to be undertaken. As part of the project's stakeholder consultations, those affected by the project will need to be properly informed of GBV risks and the project activities to get their feedback on project design and safeguards issues. Consultations with a variety of stakeholders (political, cultural / religious leaders, healthcare teams, local councils, social workers, women's organizations and groups working with youth) are recommended at the start and continuously throughout the implementation of the project. In addition, an effective grievance redress mechanism (GRM) with multiple channels to initiate a complaint with specific procedures for reporting GBV will be put in place.

**Procurement Stage:** The implementing agency will clearly define the GBV requirements and expectations in the bid documents. Based on the project's needs, the Bank's Standard Procurement Documents (SPDs), and the implementing agency's policies and goals, it will be necessary to define the requirements to be included in the bidding documents for a contractor Code of Conduct (CoC) which addresses GBV issues. In addition, the procurement documents will need to set out clearly, adequate costs required to increase safety of women and children in the host communities and female workers on the site.

The extent of labor needs will be with regards to classroom rehabilitation. Although contractors would be encouraged to hire locally, in order to accomplish refurbishments, it is expected a small, temporary influx of labor will be needed. As such, all contractors and workers will be subject to Labor Management Plans, workers' rights, health and safety measures, and code-of-conduct clauses. Additionally, workers and local communities will be educated in gender equity and prevention of harassment and violence and informed on GRM responsive to SEA/SH.

Implementation Stage: The implementing agency will need to review Contractor's ESMPs to verify that appropriate GBV mitigation actions are included as it is a fundamental instrument for ensuring oversight and management of GBV risks. To ensure grievances regarding GBV are promptly addressed, the implementing agency and the Task Teams will also review that the GRM receives and processes complaints, follows protocols and responds in a timely manner, through an established mechanism. Codes of Conduct need to be signed with the contractors and the implementing agency will ensure the following: (i) requirements in CoCs are clearly understood by those signing; (ii) have CoCs signed by all those with a physical presence at the project site; (iii) train project-related staff on the behaviour obligations under the CoCs; and (iv) disseminate CoCs (including visual illustrations) and discuss with employees and surrounding communities. In addition, the implementing agency will be responsible for providing awareness to project workers and local community on issues of Sexual Exploitation and Abuse (SEA)<sup>30</sup> and Sexual Harassment

<sup>&</sup>lt;sup>30</sup> Any actual or attempted abuse of a position of vulnerability, differential power, or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another. Sexual abuse is further defined as "the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions." Women, girls, boys and men can experience SEA. In the context of World Bank supported projects, project beneficiaries or members of project-affected communities may experience SEA.

(SH)<sup>31</sup>. To properly address GBV, the training and sensitizing of workers is essential. GBV training modules may be embedded into the regular Occupational Health and Safety (OHS) 'toolbox' meetings with workers, official training and/or standalone training efforts. In addition, the implementing agency will be responsible for M&E of progress on GBV activities, including reassessment of risks as appropriate. Should GBV risks become apparent over the course of project implementation, these issues will need to be escalated to ensure they are duly addressed.

Diversifying the existing curriculum and promoting TVET and STEM for all persons will ensure boys and girls, either in Male' or rural islands, have equal chances and opportunity to access these subjects. Vocational education training subjects will target both genders to avoid stereotyping certain courses to certain groups. Teacher groups, principals, and parents will be made aware of opportunities for both genders, and encourage girls to enter non-traditional fields. Education at secondary level will promote equality for all students. Additionally, school development plans will include measures to ensure gender equality

For a detailed explanation of the measures to address GBV risks discussed above please refer to the World Bank's Good Practice Note on Addressing Gender Based Violence in Investment Project Financing involving Major Civil Works<sup>32</sup>.

World Bank's Good Practice Note on GBV also provides guidance on ensuring a survivor centered approach when responding to GBV incidents, which ensures confidentiality, safety and wellbeing of the survivor. It also recommends working with GBV Services Provider(s) and community-based organizations that are able to support the project in addressing GBV incidences while also working to proactively prevent such cases. Further guidance is also given in the Good Practice Note in handling GBV complaints, resolving cases and ensuring appropriate support for survivors.

#### 6.8 CITIZEN ENGAGEMENT

Stakeholder consultations and public engagement will be conducted with NGOs, relevant government Ministries and counterparts, and Island/Atoll Councils, amongst others. Citizen engagement will be undertaken regularly as part of different sub-projects, and the mode of communication and participants will vary for each activity. Consultations will also be conducted (in person where possible) for all refurbishment activities as part of the environmental and social screening process.

During the social screening stage stakeholders are to be consulted focusing on identifying their issues and concerns with regards to the project interventions. Stakeholder needs, and management responses will be incorporated in the project development plans and the relevant information on the implementation of these plans will be shared with the stakeholders.

<sup>&</sup>lt;sup>31</sup> Unwelcome sexual advances, requests for sexual favors, and other unwanted verbal or physical conduct of a sexual nature. SH differs from SEA in that it occurs between personnel/staff working on the project, and not between staff and project beneficiaries or communities. The distinction between SEA and SH is important so that agency policies and staff training can include specific instructions on the procedures to report each. Both women and men can experience SH.

<sup>&</sup>lt;sup>32</sup> http://pubdocs.worldbank.org/en/399881538336159607/Good-Practice-Note-Addressing-Gender-BasedViolencev2.pdf

Furthermore, citizen engagement will be embedded in the project design through stakeholder feedback.

As discussed in Chapter 9, the project will adopt a grievance redress mechanism (GRM) that will be transparent, objective and unbiased and will also provide a means for stakeholders to raise concerns or provide feedback.

#### 6.9 ENVIRONMENTAL AND SOCIAL MONITORING DURING CONSTRUCTION

Monitoring is the continuous and systematic collection of data in order to assess whether the environmental and social objectives of the project have been achieved. Good practice demands that procedures for monitoring the environmental and social performance of proposed projects are incorporated in all relevant environmental and social management instruments. Monitoring provides information on the occurrence of impacts. It helps identify how well mitigation measures are working, and where better mitigation may be needed. Each respective safeguard instrument prepared will require a monitoring program to be included for the respective activities. The monitoring plan should identify what information will be collected, how, where and how often. It should also indicate at what level of effect there will be a need for further mitigation. How environmental and social impacts are monitored is discussed below.

- Responsibilities in terms of the people, groups, or organizations that will carry out the
  monitoring activities be defined, as well as to whom they report amongst others. In some
  instances, there may be a need to train people to carry out these responsibilities, and to
  provide them with equipment and supplies;
- Implementation schedule, covers the timing, frequency and duration of monitoring are specified in an implementation schedule, and linked to the overall sub-project schedule;
- Cost estimates and source of resources for monitoring need to be specified in the monitoring plan;
- Monitoring methods need to be as simple as possible, consistent with collecting useful information, so that the sub-project implementer can apply them.
- The data collected during monitoring is analyzed with the aim of:
  - Assessing any changes in baseline conditions;
  - Assessing whether recommended mitigation measures have been successfully implemented;
  - o Determining reasons for unsuccessful mitigation;
  - Developing and recommending alternative mitigation measures or plans to replace unsatisfactory ones; and
  - o Identifying and explaining trends in environment improvement or degradation.

A set of Monitoring Requisites for the construction phase of sub-projects are provided in detail in the following **Annex 8**.

### 6.10 INSTITUTIONAL ARRANGEMENT FOR IMPLEMENTATION OF THE ESMF

The Environmental and Social Specialists at the OMSU; The Environment and Social Safeguards Specialists recruited for MoE OMSU will be responsible for the implementation of all steps presented in the ESMF. The facilitation of the preparation of environmental and social instruments, such as ESIAs and ESMPs, requesting for environmental and social clearances from relevant authorities as the EPA and the WB where applicable, and monitoring/reporting on

compliance of due diligence mechanisms set forth in the ESMF and relevant trainings. They will be responsible for the implementation of environmental and social management plans, grievance redress mechanism; addressing gender and social inclusion; citizen engagement, liaison with other agencies, contractors and engineering supervisors at the island level; monitoring and evaluation; and training for all safeguards assessments when it is required. The OMSU will outsource detailed studies to external consultants and also manage them. The OMSU Environmental and Social Specialists will be responsible for ensuring the delivery of such outsourced tasks. They will be responsible for the preparation of quarterly compliance summaries and formally communicating to WB on environmental and social safeguards matters.

In terms of managing the GRM, the MOE Social Safeguard Specialist is tasked with sorting and all received grievances. The individual will then undertake the GRM process independently and report into the grievance log. The individual will be responsible for ensuring that the activities being implemented are in line with the safeguard measures outlined in the ESMF.

Environmental and Social Officers in the field, where deemed necessary and as identified during project implementation; he/she will be responsible for ensuring island level activities as per the ESMF are well managed and report to the Environmental and Social Safeguards Specialist based in the OMSU. They will assist in collecting data and the timely completion of environmental and social instruments, such as ESMPs and EISAs, in collaboration with Island Councils and take proactive efforts during monitoring/reporting on compliance of due diligence mechanisms set forth in the ESMF as well as conduct trainings as instructed by the Environmental and Social Specialist of the OMSU, who will provide them with training as required. They will be required to conduct regular monitoring visits and facilitate good communication between the ICs and the OMSU on safeguards issues and provide guidance to the ICs. Project monitoring officers can be trained to meet this dual purpose.

A standard Environmental and Social Compliance Monitoring Checklist for Project Activities is presented in **Annex 8**. In addition, the Special Monitoring Checklist for Ensuring Safe Conditions for Workers and Public, presented in **Annex 9** should be attached to the main monitoring update presented in Annex 8. For all project ESMPs in implementation Annex 8 and Annex 9 must be combined and maintained from the inception to the completion of the implementation of ESMP.

Regular World Bank missions will include specialists to monitor the project's compliance with World Bank ES policies and standards. The progress of environmental monitoring will be formally communicated to the World Bank through regular progress reports and updates as per the compliance monitoring agreement made during project implementation.

Compliance monitoring reports should be submitted to the World Bank on a quarterly basis from the commencement of the contract.

# CHAPTER 7 - LABOR MANAGEMENT PROCEDURES

# 7.1 POLICIES AND PROCEDURES FOR MANAGEMENT OF LABOR ISSUES UNDER THE PROJECT (FROM THE DETAILED LMP DOCUMENT OF AEDP)

This section identifies the key policies and procedures that will be in place to ensure that the risks identified in section 03 of this LMP<sup>33</sup> is adequately addressed. In this regard, this section will first look at means of addressing identified risks associated with direct project workers followed by means of addressing such risks of contracting.

# 7.1.1 DIRECT PROJECT WORKERS

Direct workers are people employed or engaged directly by the Borrower (including the project proponent and the project implementing agencies) to work specifically in relation to the Project.

The following are the mitigation measures that will be implemented during project implementation to ensure that the risks to project direct workers identified in Section 03 of this LMP are addressed. The project manager and the director will have the overall responsibility to ensure the aspects highlighted are implemented. The safeguards officer will undertake periodic review quarterly to determine compliance and report to project manager, project director and the World Bank. To ensure compliance, the following clauses will be included in the employment contract, where relevant.

#### **GENERAL PROVISIONS**

- 1. All project staff will be provided with an employment contract as per the requirements of Employment Act (2/2008).
- 2. All direct project staff employed for the purpose of the project will be above 18 years. Even though the employment act provides provision to employ minors between 16 to 18 years of age, with the consent of the parents, it is not envisioned that a minor will be required to be employed as a direct project worker.
- 3. Maximum working hours for staff will not exceed the maximum limit set in the Employment Act, i.e. 48 hours a week.
- 4. Equal training opportunities will be available to all staff working in the project without discrimination, based on gender or otherwise, as specified in the Employment Act. It is the responsibility of the Project Manager and the Project Director to ensure that such discrimination does not exist.
- 5. All staff will be entitled to breaks from work of 30 (thirty) minutes after every 05 (five) hours during working hours as per the Employment Act. They will also be provided with the entitled leaves under the Employment Act, in addition to paid maternity and paternity leaves as per the social protection policy of the government. In this regard, 06 months maternity leave and 01 month paternity leave will be provided. This policy has been established and enforced in all government civil service offices and all government companies.
- 6. All staff will be made aware of grievance redress mechanism available for the staff specified under this LMP.
- 7. Staff will be made aware of the avenues available at the Ministry for victims of sexual harassment. Staff will be able to lodge complaints to the Sexual Harassment Prevention Committee at the Ministry of Education, established under Prevention of Sexual Harassment Act (16/2014).

https://documents1.worldbank.org/curated/en/099420008292240426/pdf/P1777680ee43840320a9c80f561571d6189.pdf

<sup>33</sup> 

- 8. Staff will be provided a pension contribution and deductions will be made from their salaries for their contribution in accordance with the Pension Act 18/2016).
- 9. Any foreign party employed by the project will have a valid work permit and a work visa while working in Maldives.

#### AT PROJECT OFFICES

- 1. A work station with a computer will be provided to all staff.
- 2. Separate male and female toilet facilities will be provided at all project offices.
- 3. Drinking water will be available at all project offices.
- 4. All project offices will be free of pests. Where pests are detected pest control measures will be taken immediately.
- 5. Fire detection and firefighting equipment will be available at all project offices.
- 6. Emergency evacuation plan will be established for all project offices and staff will be made aware of the plan and periodic simulation exercises that need to be implemented.
- 7. All software essential for functioning of the assigned tasks will be provided to all project staff.

#### AT THE FIELD

- 1. When procuring sea-vessels for travel in addition to cost, safety considerations will be made, and the size of the vessel will be adequate from a safety perspective.
- 2. Lifejackets will be provided to all project staff when traveling by sea.
- 3. Hard hats (through contractors, investors or projects directly) will be provided to all project staff when visiting project construction sites.
- 4. Enclosed shoes will be worn by all project staff when visiting project construction sites (safety shoes are preferable).
- 5. Safety harness will be provided (through contractors, investors or project directly) to all project staff when climbing heights at project sites.
- 6. Electrical Protective gloves (through contractors, investors, implementation partners or project directly) will be provided to all project staff inspecting power systems.
- 7. Ear plugs will be provided to all project staff (through contractors, investors or project directly) when visiting high noise areas for example power houses.
- 8. Arrangement will be made to ensure that water is available to all project staff at the field. Ideally a refillable water bottle would be provided to each project staff to be used during field visits.
- 9. Some form of identification will be there identifying the staff belonging to the project when attending meetings and sites.
- 10. Where a state of emergency or an epidemic is declared, all travel to that place will seize with immediate effect.
- 11. A daily subsistence allowance (DSA) will be provided to all project staff covering lodging, meals, gratuities and transport costs when traveling in the field. The rate of DSA will be determined based on the rates at locations where the project is implemented and will be revised based on changes to rates.
- 12. To ensure enforcement of these aspects highlighted in the LMP, these provisions will be included in the employment contracts of all direct workers.

# 7.1.2 CONTRACTED WORKERS

Contract workers are defined as people employed or engaged through third parties to perform work related to core functions of the project, regardless of location.

On behalf of OMSU, the safeguards specialists will have the overall responsibility for the implementation of the policies and procedures identified here. Regular monitoring of on the ground conditions of the contracted staff will be undertaken through the project assigned supervision party. At the time of writing, the plan is to utilize utility staff based in the islands for this purpose. The environmental and social safeguards specialists of the OMSU will provide the training to the assigned supervision staff of the contractor. The safeguards specialists will review inputs from the supervision staff and communicate issues that require addressing to the contractors/investors. The safeguards specialists will undertake periodic review quarterly to determine compliance and report to project manager, the contractor/investor and the World Bank. To ensure compliance it is recommended to include relevant clauses in the works contracts and other legal agreements developed through the project.

#### **GENERAL PROVISIONS**

- List of workers to be utilized in relation to the project, with proof of employment will be required to be submitted to OMSU by all investors/contractors.
- Construction work can only commence once the following conditions are met:
  - Toolbox training completed by all staff employed by the contractor
  - All the required Personal Protective Equipment are acquired by the contractor for all workers
  - Any newly employed party by the contractor will be required to complete the toolbox prior to commencing any physical work
- As per the provisions of the employment, all parties employed by any contracted party will be above 16 years of age. For those between 16 to 18 years of age, consent of the parent will be required as per the employment act. In addition, all other provisions of the act highlighted previously regarding employment of a minor will apply. All contractors and investors will be required to provide document evidence (passport, identity card or birth certificate) confirming the age of employees to OMSU prior to involving them in activities of the project. In addition, for minors, consent of the parent will be provided in writing together with evidence of legal guardianship.
- Maximum working hours for staff will not exceed the maximum limit set in the employment act, i.e. 48 hours a week. To confirm this, monthly attendance and duty sheets need to be submitted to OMSU during the refurbishment construction phase.
- An internal transparent and accountable system will be established within the company to tackle issues of sexual harassment, physical and psychological harassment and workplace bullying. Details of this system will be shared with OMSU prior to signing any contracts or agreements.
- All contracted staff will be made aware of grievance redress mechanism available for the staff specified under this LMP.
- The leave policy of the company will be shared and confirmed that it is in line with national laws and regulations.
- All foreign parties employed by all contractors / investors will have valid work permits. The work permit details will be shared with OMSU.
- All vehicles used by any contractor/investor for the purpose of the project will have valid registration, insurance and road worthiness.

# PROJECT WORK SITE

- All provisions that are required under Health and Safety Regulation for Construction Industry (2019/R-156) will be strictly adhered to.
- All workers will be provided with Personal Protective Equipment (PPE) by the contractor/Investor. In this regard the following will be observed:

- Hard hats should be used by all workers when undertaking construction and when undertaking inspections at height.
- Enclosed safety shoes should be worn by all construction workers.
- Safety harnesses should be used by all workers when climbing heights at project sites.
- Electrical protective gloves should be provided to workers when dealing with electrical components.
- Chemical protective gloves should be provided to all workers when dealing with any chemicals.
- o Construction safety goggles should be worn by all workers as required.
- Ear plugs should be worn by all workers working in environments with high noise (working above 75 decibels).
- Masks should be worn when dealing with chemicals and when working in dusty environments.
- All chemicals will be stored on hard surfaces and should be covered.
- Potable drinking water should be made available at the work site during the refurbishment phase.
- Adequate safety signs will be installed at the work site giving clear direction. These will be provided in English and a language understood by workforce.
- Construction work sites will be demarcated & fenced, and warning signs will be displayed both in English and Dhivehi.
- When construction is undertaken, clearly demarcated bins for waste disposal will be placed and emptied daily.
- Open pits will not be left for water to accumulate for a long time.
- Any stockpiled sand will be covered to prevent sand particles from being airborne.
- All vehicles and equipment used for the project will be used by well trained personnel.
- When working at night, adequate lighting will be provided.
- A designated toilet facility will be available within 10 minutes of the work site.
- Breaks will be given to the workforce during mealtimes.
- The site will be cleaned daily following completion of days' work.

# AT CONTRACTORS' OFFICES AND TEMPORARY ACCOMMODATION SITE(S)

- Constant and reliable electricity supply will be available at the project office and accommodation site.
- Toilet and drainage will be connected to the local sewer system, where not available, septic tanks will be used for treatment prior to disposal.
- A minimum ratio of 01 toilet/shower per 20 workers will be maintained. Separate facilities will be provided for men and women.
- Designated locations for waste disposal with clearly marked bins will be established. Bins will be emptied daily.
- The site will be cleaned daily.
- Monthly inspections to determine pest infestation of the site will be undertaken.
- To ensure enforcement of the aspects highlighted for the contracted workers by the contractor, the conditions highlighted under this section will be included in the contracts signed with all contractors.

#### 7.1.3 PRIMARY SUPPLY WORKERS

As the project involves procuring and installation of IT equipment, primary supply workers will be involved as part of the project. These workers will not be stationed in Maldives. However, all provisions highlighted under the Project's Labour Management Plan for contracted workers will apply to primary supply workers as well.

Primary supply workers are defined in the ESF as people employed or engaged by the Borrower's primary suppliers. Primary suppliers are used to mean those suppliers who, on an ongoing basis, provide directly to the project goods or materials essential for the core functions of the Project.

# 7.2 MANAGING ADVERSE IMPACTS OF LABOR INFLUX

To address the potential impacts from labour influx on local communities, the Project will:

- Reduce labour influx by tapping into the local workforce, to the extent possible;
- Assess and manage labour influx risks based on appropriate instruments; and
- Incorporate social and environmental mitigation measures, including those relating to GBV, into the civil works contract.

Hence, the following steps will be adopted:

- Administer the Social Screening Checklist prepared for this ESMF to identify and assess the type and significance of potential social impacts on local communities that may be generated by labour influx;
- As part of the ESIA, carry out an assessment of the location of the Project, contextual factors of the location, and the legal and policy framework of the GoM, if the screening suggests potential impacts:
- Incorporate the recommendations of the ESIA, including those relating to SEA risks, and define
  mitigation measures, including those recommended by the World Bank's Good Practice Note on
  GBV, which has been prepared based on the recommendation of World Bank's Global GBV Task
  Force<sup>34</sup>;
- Develop specific measures to mitigate the risks associated with the social and environmental impacts from labour influx into the ESMP/SIMP in consultation with affected communities, in the civil works bidding documents, and subsequent contracts (contractor responsibilities are outlined in Box 1 below);
- Implement the appropriate mitigation and monitoring programmes, which includes the development and implementation of a stakeholder engagement programme;
- Establish a GRM for workers and host community which among others will integrate protocols established by the World Bank's Good Practice Note on GBV;
- Monitor and supervise regularly, including on GBV-related issues, in co-ordination with other government agencies and civil society organisations; and
- Prepare periodic reports for submission to the OMSU, the World Bank, and other relevant Ministry/government agencies on implementation and the results of the ESMP, SIMP, EMP, and other relevant plans, as well as the GRM resolutions relating to labour and GBV-related issues.

Further, mitigation measures will be driven by consultations with stakeholders and in alignment with the World Bank's Guidelines on 'Managing the Risks of Adverse Impacts on Communities from Temporary Project Induced Labour Influx'. It will be the contractor's obligation to prepare and submit a plan that outlines code of conduct for workers, worker camp management plan and measures to address GBV. These will be part of the tender package and construction contract as elaborated in Box 1.

# BOX 1. CONTRACTORS' RESPONSIBILITIES

\_\_\_

Report of the Global Gender-Based Violence Task Force (2017): Working together to prevent sexual exploitation and abuse: recommendations for World Bank

investment projects (http://documents.worldbank.org/curated/en/482251502095751999/Working-together-to-prevent-sexual-exploitation-and-abuse-recommendations-for-World-Bank-investment-projects)

The Environment and Social Management Plan (ESMP) is developed during project preparation. Based on the findings of the screening report and the ESIA, the management plans contain general mitigation measures. These mitigation measures will be part of the tender package and construction contract.

Prior to starting physical works, all workers must sign the SEA / SH Prevention of Code of Conduct and the Contractor will be required to prepare and submit their own. The Code of Conduct will be issued in a language understood by the workers.

The Contractor's ESMP will provide a detailed explanation of how the Contractor will comply with the Project's safeguards documents, including the ESMF, and demonstrate that sufficient funds are budgeted for that purpose. The Contractor's ESMP will include management plans for: (i) work activities; (ii) traffic management; (iii) occupational health and safety; (iv) environmental management; (v) social management; (vi) labour influx and worker camp management plan; (vii) code of conduct for workers, including measures to address GBV, SEA and SH; and (vii) chance-finds, where relevant.

The project will verify and ensure the consistency of the Contractor's ESMP and the plan prepared under each sub-project. If issues emerge during implementation for which the Contractor's ESMP does not contain appropriate mitigation measures, the Contractor will be required to update their ESMP to include such mitigation measures and, if necessary, the civil works contract will be amended.

Civil works for the sub-projects will not commence until the Contractor prepares an appropriate ESMP, which properly identifies and proposes risk mitigation measures, and it is approved by the project.

During implementation, the Contractor will implement civil works in accordance with its ESMP, including all works conducted by sub-contractors under the Contractor's control. The Contractor will also be required to train workers on the roles and responsibilities under these plans, policies, and standards.

The Contractor will submit regular reports to the OMSU and/or other relevant Ministry/Agency, and proactively address any issues that arise.

# CHAPTER 8: STAKEHOLDER ENGAGEMENT PLAN

In consultation with the Bank, the Stakeholder Engagement Plan (SEP) was developed, to be proportional to the nature and scale of the Project and its potential risks and impacts. The SEP outlines the timeline and methods of engagement with relevant stakeholders throughout the life cycle of the Project, and distinguishes between project-affected parties and other interested parties. The SEP also identifies the range of information to be communicated to project-affected parties and other interested parties, as well as the type of information to be sought from them.

The term 'stakeholder' is used in the ESF, to refer to individuals or groups who

- a. Are affected or likely to be affected by the project (project-affected parties); and
- b. May have an interest in the project (other interested parties).

Hence, AEDP will adopt the same definition of the term in undertaking stakeholder engagement activities.

# 8.1 PURPOSE AND TIMING OF STAKEHOLDER ENGAGEMENT PLAN (EXTRACTED FROM THE DETAILED SEP OF AEDP)

The overall objectives of SEP as stated in the ESS-10 are:

- To identify the roles and responsibility of all stakeholders and ensure their participation in the complete project cycle
- Establish a systematic approach to stakeholder engagements that will help the Project identify stakeholders and build and maintain a constructive relationship with them, in particular project-affected parties
- Assess the level of stakeholder interest and support for the project and to enable stakeholders' views to be considered in project design and implementation
- Promote and provide means for effective and inclusive engagement with project-affected parties throughout the project life cycle on issues that could potentially affect them.
- Ensure that appropriate project information on environmental and social risks and impacts is disclosed to stakeholders in a timely, understandable, accessible, and appropriate manner and format with special consideration for the disadvantaged or vulnerable groups.
- Provide project-affected parties with accessible and inclusive means to raise issues and grievances and allow the Project to respond to and manage such grievances.
- To devise a plan of action that clearly identifies the means and frequency of engagement of each stakeholder.
- To allocate budgetary and other resources in the project design, project implementation, and Monitoring and Evaluation (M&E) for stakeholder engagement and participation

Thus, SEP provides an opportunity for an all-inclusive approach in project preparation, planning, implementation, and monitoring processes. It is geared toward ensuring meaningful and a wide consultative process guided by World Bank's Environmental and Social Framework (ESF), particularly ESS-10.

Information disclosure and consultation processes will continue with affected parties, other interested parties and vulnerable groups during (i) project preparation, (ii) project implementation, and (iii) project operational phases. A variety of methods such as group consultations, individual consultations, and interviews through different offline and virtual medians such as emails, telephone and conference calls etc. and communication through printed and electronic media, appropriate to the target audience, will be used for information disclosure and consultation.



# CHAPTER 9: GRIEVANCE REDRESS MECHANISM, MONITORING AND INFORMATION DISCLOSURE

# 9.1 GRIEVANCE REDRESS MECHANISM

#### 9.1.1 SCOPE

The Grievance Redress Mechanism (GRM) works towards strengthening accountability and providing avenues for project beneficiaries and all stakeholders to provide constructive feedback on project activities. It provides a mechanism that allows for the identification and resolution of issues affecting the project. Thus, it acts to reduce the risk of the project inadvertently affecting beneficiaries and serves as an important feedback and learning mechanism that can help increase the positive impacts of the project.

Grievances should meet the below stated criteria for it to be eligible for redressal under the Project GRM.

- 1. The complaint relates to a project component or activity that is under preparation, active, or has been closed for less than 12 months.
- 2. The complaint is submitted by individuals or communities affected by the project component or activity, or by their authorized representative
- 3. The grievant(s) allege that they have been or will be affected by the project
- 4. Grievances related to the design or suitability of AEDP activities and policies.

The following will not be handled under the Project Grievance Redress Mechanism.

- Grievances not related to AEDP
- 2. Grievances related to government policies and procedures

#### 9.1.2 GRM STRUCTURE

The project practices a 4-tier grievance redress mechanism.

- Tier 1: Island level
- Tier 2: OMSU level
- Tier 3: Grievance Redress Service
- Tier 4: Judiciary

Upon receipt of a grievance, the OMSU focal point will assess whether the grievance can be redressed under the mechanism established by the Project. If it meets the criteria, they must register and log the grievance in the 'Grievance Registry' and identify, and refer to the tier it can be redressed at (whether it can be resolved at the island level, or whether it requires stricter intervention at the OMSU), based on its nature and severity.

Resolution periods for all grievances at Tier 1 and 2 are 15 (fifteen) calendar days. All grievances can be submitted anonymously, and the grievant has the right to appeal any decision taken as outlined in the Project GRM.

# 9.1.3 GRM CHANNELS

Grievances can be submitted via the following channels.

i. Via email: <a href="mailto:feedback.aedp@moe.gov.mv">feedback.aedp@moe.gov.mv</a>

- ii. Via AEDP project website
- iii. Via mail/letter addressed to:

Maldives Atoll Education Development Project, Ministry of Education, 8<sup>th</sup> floor, H. Velaanaage, 20096, Ameer Ahmed Magu, Male' City, Republic of Maldives

- iv. Via feedback boxes at subproject sites.
- v. Via direct messages through social media platforms
  - a. Facebook
  - b. Twitter
  - c. Instagram

Grievances can be submitted anonymously, and all content will be kept confidential.

# 9.1.4 AWARENESS RAISING

The Project GRM will be made available online to the public and at all physical intervention locations during refurbishment works. Additionally, information will be disseminated through project activities, social media and consultations. All OMSU and key implementing agency staff will be trained on the requirements of the GRM.

# 9.1.5 REPORTING

Progress reports shared with the Bank shall include a GRM section which provides updated information on the following:

- Status of establishment of the GRM (procedures, staffing, training, awareness building, budgeting, etc.)
- Quantitative data on the number of grievances received, the number of grievances relevant, and the number of grievances resolved
- Qualitative data on the type of grievances and answers provided, and issues that are unresolved
- Time taken to resolve the grievances
- Channels through which the grievances were received
- The number of grievances resolved at the lowest level, raised to higher levels
- Satisfaction of the grievant with the action taken
- Any procedure related issues
- Factors that may affect the use of the GRM/beneficiary feedback system
- Any corrective measures adopted

Additionally, the Monitoring and Evaluation Specialist, with guidance from the Project Director will monitor and evaluate the grievance redressal process and provide feedback.

More comprehensive details can be found in the Project's GRM document.

# 9.2 ENVIRONMENTAL AND SOCIAL COMPLIANCE MONITORING AND REPORTING

# 9.2.1 SCOPE

The scope of E&S supervision will be limited to activities undertaken and financed by the Project. Supervision of the ESMPs, along with other aspects of the project, will cover monitoring, evaluative review and reporting in order to achieve, among others, the following objectives:

- determine whether the project is being carried out in conformity with environmental and social standards and legal agreements;
- ✓ identify issues as they arise during implementation and recommend means to resolve them;
- recommend changes in project concept/design, as appropriate, as the project evolves, or circumstances change; and identify the key risks to project sustainability and recommend appropriate risk management strategies to the Proponent.

# 9.2.2 INDICATORS

Monitoring of compliance with ESMP specifications by the contractor is essential for proper environmental management and will be conducted primarily by the implementing agency. Ensuring compliance with environmental safeguards is an integral part of the monitoring program. Each respective ESMP will outline monitoring responsibilities and parameters.

A standard Environmental Compliance Monitoring Checklist for Project Activities is presented in **Annexes**, provides the special monitoring checklist to be completed in relation to ensuring safe conditions for workers and the public.

# 9.2.3 MONITORING METHODS

An appropriate environmental and social monitoring plan will be developed aiming to ensure the successful implementation of the ESMPs across the project. This will normally include recording information to track performance and establishing relevant operational controls to verify and compare compliance and progress. Monitoring will be adjusted according to performance experience, as well as actions requested by relevant regulatory authorities and feedback from stakeholders such as community members. This will take place in line with the outputs identified in the Project Stakeholder Engagement Plan and the Labour Management Plan.

Additionally, on-site inspection of construction/refurbishment activities will be undertaken to verify that measures identified in the ESMPs are included in the clauses for contractors and are being implemented. This type of monitoring is similar to the normal technical supervision tasks ensuring that the Contractor is achieving the required standards and quality of work. Photo documentation of non-compliance, as well as best practices will be kept to record implementation conditions efficiently.

# 9.2.4 MONITORING RESPONSIBILITIES AND TIMEFRAME

Quarterly, the OMSU will monitor the implementation of the respective environment and social mitigation measures outlined for all project interventions. Compiled safeguards report will be shared with the WB every 6 months. The responsibility of ensuring timely submission of the reports will fall upon the Social Specialist of the Project. The reports should provide an accurate and objective record of project implementation, including compliance with the requirements of the ESSs. This will include updates on stakeholder engagement activities conducted during implementation in accordance with ESS10.

# 9.2.5 REPORTING AND INFORMATION DISCLOSURE

Some key environment and social monitoring indicators collected through the monitoring process are the number of environment and social risk mitigation measures implemented and financed by the project, number of grievances received and addressed according to the GRM, and number of consultations and visits conducted.

Information on compliance would be disclosed periodically on relevant websites and social media platforms of the Project.

Further, regular World Bank missions will include specialists to monitor the project's compliance with World Bank safeguard policies.

# 9.3 CAPACITY BUILDING ON ENVIRONMENTAL AND SOCIAL SAFEGUARDS

Effective implementation of the Environmental and Social Management Framework will require capacity development for AEDP OMSU, the implementing agencies as well those responsible for implementing sub-projects at grass-root levels. The relevant parties should be trained on the components of the ESMF, World Bank ESF, and procedural requirements of the WB. Implementers need to understand inherent social and environmental issues and values and be able to clearly identify indicators of these. Training will be provided for the Implementing Agencies on how to monitor and report on environmental and social requirements by the E&S Specialists. All involved will also be provided training on the use and implementation of the Grievance Redress Mechanism.

All investors/ contractors are expected to disseminate and create awareness within the workforce regarding ESMP compliance. Specific training on basic Occupational Health and Safety considerations, use of PPP equipment and worker codes of conduct must be conducted. Where contractors do not have existing environmental and social staff, the OMSUs Environment and Social Specialist together with the OMSU and the Implementing Agencies will plan for adequate capacity building within the workforce to be involved.

# 9.4 TRAINING OBJECTIVES

The overall objective of capacity building on environmental and social safeguards is to ensure that compliance remains a participatory process at the sub-project levels across all activities, encouraging stakeholder engagement during the identification, planning, implementation and mitigation stages to monitor and address risks.

The specific objectives of the training included:

- ✓ To ensure that key stakeholders understand the ESMF, how to apply it to subprojects and other activities of AEDP;
- ✓ To encourage stakeholders to utilize the ESMF to develop project specific ESMPs
- ✓ To ensure effective implementation of ESMPs
- ✓ To facilitate compliance monitoring and reporting
- ✓ To actively involve stakeholders and projects affected communities in the screening of environmental and social aspects of AEDP subprojects from design, planning, monitoring and implementation;
- Domesticating the ESMF to fast track the implementation of the associated subprojects.

#### 9.5 SCOPE OF THE ESMF TRAINING

While undertaking this study a capacity needs assessment identified a requirement to strengthen capacity on social and environmental evaluation, screening, mitigation and monitoring. It was established that knowledge of environmental management of implementing institutions is still inadequate. AEDP aims to enhance capacity to enable it to have dedicated staff who can follow on social and environmental challenges of the project to ensure maximum benefits.

Capacity building will take into consideration the integration and fulfilment of the requirements of World Bank Environmental and Social Safeguards as well as those of the Environmental Act, and applicable policies and regulations. The programme should include training directly linked to the implementation of the ESMF as well as training on aspects influencing success of ESMF and was clustered to cater for various target groups. Topics to be covered initially include:

- ✔ Background of the AEDP project its objectives, target groups and footprints;
- ✔ Role of ESMF in implementation of AEDP sub-projects;
- ✓ Environmental Act and relevant environmental regulations;
- ✓ World Bank Environmental and Social Standards;
- ✔ Project screening methods;
- Environmental Impact Assessment (EIA) and Environmental Audit (EA) procedures:
- ✔ Project activities and their potential environmental and social risks and impacts:
- Development of environmental management/mitigation plans;
- Responsibilities for ESMP development, implementation, monitoring and reporting.

The Environmental and Social Safeguard Specialist will be trained by the Environmental Specialist and Social Specialist of the World Bank project team on the ESMF implementation, safeguards and procedural requirements of World Bank.

All contractors are expected to disseminate and create awareness within the workforce ESMP compliance, and any staff training necessary for their effective implementation. Where contractors do not have existing environmental staff, Environmental and Social Specialist of the OMSU will make arrangements for adequate capacity building within the workforce. Where refurbishment work is to be undertaken by community members, training should be provided by the E&S Coordinator and Island Councils, who have been pre-trained on the project and ESMPs. That training should consist of an introductory talk, dissemination of the guidelines, and an onsite talk prior to the start of each new task within component implementation.

# CHAPTER 10: INSTITUTIONAL ARRANGEMENTS FOR IMPLEMENTATION OF THE PROJECT

The Ministry of Finance will be the executing agency and the Ministry of Education will be in overall charge of implementing the Project. The MoE will implement the project through its institutions/bodies, such as NIE, QAD, Physical facilities and infrastructure section and OMSU based on their respective mandates and responsibilities.

#### 10.1 IMPLEMENTATION ARRANGEMENTS

The OMSU to be established within the MoE will need to second/hire environmental and social specialists to focus on the tasks and responsibilities outlined in the ESMF. His/Her roles are specified in detail below. Currently, a Social Safeguard Specialist is employed at the MoE, OMSU and will continue with the same arrangement and further strengthened by recruiting an Environmental Safeguards Specialist. At the moment, both environmental and social safeguard aspects are overseen by the Social Safeguard Specialist. The Environmental and Social Specialists are responsible for the development and implementation of a safeguard plan, establishment, maintenance and raising awareness of the grievance redress mechanism, ensuring adequate implementation of social and environmental safeguard measures in line with World Bank's ES policies and standards for all project activities, preparation of relevant reports based on the grievances and safeguard risks with actions taken for all components of the project, and ensuring timely completion of E&S screenings for all refurbishment activities, among other duties necessary to ensure compliance of all project activities with the E&S standards outlined in the ESMF.

In terms of managing the GRM, the MOE Social Safeguard Specialist is tasked with sorting and all received grievances. The individual will then undertake the GRM process independently and report into the grievance log. The individual will be responsible for ensuring that the activities being implemented are in line with the safeguard measures outlined in the ESMF.

# **Cost Estimate for ES Management**

It is difficult to provide accurate cost estimates for the preparation of safeguards instruments due to the dynamic nature of the environmental and social consultancy market within the Maldives. Drawing from the project experience of other World Bank and donor funded operations and current indicative costs, the following table provides a rough estimation of costs for safeguard instruments.

Instrument	Cost (MVR – local consultant)
ESMP	38,000
Environmental and Social Assessment	77,000

In terms of costs, competition and an increase in the number of consultants available within the country has led to drops in preparation costs since 2016. All safeguards' instruments have been inbuilt in to the project modality and will be financed via the project. Detailed project cost tables will include the necessary costs accordingly.

# 10.1.1 OPERATIONS AND MONITORING SUPPORT UNIT

- The OMSU's main role will be to ensure operational compliance as per the World Bank polices as defined in the Project Appraisal Document, Financing Agreement and Operations Manual and Government policies as applicable.
- The OMSU will be led by a Project Director and will include a team of specialized staff responsible for project management, financial management, procurement, environmental safeguards, social safeguards, and monitoring and evaluation.
- The OMSU will also recruit specialized consultants necessary for specific technical assistance for overall implementation of activities.

 The OMSU will liaise closely and also ensure overall coordination of all Project entities to ensure necessary data and information are shared and collated for reporting to Project Board and the World Bank. (Ref Appraisal stage PAD, 2020)

# 10.1.2 ROLES AND RESPONSIBILITIES OF WORLD BANK

The World Bank project task team, specifically the environmental and social specialists, will provide close supervision and necessary implementation support in the initial stages of the project in conducting screening, preparation of ESIAs and ESMPs;

- Undertake prior review of a sample screening reports, ESMPs, and other relevant documentation of all project interventions.
- Ensure regular missions to review overall E&S performance and provide further implementation support
- Share knowledge on technologies and best practices
- Provide training support on Bank's safeguard policies and requirements of the project.

Table 9: Requisite training programs required for implementation of ESMF

Training Program	Target Audience	Conducted By	Minimum Number to be conducted over project period
ESF E-Learning Program - Online Modules	OMSU Staff	Online Modules	Should be completed within the 1 <sup>st</sup> 2 months post recruitment.
ESMF and ESF Implementation Training: to cover world bank environmental and social management procedures, instrument preparation, consultation and monitoring during project implementation and reporting- (including refresher) - Training for Trainers Modality	OMSU Staff	World Bank Environmental and Social Specialists and team	2 programs at minimum
ESMF and ESF Implementation Training: to cover world bank environmental and social management procedures, instrument preparation and monitoring during project implementation and reporting- (including refresher)	HPA, HCFs, EPA and other IAs as relevant.	OMSU ESSS and Team	3 programs
Training on implementation of Environmental Management Plans-	Contractor Staff of each subproject, including	OMSU ESSS and Team	At minimum once, (prior to the contract commencing on

Based on the subproject specific ESMPs	supervision consultants' environmental officers		the ground) for each subproject in implementation
Respective Occupational Health and Safety considerations, use of PPP equipment and worker codes of conduct must be conducted.	To all contractor staff during the sub-project implementation	Contractor/Invest or	Every 3 months during the contracted project implementation period-specifically targeting the construction phase.

# ANNEXES



- E	nvironmental Protection Agency		- A	li da-1889 yediiiidi
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PA R	ac [+960] 333 5953	زفت	Website: www.epa.gov.mv	ولائيل :

# National Emblem

Ministry of Education

# **Environmental Protection Agency**

# **DEVELOPMENT PROPOSAL SCREENING FORM**

Form No: _	
	(Office Use)

A Development Proposal Screening Decision will be issues after the receipt of this Development Proposal Screening Form.

The form is divided in 2 parts, please complete all parts.

Part 1: Proponents Information
Name of person submitting form:
On behalf of (company, other person, self):
Address:
Telephone Number: ID Card Number:
Fax Number: Date: Year Month
Day
Email: Signature:
Part 2: Project Description
Project Title:
Type of Development:
Location of Project:

Duration of Project:
Government Agencies responsible for Authorization:
Brief description of the project activities not exceeding 3 A4 size papers in chronological order (include information about equipment and machinery to be used):
Details of existing environment of the project location and the changes that will be brought to the environment by the project, not less than 5 A4 size papers:
Expectations of labour requirement to carry out the civil works and description of how that requirement will be met:
□ Please use additional sheets where appropriate
As the proponent of this project, we hereby declare that to the best of our knowledge the information provided here are accurate and complete.
Name:
Date: Year Month Day
Signature:

The Screening Report must include a copy of the technical engineering design for the proposed intervention, at least preliminary designs and description of the proposed project activity.

# 1 ENVIRONMENTAL AND SOCIAL SCREENING REPORT: PROJECT NAME

The Screening Report must include a copy of the technical engineering design for the proposed intervention (where available), at least preliminary concept and description of the proposed project activity.

# A. Description of Intervention

# **Project Identification**

Project title	
Project Proponent	

# **Project Location**

Location	(Location Map and Site Photographs to be Annexed) and Location Name Included Here
Definition of Project Area	Describe the project area and extent of the immediate vicinity at a 500meter radius around the site
(The geographical extent of the project & areas affected during construction)	
	<ol> <li>List all close by infrastructure and or ancillary facilities</li> <li>Sensitive receptors such as places of worship, schools, hospitals etc. should be clearly marked.</li> <li>Any protected marine or terrestrial areas have to be mentioned.</li> <li>Provide for each the distance from the site boundary in meters or KMs</li> </ol>

	Note: these should be marked in the site map clearly.
Project Justification	
Need for the project	Justification of the project
(What problem is the project going to solve)	
Purpose of the project	
(What is going to be achieved by carrying out the project)	
Alternatives considered	
(Different ways to meet the project need and achieve the project purpose)	
Project Description	
Proposed start date	
Proposed completion date	
Estimated total cost	
Present land ownership	
Description of the project	
(With supporting material such as maps, drawings etc. attached as required)	
Project Management Team	

#### **B.** Site Description Questionnaire

#### 1. Site Setting and Land use/Ownership

a) Who is the owner/occupier of the site (refer to land registry/title deed)?

Attach a copy of land approval from relevant ministry and indicate ownership.

- b) What is the current land use of the site?
- c) When was the site first developed to the current land use?
- d) What is the historical land use of the site prior to the current development of the site?
- e) What is the current land use of the properties surrounding the vicinity of the site and adjacent to the site? (Request for land use plan with planned developments at the island/note land use during site vicinity walk around);

# 2. Consultations with island council/local communities and civil society organization

Summaries the notes of consultation conducted

Additional information required on site vicinity - Island Councils or Project Island

- 1) Current and projected population;
- 2) Number of households (and empty houses);
- 3) Planned development activities;
- 4) Present employment by industry;
- 5) Income distribution
- 6) Public health status.

# C. Screening for Potential Environmental Impacts in relation to the proposed project intervention

	Screening question	Yes	No	Significa nce of the effect (Low, moderate , high)	Remarks	
Section	Section A: General					
1	Will construction and operation of the Project involve actions which will cause physical changes in the locality (topography, land	Yes				

	use, changes in water bodies, etc)			
2	Will the Project involve use, storage, transport, handling or production of substances or materials which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health?	Yes		
3	Will the Project produce solid wastes during construction or operation?	Yes		
4	Will the Project release pollutants or any hazardous, toxic or noxious substances to air?	Yes		
5	Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation?	Yes		
6	Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater or coastal waters?	Yes		
7	Will the project cause localized flooding and poor drainage during construction?	Yes		
8	Is the project area located in a flooding location?	Yes		
9	Will there be any risks and vulnerabilities to public safety due to physical hazards during construction or operation of the Project?	Yes		

10	Are there any transport routes on or around the location which are susceptible to congestion or which cause environmental problems, which could be affected by the project?	Yes		
11	Are there any routes or facilities on or around the location which are used by the public for access to recreation or other facilities, which could be affected by the project?	Yes		
12	Are there any areas or features of high landscape or scenic value on or around the location which could be affected by the project?		No	
13	Are there any other areas on or around the location which are important or sensitive for reasons of their ecology e.g. wetlands, watercourses or other water bodies, mountains, forests which could be affected by the project?		No	
14	Is the location within or adjacent to the coastal zone? If so, what is the distance to the coast?	Yes		
15	Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, migration, which could be affected by the project?		No	
16	Are there mangroves, coral reefs, sea grass beds, turtle beach habitats etc. within close proximity?		No	

17	Is the project located in a previously undeveloped area where there will be loss of green-field land	Yes		
18	Will the project cause the removal of trees in the locality?	Yes		
19	Can any of the identified historic or culturally importance sites on or around the location be affected by the project?		No	
20	Are there existing land uses on or around the location e.g. homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying which could be affected by the project?	Yes		
21	Are there any areas on or around the location which are densely populated or built-up, which could be affected by the project?	Yes		
22	Are there any areas on or around the location which are occupied by sensitive land uses e.g. hospitals, schools, places of worship, community facilities, which could be affected by the project	Yes		
23	Are there any Defence Installations / Airport Routes		No	
24	Are there any areas on or around the location which contain important, high quality or scarce resources e.g. groundwater, surface waters, forestry, agriculture, fisheries, tourism, minerals,		No	

	which could be affected by the project?					
25	Are there any areas on or around the location which are already subject to pollution or environmental damage e.g. where existing legal environmental standards are exceeded, which could be affected by the project?		No			
26	Will the project involve treatment of Solid Waste, if so indicate the amounts, nature of waste and briefly describe proposed waste management technologies to be implemented on site.		No			
Section	on B: Social Impact Screening		1	1		
1	Will the project create significant/ limited/ no social impacts? If so please provide details of what they will be.	Yes				
2	Will there be land acquisition resulting in loss of income from agricultural land, plantation or other existing land-use?		No			
3	Will there be land acquisition resulting in relocation of households?		No			
4	Will the project cause any reduction of access to traditional and river dependent communities (to river and areas where they earn for their primary or substantial livelihood)?		No			
5	Will the project cause any displacement or adverse impact on tribal settlement(s)?		No			
6	Will the project lead to any specific gender issues?		No			

7	Will the project create significant / limited / no social impacts during the construction stage?	Yes		
Section	on C: Impacts of Construction			
1	Will the project lead to flooding of adjacent areas ?	Yes		
2	Will it involve the improper storage and handling of substances leading to contamination of soil and water?	Yes		
3	Will the activities lead to elevated noise and dust emission?	Yes		
4	Will project activities lead to disruption to traffic movements?	Yes		
5	Will project activities lead to damage of existing infrastructure, public utilities, amenities etc.?	Yes		
6	Will there be possible conflicts with and/or disruption to local community?	Yes		•
7	Are there adequate facilities for storage of construction goods & materials?	Yes		
8	Will there be a need to establish facilities for storage of any hazardous material?	Yes		
9	Will there be facilities for long term housing for operational workers?		No	
10	Will the construction work (Permanent & Temporary) lead to alterations of the site?	Yes		
11	Are facilities for construction workers (temporary labour camp, drinking water, waste disposal, etc.) required during implementation?	Yes		
12	Are facilities for disposal of solid waste available on the	Yes		

Island - please specify the			
forms in the comments?			

# 7. Conclusion and Screening Decision

# Summary of environmental and social effects:

Assuming that all mitigation measures are implemented as proposed, the following effects can be predicted

N/S - Effect not significant, or can be rendered insignificant with mitigation
SP - Significant positive effect
SN - Significant negative effect
U - Outcome unknown or cannot be predicted, even with mitigation

# 8. Screening Decision Recommendation (check one):

All potentially adverse effects can be classified as minor general construction related impacts and can be minimized/eliminated with known technology. Operational impacts are minimal. Public concern does not warrant further assessment.  Therefore, a thorough Code of Conduct (CoC) would be required prior to the project proceeding.
All potentially adverse effects can be classified as general construction related impacts and are mitigatable with known technology and operational impacts are minimal. Public concern does not warrant further assessment.  Therefore, while a standalone Environmental and Social Assessment would not be required, an Environmental and Social Management Plan would be required prior to the project proceeding.
Potential adverse impacts are significant, hence, a standalone Environmental and Social Impact Assessment, including an Environmental and Social Management Plan is needed before the project can proceed

	Potential adverse impacts are significant; hence, project cannot be justified				
11. Details of Persons Responsible	11. Details of Persons Responsible for the Environmental and Social Screening				
Screening report con	Screening report completed by:				
Name and Designation:					
Date:					
Signature:					
Screening report rev	viewed by:				
Name and Designation:					
Date:					
Signature					
Approved by:					
Name and Designation:					
Date:					
Signature:					

# STANDARD LIST OF ANNEXES TO BE INCLUDED

- Annex 1: Location Map
- Annex 2 Project Description If detailed proposal available, should be submitted with the screening form
- Annex 3: Community Consultations Summary Report
- Annex 4: Land Use Approval where applicable
- Annex 5: MOU signed with island or landowner- where applicable
- Annex 6: EPA Screening Decision- Where Applicable
- Annex 7: Indicative Mitigation Plan for the Identified Risks The following General Guidelines can be used in the preparation of the Environmental and Social Management Plan. Kindly refer to the Environmental and Social Management Framework of the project and the World Bank Groups General Environmental Health and Safety Guidelines for added guidance on identifying impacts and designing relevant mitigation measures.

Construction Site and Construction Workers	<ul> <li>All provisions that are required under Health and Safety Regulation for Construction Industry (2019/R-156) should be strictly adhered to.</li> <li>All workers should be provided with Personal Protective Equipment (PPE) by the contractor. In this regard, the following needs to be observed:</li> </ul>
	<ul> <li>Hard hats should be used by all workers when undertaking construction and when undertaking inspections at height.</li> <li>Enclosed safety shoes should be worn by all construction workers.</li> <li>Safety harnesses should be used by all workers when climbing heights at project sites.</li> <li>Electrical protective gloves should be provided to workers by the contractor when dealing with electrical components.</li> </ul>
	<ul> <li>Chemical protective gloves should be provided to all workers by the contractor when dealing with any chemicals.</li> <li>Construction safety goggles should be worn by all construction workers.</li> <li>Ear plugs should be worn by all construction workers working in environments with high noise (working above 75 decibels).</li> <li>Masks should be worn when dealing with chemicals and when working in dusty environments.</li> </ul>
	<ul> <li>All chemicals should be stored on hard surfaces and should be covered.</li> <li>Potable drinking water should be available at the construction site during the construction phase.</li> <li>Adequate safety signs should be installed at the work site giving clear direction. These should be provided in a language understood by the</li> </ul>
	<ul> <li>workforce.</li> <li>Construction work sites should be demarcated &amp; fenced, and warning signs should be displayed both in English and Dhivehi.</li> <li>When construction is undertaken, clearly demarcated bins for waste disposal needs to be placed and emptied daily.</li> </ul>
	<ul> <li>Open pits should not be left for water to accumulate for a long time.</li> <li>Any stockpiled sand needs to be covered to prevent sand particles from being airborne.</li> <li>All vehicles and equipment used for the project needs to be used by well trained personnel.</li> <li>When working at night, adequate lighting should be provided.</li> </ul>

	<ul> <li>A designated toilet facility should be available within 10 minutes of the construction site.</li> <li>Breaks should be given to the workforce during mealtimes.</li> <li>Firefighting equipment should be available at the construction site, at the workers accommodation and any storage areas used for the project.</li> <li>The site needs to be cleaned daily following completion of day's work.</li> <li>The maximum working hours of all construction workers should be 48 hours per week as per the Employment Act of Maldives.</li> </ul>
Storage and use of hazardous chemicals	<ul> <li>Any chemicals, fuels, waste oil and hazardous waste should be handled and transported carefully. All such chemicals and wastes should be stored and transported in sealed containers. Such chemicals and wastes should be stored in concrete hard surfaces to prevent impacts through any leakages.</li> <li>Stored containers should be regularly inspected to identify any leakages.</li> <li>Any hazardous material storage areas should have firefighting equipment.</li> <li>All vehicle/machinery and equipment operation, maintenance and refueling will be carried out in such a fashion that spillage of fuels and lubricants does not contaminate the ground.</li> <li>All activities should be undertaken in presence of an experienced supervisor.</li> <li>Chemical protective gloves, goggles, masks and safety shoes need to be worn when handling any hazardous material.</li> </ul>
Vegetation Removal and leveling	<ul> <li>Where and if trees and palms fall within the project footprint, option to relocate any trees and palms should be considered first.</li> <li>If relocation is not feasible due to status of the tree/palm (for example palms that are too old and unlikely to survive elsewhere) or due to lack of available space to replant for every tree/palm removed two trees /palms need to be planted at a location identified by the city/atoll/island council.</li> <li>No vegetation within the 20 m coastal zone should be removed for the purpose of the project.</li> <li>No protected trees should be removed as part of the project.</li> <li>Any construction area needs to be leveled to preexisting levels.</li> </ul>
Solid and construction waste during construction phase	<ul> <li>For domestic waste produced by the staff, clearly demarcated bins for waste disposal needs to be placed and emptied daily.</li> <li>For construction, solid waste should be cleared from the work site every day and placed in a designated location.</li> </ul>
Emissions from vehicles	All vehicles used for the project should have an up-to-date road worthiness.
Dust, Noise and Vibration	<ul> <li>Construction equipment should be kept properly stored and secured at a location approved by the council.</li> <li>Materials that are stockpiled at the location for a long period of time should be covered to minimize impact of dust generation due to windy conditions.</li> <li>Ensure that the construction site is wetted regularly to minimize impact of dust as a result of the project.</li> </ul>
Groundwater	<ul> <li>All storage containers need to be inspected regularly for any leaks.</li> <li>If and where dewatering is required, the dewatering permit should be attained as per the requirements of Dewatering Regulation (R-1697/2013).</li> </ul>

Road closure and road safety	<ul> <li>All closures need to be preannounced.</li> <li>All road closures need to be coordinated with the relevant council and Police.</li> <li>Clear markings need to be placed on roads during road closure with indicative lights and warning signs.</li> <li>Following backfilling and resurfacing where and if required, must ensure that preexisting levels are maintained.</li> </ul>
Public access to the work site	<ul> <li>Area in which construction work is undergoing should be closed off for public access.</li> <li>Appropriate safety signs should be placed at the construction site in both English and Dhivehi.</li> </ul>
Labour related impacts	<ul> <li>If foreign labour is used, the labour force needs to be briefed on the language, culture and customs of Maldives.</li> <li>It is imperative that the comprehensive Labour Management Procedures (LMP) developed for the project is followed (link: https://moe.gov.mv/assets/upload/Labor_Management_Procedures_Mald ives_Atoll_Education_Development_Project_P177768pdf)</li> <li>Constant and reliable electricity supply should be available at site.</li> <li>Designated locations for waste disposal with clearly marked bins needs be established. Bins need to be emptied daily.</li> <li>Potable drinking water should be provided.</li> <li>The site needs to be cleaned daily.</li> <li>Monthly inspections to determine pest infestation of the site should be undertaken.</li> <li>Meals if prepared from a local café or restaurant should be from a Maldives Food and Drug Authority certified facility.</li> <li>If Covid-19 restrictions are in place all guidelines issued by Health Protection Agency of Maldives need to be followed.</li> </ul>

# ANNEX 3: ENVIRONMENTAL CLEARANCE PROCEDURE WITH THE EPA

It is recommended that each proponents/investor go through the environmental clearance process for their subprojects. All the planned installations that fall under a sub-project can be lumped together as a single project.

The following process follows the EIA regulations issued by EPA in 2012.

# Step Environmental Clearance Procedure for the major subprojects.

- 1 The Proponent prepares a Development Project Screening form and submit to EPA.
- 2 EPA will complete the process and inform the proponent either to: (i) undertake the preliminary Environmental assessment or (ii) to prepare an Environment Management Plan.
- If a preliminary Environment Assessment is required, the Proponent will prepare the report and submit to EPA for further appraisal.
  - If an ESMP is required, follow Step 5.
- 4 EPA will issue a decision on the Environment Assessment and request to either: (i) prepare an ESMP or; (ii) and Environment and Social Impact Assessment.
  - For an ESMP, follow Step 5; and for an ESIA, follow Step 7
- 5 Proponent will prepare an ESMP and submit to EPA for approval.
- 6 EPA will evaluate the ESMP and issue an approval. No further approvals are required after an **ESMP approval** is granted.
- 7 Proponent will prepare and submit an EIA report.
- 8 EPA will evaluate and either: (i) request additional information or; (ii) **issue a Decision**Note. If a Decision Note is issued, no further approvals are required. If additional information is required, follow Step 9.
- 9 Proponent will prepare the additional information and submit to EPA.
- If the additional information is adequate, EPA will issue a **Decision Note.** If inadequate additional requests can be made and Step 9 will need to be followed.
  - EPA reserved the right to reject a project if there are significant environmental impacts that cannot be substantially mitigated. This situation is very unlikely for the AEDP project, given its low impacts.

Note: All the application forms are available from EPA website: www.epa.gov.mv.

# ANNEX 4: TYPICAL STRUCTURE OF AN ESIA

The Environment Impact Assessment (ESIA) Report would cover the following sections and is based on the EIA regulations 2012.

# **Cover Page:**

Should contain the project title, location(s), consultant names, proponent names and date

# **Executive Summary:**

Should be prepare in local language or if the report is in English, in both Dhivehi and English.

#### Introduction:

A summary of information relating to the proponent, contractors, costing and terms of reference.

# **Project description:**

A brief description of the project including its rationale, objectives, main components, activities, work plan, project management arrangements, inputs and expected output .

# **Analysis of Alternatives:**

This section would address alternatives for the proposed action, which would include the "no project" alternative as well as other alternatives considered before selecting the proposed action. These may include alternative sites .

#### Legal and regulatory considerations:

A summary of the pertinent legislation, regulations and standards, and environmental policies that are relevant and applicable to the proposed subproject, and identify the appropriate authority jurisdictions that will specifically apply to the project. Include permits, approvals and agreements (including roof-lease agreement, if available) in the EIA document.

# **Description of the environment:**

A summary of existing conditions around the site, including any vegetation cover present, adjoining building and how their widows are arranged. An assessment of social conditions in the proposed facility and surrounding buildings may be required.

# **Potential Impacts:**

This section would identify potential environmental impacts that may arise as a result of the proposed project. All cumulative effects will be considered – positive and negative, direct and indirect, long term

and short term. A stronger focus should be on social impact assessment, particularly surrounding buildings and social equity issues.

#### **Mitigation Measures:**

This section would include a detailed explanation of how the potential environmental impacts identified above could be mitigated.

#### **Monitoring Plan:**

This section should include a long term plan for monitoring to ensure that there no adverse impacts due to the project.

#### **Environmental and Social Management Plan:**

Considering the nature of the sub-projects, it is unlikely that any major or irreversible environmental impacts will be encountered. Therefore, the most important section of the EIA would be the section on Environmental Management Plans (ESMPs). Prediction of potential adverse environmental and social impacts arising from project activities will be at the core of the environmental impact assessment process. By following the procedure described in this document and the EIA Regulations 2012, the environmental assessments to be conducted under the Project will be able to identify environmental and social impacts as a result of implementing the sub-projects. While impact identification is important, an equally essential element of this process is to develop measures to eliminate, offset or reduce impacts to acceptable levels during implementation and operation of the projects.

The integration of such measures into project implementation and operation is supported by clearly defining the environmental requirements within an ESMP. ESMPs provide an essential link between the impacts predicted and mitigation measures specified within the EIA and implementation and operation activities. The plan outlines the anticipated environmental impacts, the mitigation measures to minimize these impacts, responsibilities for mitigation, timescales, costs of mitigation and sources of funding.

The AEDP subprojects are classified as Category B Projects. World Bank guidelines state that detailed ESMP's are essential for Category A projects, but for many Category B projects, a simple ESMP or CoC may suffice. The ESMP will address the following aspects:

- Summary of impacts
- Description of Mitigation Measures
- Description of Monitoring Programs
- Institutional Arrangements/responsibilities
- Implementation Schedule and Reporting Procedures Cost estimates and sources of funds

# Objective and Scope of Preparation of Environmental and Social Management and Monitoring Plan (ESMP)

In order to ensure short and long term environmental and social impacts that would arise due to improvement and rehabilitation work (to be described in the first section based on the sub-project/activity) are mitigated, an ESMP will need to be developed as per the scope presented below and in accordance with the ESMF of the Project:

- 1. Identification of impacts and description of mitigation measures: Firstly, impacts arising out of the project activities need to be clearly identified. Secondly, feasible and cost-effective measures to minimize impacts to acceptable levels should be specified with reference to each impact identified. Further, it should provide details on the conditions under which the mitigatory measure should be implemented (ex; routine or in the event of contingencies) The ESMP also should distinguish between type of solution proposed (structural & nonstructural) and the phase in which it should become operable (design, construction and/or operational).
- 2. Enhancement plans: Positive impacts or opportunities arising out of the project need to be identified during the preparation of the check list Environmental Assessment and Social Screening process where applicable. Some of these opportunities can be further developed to draw environmental and social benefits to the local area. The ESMP should identify such opportunities and develop a plan to systematically harness any such benefits.
- 3. *Monitoring programme:* In order to ensure that the proposed mitigatory measures have the intended results and complies with national standards and donor requirements, an environmental performance monitoring programme should be included in the ESMP. The monitoring programme should give details of the following:
  - Monitoring indicators to be measured for evaluating the performance of each mitigatory measure (for example national standards, engineering structures, extent of area replanted, etc).
  - Monitoring mechanisms and methodologies
  - Monitoring frequency
  - Monitoring locations
- 4. *Institutional arrangements:* Institutions/parties responsible for implementing mitigatory measures and for monitoring their performance should be clearly identified. Where necessary, mechanisms for institutional co-ordination should be identified, as monitoring tends to involve more than one institution.
- 5. *Implementing schedules:* Timing, frequency and duration of mitigation measures with links to overall implementation schedule of the project should be specified.
- 6. Reporting procedures: Feedback mechanisms to inform the relevant parties on the progress and effectiveness of the mitigatory measures and monitoring itself should be specified. Guidelines on the type of information wanted and the presentation of feedback information should also be highlighted.
- 7. Cost estimates and sources of funds: Implementation of mitigatory measures mentioned in the ESMP will involve an initial investment cost as well as recurrent costs. The ESMP should include costs estimates for each measure and also identify sources of funding.
- 8. Contract clauses: This is an important section of the ESMP that would ensure recommendations carried in the ESMP will be translated into action on the ground. Contract documents will need to be incorporated with clauses directly linked to the implementation of mitigatory measures. Mechanisms such as linking the payment schedules to implementation of the said clauses could be explored and implemented, as appropriate.

The format to present the ESMP in a matrix is provided below:

Activity	Environmental Impact	Proposed Mitigatory Action	Location	Frequency of Implementation/ Application	Implementation Responsibility	Monitoring Responsibility	Monitoring Frequency	Implementation Progres	
Design Sta	ge								
Pre-Constr	uction Phase	е							
Construction	on Phase								
Operationa	Operational Phase								

Important to note the following when using this ESMP template:

- The ESMP that will be prepared should have all sections in place, except the last column on Implementation Progress.
- Any activity that may be identified as the responsibility of design engineers should not be part of the ESMP that goes into the bid and contract documents of construction contractors.
- The consultant is responsible to ensure the ESMF requirements are taken into consideration in the designing of infrastructure.

The following is a template for presenting adverse social impacts and a relevant mitigation plan for these impacts:

Adverse Social Impact	Mitigation Measures	Location/ Place	Implementing Cost	Responsibility	Timeframe				
(1) Access distur	(1) Access disturbances - Temporary Impact								
(2) Dodostviene C	of a trade of the land of the	us no ob							
(2) Pedestrians Safety Issues - Temporary Impact									

(3) Traffic Conge	stion - Temporary Impacts								
(4) Shifting of Common and Private Utilities - Permanent Impact									
	struction camps, labour on temporary project induc				se impacts on				
(6) Dust, Noise a	nd Vibration - Temporary I	mpact							
(7) Parking of Co	ntractor's vehicles along tl	no Pond Tompo	arary Impact						
(7) Parking of Co	intractor's verificies along the	ie Koau - Tellipo	лагу шірасі						
(0) 0 1 1 2 2 1 111		_							
(8) Social Mobilit	ty Issues - Temporary Impa	ict							
(0) 0	Harlib and Cafety Tanan								
(9) Occupational	Health and Safety - Tempo	orary impact							
(10) Lack of awar	(10) Lack of awareness & gender base violence issues of workers - Temporary Impact								
(11) Handling complaints from community - Temporary Impact									

## The ESMP Presentation

The ESMP should follow the same sequence as the tasks described above including the ESMP matrix provided above.

## **Consultant Qualifications**

The design consultant team should include an expert with at least 8 years of experience preparing environmental management and monitoring plans for infrastructure construction, improvement and rehabilitation, costing of mitigation measures and preparing contractor clauses necessary to capture ESMP implementation needs.

## Reporting and feedback schedule

All submissions related to the assignment should be submitted to OMSU, as hard copies and electronically. During the final submission of the ESMP report, if changes requested during the draft report stage have not been incorporated in a satisfactory manner to the client and the World Bank, the consultant will be required to work further on the document until it is considered satisfactory.

#### ANNEX 6: MINIMAL PROVISIONS TO BE INCLUDED IN CONTRACT DOCUMENTS

Unless the WBGs Standard Bidding Documents, that already contain ESHS provisions are used at the minimum the following provisions shall be included in all contract documents for any physical works that include construction and/or rehabilitation.

## IMPLEMENTATION OF ENVIRONMENTAL AND SOCIAL IMPACTS MITIGATION MEASURES AND MONITORING GENERAL CONDITIONS

The Contractor shall provide adequate measures to avoid, reduce or off-set any environmental and/or social impacts during the construction period due construction activities or any other related activities. The Contractor shall implement the Environment and Social Management Plan (ESMP)/CoC attached with the Bidding Documents. The remedial actions shall comply and be acceptable to Engineer and other project monitoring agencies.

The Contractor shall be responsible to ensure all construction material are sourced from approved sites or licensed commercial vendors. All key environmental parameters such as vibration and noise shall not exceed the limitation imposed by the Environmental Protection agency.

### Applicable Laws, Regulations and Policies covering the proposed project

Following national laws and regulations will be applicable for this project.

- Environment Protection and Preservation Act (Law No. 4/93)
- Regulation on Environmental Liabilities (Regulation No. 2011/R-9)
- Environmental Impact Assessment Regulation, 2007
- By law, Cutting Down, Uprooting, Digging Out and Export of Trees and Palms from one island to another (Regulation No. 493)
- Regulation on Sand and Aggregate Mining
- Regulation on Coral Mining (1990)
- Building Act and Building Code
- Land Use Planning and Management and Traditional Rights to Land

In addition to national laws and regulations, the project should comply with World Bank Operational Policies.

## CONTROLLING ENVIRONMENTAL IMPACTS

The Contractor shall be responsible to maintain and monitor the impacts to the environment to ensure the construction and related works are harmless to the environment. In order maintain the activities in accordance with EMAP, the Contractor shall be asked to quote the required rate in the Bill of Quantity.

The Contractor shall submit methodology and frequency of remedial activities for the approval of Engineer, as per the construction plan addressing the following, but not limited to:

- (a) Identification of construction material extracting sites and disposal sites and related approvals from authorities and/or time-based plan to obtain the approvals;
- (b) Measures to avoid and/or control the occurrence of environmental impacts;
- (c) Measures to provide positive environmental offsets to unavoidable environmental impacts;
- (d) Measures to implement environmental enhancements;

- (e) Site specific environmental management techniques and processes for all construction activities which are important for the quality of the environment in respect to permanent and/or temporary works including specific measures on safety;
- (f) Locational details of important elements such as temporary dust and noise barriers, portable amnesties, truck, plant and material storage, access locations, provision of site hoarding, etc.; and
- (g) Identification of the role, responsibility, authority, accountability and reporting of personnel relevant to compliance with the ESMP

If the Contractor fails to adhere to the ESMP to a level acceptable to the Engineer or other monitoring the Engineer shall be temporarily suspend the work until such time proper mitigation measures are implemented.

If any of the defects are not remedied by the Contractor within the time given by the Engineer, the Engineer shall consider the contractor's work is non-compliance towards environmental safeguards and necessary remedial action shall be undertaken by the Engineer through a third party. Further the cost of the third party and 12% (twelve percent) for supervision charges shall be deducted from the Contractors Interim Payment that has non-compliance towards environmental safeguards. Any additional cost or time incurred due to above shall be at contractors' expense and shall not be subjected to extension of time or claim.

The contractor shall be responsible for cleaning up and disposing of all waste materials and rehabilitating (landscaping) all construction sites and work areas so that these can be returned as close as possible to their previous use. This includes the stabilization and landscaping of all of the construction sites. Any borrow pits that were operated by the contractor are to be reshaped and closed. Any contaminated soil must be removed from fuel and oil storage areas. All construction debris is to be removed. Payment will be withheld from the contractor until all of the sites are satisfactorily cleaned, all spoils removed and the sites satisfactorily rehabilitated. The final payment will be released only after confirmation by the Environmental and Social Specialist that the above-mentioned tasks have been completed satisfactorily by the Contractor.

### **Measurement and Payment**

The measurement will be based on weekly assessment of all activities given as per the construction plan and related ESMP.

## ANNEX 7: ENVIRONNEMENTAL AND SOCIAL MANAGEMENT IN CONSTRUCTION SITES

#### **Management of Construction Sites**

It is acknowledged that most of the physical sub-components will be small-medium scale activities undertaken by local contractors. Nevertheless, it is necessary to apply best practice management measures to ensure that the work will have a minimum effect on the natural environment.

- Vehicles must not be washed at construction sites.
- All liquid fuel and lubricant storage tanks must be bunded to retain the entire contents of the tank in the event of leakage or rupture.
- Construction sites must be watered to suppress dust whenever appropriate during the dry season.
- All site drainage water must be passed through a sediment trap.
- Care must be taken to prevent cement laden drainage water from entering the wetlands.
- Temporary toilets must be provided for construction workers.
- All sewage must be treated before discharge, e.g., using septic tanks.
- All effluents must comply with any national environmental standards.
- All emissions (e.g., from engines, crushers, batching plants, etc.) must comply with any local environmental standards.
- All motor-driven generators, compressors, pumps, etc., must be properly silenced.
- The running of machinery and lighting in the vicinity of housing must be limited to normal working hours.
- · All solid wastes must be properly disposed of construction solid wastes and toxic wastes
- · Proscribed toxic and hazardous substances must not be used or disposed of.
- All plant, equipment and wastes must be removed at the end of construction, and each site
  must be restored to its original condition.
- A Code of Practice must be issued to all construction workers. This should specify required behavior, e.g.
  - No unauthorized cutting of trees or branches.
  - No disposal of any kind of waste into water courses.
  - Behaviour to comply with defined local cultural and religious sensitivities.
  - No unauthorised entry onto private property
  - Recommended health protection measures (see also Health and Safety below).

*Environmental Standards* – Contractors must comply with any national environmental standards. In the absence of relevant national standards, international standards should be applied, e.g. as published in the World Bank Pollution Prevention and Abatement Handbook, 1997.

Toxic and Hazardous Materials - Contractors must not use any substances which are internationally banned.

## Management of construction solid wastes and toxic wastes

- Waste generation is to be minimised. The treatment of waste should follow the hierarchy: Avoid >
  Minimise > Reuse > Recycle > Treat > Dispose.
- All waste arising during construction is to be disposed of to the island's recognised waste disposal site.
   Recyclable materials (e.g., glass, cans, plastics, paper) should be separated and recovered. Organic waste should be composted.
- Any toxic or hazardous waste must be either returned to its source, or stored and disposed of separately
  in consultation with EPA; this includes oil filters, batteries, temporarily paint cans and the packaging of
  toxic construction materials.
- The containers of toxic or hazardous liquids must be punctured or crushed to avoid them being used subsequently for drinking water.
- Waste lubricating oil is to be stored prior to recycling.

- Vehicle batteries are to be stored prior to recycling.
- Vehicle tyres are to be stored prior to recycling.
- Construction generated wood, paper, glass bottles, cans, plastic and other recyclables are to be separated and recycled.
- No waste is to be burnt.

## **Management of Land**

- Topsoil must be removed and stored for future use, before any further excavation work.
- In the case of temporary land taken in agricultural areas, the positions of all walls, fences and hedges should be recorded, and they should be replaced at the end of construction.
- All land used temporarily during construction must be restored to its pre-construction condition.
- Cut and fill volumes must be planned to minimize the generation of spoil.
- Spoil from excavation must only be disposed of in planned spoil disposal sites that have been approved by the EPA; specifically, excavated spoil must not be dumped in wetlands or lagoons or on agricultural land.
- Completed spoil heaps must be profiled, covered in topsoil and grassed to maintain stability.
- All excavations below ground level should be bunded to prevent water inflow or outflow.
- Water pumped out of excavations should be passed through a settlement facility before disposal.
- The use of heavy machinery should be minimized to avoid soil compaction.
- Arrangements must be made for the halting of work and the consultation of specialists from the National Museum, in the event that any potential archaeological remains are uncovered during excavation.

## **Management of Transport**

- All vehicles must be in a safe and legal condition with respect to all of their systems.
- All vehicles must comply with national regulations on emissions and noise.
- All drivers must be properly licensed for the class of vehicle they are driving.
- All vehicles must carry a fire extinguisher and first aid kit.
- All construction vehicles must have upward facing exhaust pipes.
- All vehicles must have audible indicators for reversing.
- Public roads must be promptly cleaned if affected by material loss.
- Truckloads of construction materials or spoils must be covered to prevent dust or losses.
- Where public roads are to be used, an official construction route is to be defined, avoiding housing as much as possible, and this route should be marked with road signs.
- Unsurfaced haul roads must be watered to suppress dust whenever appropriate during the dry season. Vehicles must not be washed at construction sites.

## **Community Facilities**

- Consultation is required with neighbouring communities before the start of construction, to identify any notable features or issues of local concern.
- Features that are to be protected during construction (cemeteries, mature trees, wells, etc) should be marked with brightly coloured tape.
- Excavation works below ground level in the vicinity of settlements should be marked with posts and tapes for safety.
- Temporary bridges or diversions must be provided wherever existing footpaths, tracks or roads are to be cut by construction works.
- Temporary water supplies are to be provided where either an existing water source is to be interrupted by construction, or access to the existing supply is severed.

#### **Health & Safety**

 All employed construction workers must be given a medical examination (including sight and hearing tests) before being accepted for employment. This must be repeated annually. The results of these medical examinations must be kept by the contracting company.

- All employees must be given printed information on the health implications of their work and how to avoid problems. This should incorporate advice in the field of sexually transmitted diseases (STDs), including HIV / AIDS.
- All construction workers must be given H & S training.
- All construction workers must be provided with a set of appropriate personal protective clothing and equipment (e.g., hard hat, hard boots, leather gloves, ear defenders and dust mask). Workers are required to wear appropriate protective equipment before being allowed on active construction sites.
- A permit to work system is to be instituted for all work at hazardous locations, e.g., working over water or in boats.
- All excavations below ground level should be marked with posts and tape.
- Drinking water, toilet and washing facilities must be provided at each active site.
- Each active site must be equipped with a comprehensive First Aid kit and eyewash bottle.
- · All construction vehicles must carry a fire extinguisher and first aid kit.
- All (legal) toxic or hazardous materials (e.g., water chlorination agents) must be stored in a locked, waterproof, ventilated enclosure.
- All compressed gas bottles must be stored, chained in the upright position, in a locked ventilated enclosure.
- International occupational health standards must be applied to all contractors 'workplaces. Contractors should consult the World Bank Environment, Health and Safety Guidelines.

ACTIVITIES		
Title of project:		
Proponent:		
Contractor's Name:		
Monitoring Date:		
Monitor's Name &		
Designation:		

ANNEX 8: ENVIRONMENTAL AND SOCIAL MONITORING CHECKLIST FOR PROJECT

Issue	Proposed measures ESMP)	mitiga (from	Implementing Responsibility	Compliance: Yes/No	Reason for noncompliance	ιþ

Photo-documentation of Issue Identified Above Issue # (from Date of photograph - Photograph depicting issue description above)

 ANNEX 9: SPECIAL MONITORING CHECKLIST FOR ENSURING SAFE CONDITIONS FOR WORKERS AND PUBLIC.

Date inspection conducted:	Location:
Name(s) of those participating in this inspection:	
INDICATE EITHERS:	
A = Acceptable/Yes; U = Unacceptable/No; N/A = Not Applicable	

No.	Safety Title	A	U	N/A	Action Taken
1	PERSONAL PROTECTIVE EQUIPMENT:			- 10	
	Foot protection worn as required?				
	Hand protection used/worn as required?			8	
	Safety glasses and/or goggles available + being used?	*		5.7	
	Hearing protection worn where required?	*		55	Y.
	Hard hats worn when falling object hazard is present?			*	
	Dust masks used when needed?	÷		8	
	Traffic vests being worn where needed?				
2	EMERGENCY ITEMS:	7			
	Emergency phone numbers posted and known by all?	-		100	6
	Emergency eyewash and/or shower units accessible?	*			
	First aid kit available at work site?			7	
3	ELECTRICAL SAFTEY ISSUES: if required				
4	CONSTRUCTION SAFETY & HEALTH ISSUES:				
	100% fall protection in place above 6-5 feet in height?			2	
	Excavation? Protection from cave-ins for >5 feet deep	20		5.5	
	Hand tools are kept in safe				
	Employees instructed in proper use of all power tools? If available			×.	
	Employees below protected from falling objects?	*			f .

			1
	Proper access provided for workers and surrounding community?		
	Trenches Excavation and Shoring:	*	
	Materials are stored at least two feet from trench?		*
	Proper number of workers for each operation?		*
5	Job Information/Administrative:		Į[
	First aid kit stocked?		1
	First aid kit available?	T Y	
	Work areas properly demarcated		The state of the s
	Work areas properly barricaded?		
6	Housekeeping:		
0	Work area neat?		
	Protected from projecting nail points (removed/bent over)?		
	Waste containers provided?		
	Waste containers provided:  Waste containers used?	8 8	
-	Waste Containers useu:		
7	General:		1
	Toilet facilities available?		1
	Toilet facilities maintained?	The state of the s	1
	Drinking water available?		1
	Visitor hard hats available?	*	
	Visitor hard hats used?		
	Record Maintaine at Site level:		*
	Unsafe Acts or Practices Observed:		
	Comments:		
	Signature:	Date:	

## ANNEX 10: GUIDELINES FOR HEALTH AND SAFETY OF WORKERS, COMMUNITIES AND VISITORS

Health and safety of workers and the public should be designed into constructions, before and during and after the building phase. It is cheaper and easier to control risks in construction to workers as well as the public before work starts on site by proper planning, training, site induction, worker consultation and incorporating strict safety procedures in construction plans. The proposed project interventions will mostly involve small to medium scale construction sites. As such, extreme dangers posed by working in environments such as great heights, deep water and involving dangerous chemicals and radioactive material will not be present. Potential dangers associated with ESCAMP sites will include falling from moderate heights, vehicle accidents, falling into trenches, drowning, breathing dust and other air pollutants, back aches caused by handling heavy material, wildlife attacks, etc. and can be mitigated with following safety guidelines.

EA/ESMP for each site should mandatorily include a risk assessment as to what are the hazards involved in the work site, who might be harmed and how seriously, how likely this harm might happen and what actions are required to eliminate or reduce the risk and incorporate such measures in the ESMP and clearly set out in the tender documents. All sub-projects must observe health and safety regulations, hence during implementation it is important to check if these control measures are put in place and are meeting the legal requirement.

Further guidance can be found in the World Bank Group General EHS Guidelines. The following measures have been developed to fit the country context based on the General EHS Guidelines.

#### **TRAINING**

- Ensure constructors carry out suitable training programs on occupational health and safety for workers prior to commencement of construction, especially with regard to working in wild territory.
- Ensure only experienced and well-trained workers are used for the handling of machinery, equipment and material processing plants
- Ensure all persons, including managers, are trained and able to carry out their work without risk to the safety or health of themselves, other workers or the public

#### PERSONAL PROTECTIVE EQUIPMENT

- Ensure appropriate safety equipment, tools and protective clothing are provided to workers and that safe working methods are applied. A safety inspection checklist should be prepared taking into consideration what the workers are supposed to be wearing and monitored.
- Any person who works or operates in an area where there is a risk of flying objects, such as splinters, should wear safety goggles at all times. These should be securely fitted to the face. Welders should protect the entire face from hot sparks and bright rays by using a welding mask.
- Any person exposed to high levels of dust or hazardous gasses (when working in tunnels) should wear respiratory protection in the form of disposal masks or respiratory masks which fit more snugly around the nose and mouth.
- Any person working in an area where there is the risk of being struck on the head by a falling
  or flying object should wear a hard hat at all times. These should be well maintained in order to
  be fully effective, and any helmets or hard hats that are damaged or cracked should
  immediately be replaced.
- All workers will be required to wear shoes or strong boots to prevent sharp objects from penetrating or crushing the foot. Those working in muddy conditions and in canals with polluted water should avoid hand/foot contact with water and should never wear slippers.

Road workers should wear reflective vests to avoid being hit by moving vehicular traffic.

#### SITE DELINEATION AND WARNING SIGNS

- Ensure delineation devices such as cones, lights, tubular markers, orange and white strips and barricades are erected to inform about work zones.
- Ensure all digging and installing work items that are not accomplished are isolated and warned of by signposts and flash lamps in night time.
- Ensure dangerous warning signs are raised to inform public of particular dangers and to keep the public away from hazards.
- Ensure rehabilitation of trenches progressively once work is completed.
- The safety inspection checklist must look to see that the delineation devices are used, whether they are appropriately positioned, if they are easily identifiable and whether they are reflective.

#### **EQUIPMENT SAFETY**

 Work zone workers use tools, equipment and machinery that could be dangerous if used incorrectly or if the equipment malfunctions. Inspections must be carried out to test the equipment before it is used, so that worker safety can be secured. Inspections should look for evidence of wear and tear, frays, missing parts and mechanical or electrical problems.

#### MATERIAL MANAGEMENT

 Ensure easily flammable materials are not be stored in construction site and that they are transported out of project site

#### **EMERGENCY PROCEDURES**

- Ensure an emergency aid service is in place in the work zone.
- Ensure all site staff is properly briefed as to what to do in the event of an emergency, such as who to notify and where to assemble for a head count. This information must be conveyed to employees by the site manager on the first occasion a worker visits the site.

#### CONSTRUCTION CAMPS

- Ensure installation of adequate construction camps and sanitation facilities for construction workers to control the transmission of infectious diseases.
- Ensure that adequate warning is provided on issues of poaching and wildlife attacks.

#### INFORMATION MANAGEMENT

- Develop and establish contractor's own procedure for receiving, documenting and addressing complaints that is easily accessible, culturally appropriate and understandable to affected communities and incorporate it with the Project GRM.
- Provide advance notice to local communities by way of information boards about the schedule of construction activities.

#### WORKER CONSULTATION

Consulting the workforce on health and safety measures is not only a legal requirement, it is an
effective way to ensure that workers are committed to health and safety procedures and

improvements. Employees should be consulted on health and safety measures and before the introduction of new technology or products.

## ANNEX 11: LIST OF SCHOOLS PROPOSED FOR AEDP SUPPORT UNDER COMPONENT 1 (WHICH COVERS REHABILITATION OF EXISTING FACILITIES)

#	Zone	Atoll	Island	School	No of students
1	North	НА	Ihavandhoo	Ihavandhoo School - GS79	785
2	North	HDH	Kulhudhuffushi	Afeefudin School - GS72	908
3	North	SH	Funadhoo	Funadhoo School - GS59	610
4	North Central	N	Holhudhoo	Meyna School - GS47	379
5	North Central	R	Hulhudhuffaar u	Hulhudhuffaaru School - GS57	341
6	North Central	В	Eydhafushi	B.Atoll Eduction Centre - GS01	706
7	North Central	LH	Hinnavaru	Lh. Atoll Education Centre - GS22	526
8	Central	K	Kaashidhoo	K. Atoll School - GS36	463
9	Central	AA	Ukulhas	Ukulhahu School - GS150	358
10	Central	ADH	Mahibadhoo	ADh. Atoll Education Centre - GS10	540
11	Central	V	Keyodhoo	Keyodhoo School - GS70	196
12	South Central	М	Muli	M.Atoll Education Center - GS23	254
13	South Central	F	Nilandhoo	F. Atoll Education Centre - GS37	557
14	South Central	Dh	Kudahuvadhoo	Dh. Atoll Education Centre - GS24	777
15	South Central	Th	Thimarafushi	Th. Atoll Education Centre - GS04	272
16	South Central	L	Fonadhoo	L. Atoll Education Centre - GS17	679
17	Southern	GA	Villingili	G.A. Atoll Education Centre - GS05	585
18	Southern	GD	Thinadhoo	G.Dh Atoll Education Centre - GS26	437
19	Southern	Gn	Fuah Mulah	Gn. Atoll Education Centre - GS13	346
20	Southern	Sn	Hithadhoo	Hithadhoo School - GS03	1010
21	Southern	Sn	Meedhoo	S. Atoll School - GS16	603
22	Male	Male city	Male	Rehendhi School - RS	1997
23	Male	Male city	Male	Jamaluddin School - JS	2117
24	Male	Male city	Male	Kalaafaanu School - KS	1537
25	Male	Male city	Male	Aminiya School - AS	2450
26	Male	Male city	Male	Muhyiddin School - MUH	735
27	Male	Male city	Male	Thaajuddeen school -TS	1589
28	Male	Male city	Male	Majeediyya School -MS	1478