





## USAID CLIMATE ADAPTATION PROJECT

Enterprise Development Program for Maldives

Climate Adaptation & MSMEs In the Maldives: Context Analysis for Tourism, Fisheries & Agriculture Sectors

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## **Acronyms**

ADB Asian Development Bank

AgroNAT Agro National Corporation

BCC Business Centre Corporation

BML Bank of Maldives

CIB Credit Information Bureau

CIR Credit Information Report

COP Conference of Parties

CSR Corporate Social Responsibility

EDP USAID Maldives Enterprise Development Program

FDI Foreign Direct Investment

GCCA+ Global Climate Change Alliance Plus Initiative

GCF Global Climate Fund

GDP Gross Domestic Product

GEF Global Environment Fund

HIES Household Income and Expenditure Survey

IUCN International Union for Conservation of Nature

MIFCO Maldives Fisheries Corporation

MSME Micro- Small & Medium Enterprises

MVR Maldivian Rufiyaa

SDFC SME Development Financing Corporation

SDG Sustainable Development Goals

SME Small & Medium Enterprises

SOE State Owned Enterprise

UNEP United Nations Environment Program

UNESCO United Nations Educational, Scientific and Cultural Organization

US United States

WB World Bank

#### **CONTEXT ANALYSIS**

#### 1. Introduction

Innovation-driven entrepreneurship can help the Maldivian tourism, agriculture, and fisheries sectors adapt to climate change through technology infusion and diffusion and new market approaches. Entrepreneurs can devise and deploy market-driven solutions that enable people engaged in these sectors to adapt to the adverse impacts of a rapidly changing climate, and to exploit the resulting emerging opportunities. However, entrepreneurs and their companies, especially early-stage businesses, face significant challenges establishing themselves. Women-led enterprises also face unique challenges, especially in terms of accessing finance. Global evidence shows that education, mentorship, and financing can help these companies overcome challenges such as raising capital and gaining customer traction much faster.

A wide array of technologies and enterprises have the potential to de-risk livelihoods and lives in fisheries, tourism, and agriculture. Although, they may not be overtly branded as climate-friendly or sustainable enterprises, these technologies and businesses can provide goods or services that can increase access to information, facilitate market access, increase production or logistical efficiency, directly or indirectly reduce resource use, or expand economic opportunity in ways that reduce the adverse impacts of climate change

The USAID Climate Adaptation Project is a five-year program to enhance climate adaptive capacity in the Maldives. One key objective of the project is to identify and scale up innovative solutions to adaptively manage climate risks through market-driven private sector and community engagement.

Under this grant, FJS Consulting will design and implement USAID Maldives Enterprise Development Program (EDP) to support and rapidly develop business concepts and early-stage businesses into scalable and sustainable enterprises that can provide goods or services that can serve to de-risk agriculture, tourism and fisheries associated livelihoods in the context of observed and anticipated climate change impacts.

The project includes the following activities: an Awareness and Outreach Campaign that builds climate change adaptation and resilience awareness to motivate entrepreneurs to join the EDP; an Onboarding Process that supports early-stage enterprises to ensure that the cohort of EDP-supported enterprises are all at a similar stage of development; and a defined-duration cohort-based core Enterprise Development Program to rapidly develop business concepts and early-stage businesses into scalable and sustainable enterprises.

The target participants for the EDP are micro, small and medium-sized enterprises (MSME) with a business idea or ideas for an innovative product or service that can contribute directly or indirectly to the tourism, fisheries, or agriculture and related sectors in the Maldives.

This context analysis provides a brief overview of the current situational context in which MSMEs operate in the Maldives, the challenges and barriers faced by MSMEs and suggests a number of ways forward. There is attention given to the ways in which this context interacts with climate change impacts, implications for business, and climate adaptation strategies underway in the Maldives overlap with one another within the public and private sectors.

## 2. Background

### 2.1. Key economic sectors and climate change impacts

Maldives, a country of around 550,000 people dispersed across 185 islands, is an archipelago of 26 natural atolls, comprising 1190 small islands in the Indian Ocean. The islands cover an area of about 90,000 km² measuring 750km from north to south and 120km from east to west. Only about 1% of the country constitutes land mass; conversely approximately 99% of the country's territory consists of ocean. The abundant marine natural resources have historically and in recent times formed the basis of the key economic sectors in the country. The fisheries sector has been the traditional major economic contributor until the 1970s, when the introduction and rapid expansion of tourism led to a continual decline in the contribution of the fisheries sector to GDP. In 2017, tourism contributed 19.9% to the GDP, whilst fisheries accounted for 4.4% and agriculture 1.2%.¹ Nonetheless, the fisheries sector remains an important part of economic activity and contributes significantly in terms of employment and livelihood, value added production and export returns. Likewise, the agricultural sector – though consisting largely of subsistence and supplementary-income farming – plays a key role in supporting socioeconomic viability and food security in the country.

The national economic discourse and policy action in the Maldives is primarily dominated and driven by the large industries of tourism, construction, transportation, telecommunications, and wholesale trade<sup>2</sup>. It has been only in the past decade that the MSME sector has generated national attention and policy action, with legislative and financial support for growing the sector and supporting thousands of MSMEs that provide employment and livelihood opportunities for numerous Maldivians. The MSME sector is more diverse with a range of economic activities from farming, handicraft, rope-weaving, boatbuilding, trade and retail, hospitality, small scale manufacture of goods (such as souvenirs and food products), small-scale construction, carpentry, masonry, sand mining, professional and technical services, and other activities.

Maldives has achieved relative prosperity and is categorized as an upper-middle class country; it has made good post-covid recovery and is expected to show a robust economic growth trajectory in the coming year. The Maldives human development indicators in health, education and poverty are good, with life expectancy over 78 years, literacy rate approaching 100% and in 2019/2020, the national poverty rate was noted to be 5.4%.<sup>3</sup> Nonetheless, the country continues to face significant macroeconomic and multi-dimensional development challenges. The Maldivian economy is very vulnerable to external shocks due to its high dependence on the tourism and fisheries sectors and heavy reliance on imports. The government provides generous subsidies to the fisheries sector and food and fuel subsidies to the public through SOEs that contain domestic price increases. Spatial distribution of the population means increasing costs for providing the public with logistical support and services. The Maldives financed several of its physical and social

<sup>&</sup>lt;sup>1</sup> Ministry of Fisheries, Marine Resources & Agriculture (MoFMRA) (2019) *National Fisheries & Agricultural Policy* 2019-2029. MoFMRA/Food and Agricultural Organization. Maldives. Retrieved from <a href="https://faolex.fao.org/docs/pdf/mdv205058.pdf">https://faolex.fao.org/docs/pdf/mdv205058.pdf</a> Accessed 20 September 2022

<sup>&</sup>lt;sup>2</sup> Maldives Bureau of Statistics (2019) *Household Income & Expenditure Survey: Small Business.* Maldives Bureau of Statistics. Maldives. Retrieved from <a href="https://statisticsmaldives.gov.mv/hies-2019-small-business/">https://statisticsmaldives.gov.mv/hies-2019-small-business/</a> Accessed 20 September 2022

<sup>&</sup>lt;sup>3</sup> International Bank for Reconstruction and Development (IBRD) & World Bank (WB). (2022) *Poverty and Inequality in Maldives*. IBRD/WB. Washington DC. This is calculated at the national line of MVR71.40 (US\$8.1 per person per day or MVR2173.00 per person per month). The poverty rate is 9.5% in the atolls and 0.9% in Male'. Despite its low poverty rate, Maldives remains an unequal country, with atolls containing 93% of the country's poor. Retrieved from <a href="https://documents1.worldbank.org/curated/en/099050006092240654/P175692013149d03082ee01cbf1e014aed.docx">https://documents1.worldbank.org/curated/en/099050006092240654/P175692013149d03082ee01cbf1e014aed.docx</a> Accessed 21 September 2022

infrastructure investments through external non-concessional sources and sovereign guarantees. These investments – while boosting economic potential, contributing to sustained middle-term growth and reducing poverty levels – have exacerbated fiscal and debt vulnerabilities. The Maldives has high deficit, high public debt levels, limited economic diversification and a narrow tax base. Rising global prices are likely to put pressure on public finances. Debt serving risks remain high in the medium-term.<sup>4</sup>

An equally pressing development challenge is vulnerability to climate change. The annualized damage to national GDPs across the world stemming from climate risk is estimated to be approximately 7% by 2030.<sup>5</sup> As the lowest-lying country in the world at just an average elevation of 1m above sea level, Maldives faces some of the worst impacts of rising sea levels, swell waves, frequent storm surges, increasing impacts of El Nino southern oscillation, warmer air and sea temperatures. 6 More than half the population live within 100m of the coast and about 70% of the country's infrastructure is located within this area. In addition, Maldives is likely to experience the impacts of ocean acidification, strong cyclones, and changing rainfall patterns. Coral reefs, the first line of natural wave defense for the Maldives (they are estimated to decrease wave energy and wave height by 97% and 84% respectively<sup>7</sup>) are already affected. Wetland ecosystems – which help flood and soil erosion control, groundwater recharge, and freshwater storage – are similarly affected. Islands face severe risks for floods, soil erosion and groundwater salination. Moreover, Maldivian coral reefs are one of the richest in the world in terms of species diversity and natural beauty; they host over 1900 species of fish, 187 corals and 350 crustacean species.8 Coral bleaching and reef degradation can affect the reef ecosystem, marine life population, fish stocks in the vicinity and impact their aesthetic appeal. These climate change impacts can be expected to affect the key economic sectors of tourism, fisheries and agriculture and related sectors such as transportation and telecommunications, all of which will in turn significantly and negatively impact island communities and livelihoods as well as the national economy.

Climate change impacts are already well underway in the Maldives: severe rates of shoreline erosion affect about 64% of islands,<sup>9</sup> and in recent years more than 90% of inhabited islands have reported some flooding.<sup>10</sup> Annual flooding now occurs on 37% of the islands; and freshwater shortages during dry season affect about half of all islands requiring emergency water distribution measures. Overfishing and exploitation of marine resources have already endangered several fish

<sup>&</sup>lt;sup>4</sup> The World Bank in Maldives: Overview Country Context. Retrieved from https://www.worldbank.org/en/country/maldives/overview#1 Accessed 24 December 2022

<sup>&</sup>lt;sup>5</sup> Altamirano, M. A. (2021). Leveraging Private Sector Investments in Adaptation: The evolving role of climate finance in enabling a paradigm shift. Retrieved from <a href="https://www.cmia.net/news/press-releases/mobilising-private-finance-for-adaptation-the-case-for-a-fair-transition-2/">https://www.cmia.net/news/press-releases/mobilising-private-finance-for-adaptation-the-case-for-a-fair-transition-2/</a> Accessed 24 September 2022

<sup>&</sup>lt;sup>6</sup> Muller, Nicholas (2022 Feb 16) Seeking Higher Ground: Climate Resilience in the Maldives. *The Diplomat*. Retrieved from <a href="https://thediplomat.com/2022/02/seeking-higher-ground-climate-resilience-in-the-maldives/">https://thediplomat.com/2022/02/seeking-higher-ground-climate-resilience-in-the-maldives/</a> Accessed 20 September 2022

<sup>&</sup>lt;sup>7</sup> Ferrario, F., Beck, M. W., Storlazzi, C.D., Micheli, F., Shepard, C.C & Airoldi, L. (2014) The effectiveness of coral reefs for coastal hazard risk reduction and adaptation. *Nature Communications* Issue 5 Article No: 3794 (2014). Retrieved from <a href="https://www.nature.com/articles/ncomms4794">https://www.nature.com/articles/ncomms4794</a> Accessed 21 September 2022

<sup>&</sup>lt;sup>8</sup> World Bank. (2010, April 6). Climate change in the Maldives. World Bank.

https://www.worldbank.org/en/news/feature/2010/04/06/climate-change-in-the-maldives cited in Sharma, A. & Sommer, N. (2022) Anthropogenic Threats to Ecosystem Services of Maldivian Coral Reefs: Current Policies and Solutions *Journal of Student Research High School Edition* Volume 11 Issue 2. Retrieved from https://jsr.org/hs/index.php/path/article/download/2892/1138) Accessed 15 October 2022

<sup>&</sup>lt;sup>9</sup> Maldives Environment Minister Aminath Shauna.(2021, September) Interview with Adam Behusi for *Finance & Development: In the Trenches* September 2021. Retrieved from <a href="https://www.imf.org/-/media/Files/Publications/Fandd/Article/2021/September/maldives-climate-change-aminath-shauna-trenches.ashx">https://www.imf.org/-/media/Files/Publications/Fandd/Article/2021/September/maldives-climate-change-aminath-shauna-trenches.ashx</a> Accessed 21 September 2022

<sup>&</sup>lt;sup>10</sup> Ministry of Environment, Energy and Water [MEEW] (2007). National Adaptation Programme of Action: The Republic of Maldives. Retrieved from <a href="http://unfccc.int/resource/docs/napa/mdv01.pdf">http://unfccc.int/resource/docs/napa/mdv01.pdf</a> Accessed 22 September 2022

species in the Maldives<sup>11</sup>; conservation efforts of these species are made more difficult by escalating climate change impacts on marine life and environment. Storms, strong winds and heavy rainfall are more frequent, damaging crops and affecting transport of goods.<sup>12</sup> Additionally, epidemic outbreaks related to increase in disease vectors (dengue, chikungunya, rodents and pests, crop diseases etc.) are also noted climate change impacts due to warmer temperatures and heavy irregular rainfall,<sup>13</sup> exacting a toll on quality of human life, agricultural crops, flora and fauna and livelihoods.

The highly fragile ecosystems of the marine and coastal environment require ongoing costly protection and restoration efforts. Financial resources that could have been spent on enhancing economic development and strengthening public benefits such as healthcare and education are being allocated to sea protection walls, embankment, desalination, water and irrigation systems, flood defenses, and to offset the effects of occasional extreme weather events, for instance heavy storm damage to built infrastructure and investments, emergency aid for water shortages in drought conditions or helping communities deal with annual flooding. The 2004 tsunami gave a foretaste of the high costs that can be wrought by inundation and storm damage, with an estimated half a billion US dollars of infrastructural loss and damage and erasing almost half of the country's GDP. The seemingly slow but fast-gathering forces of climate change are likely to have an equally devastating impact on the country's economic future unless action is taken globally and locally to manage such devastation.

### 2.2. Climate adaptation: initiatives, financing and adaptation strategies

Environment protection has been part of the national Maldivian discussion since the 1980s, unsurprising in a country reliant on its scenic beaches, pristine waters and abundant seas to generate tourism and fishing. Early recognition of the potential impacts of rising sea levels on small island developing states led to high-level advocacy efforts, with the Maldives hosting the first international small states conference on sea level rise in November of 1989, raising global attention to the growing concern and issue. 14. Advocacy efforts have continued over the past decades and have been aimed at multilateral development institutions and developed countries calling for urgent action to reduce greenhouse emissions. At the same time, starting the implementation of SDGs has shaped the national discourse, with marine coastal and wetland conservation, biodiversity, moves to renewable energy, pollution reduction, and responsible consumption and waste management becoming prominent issues leading to several relevant policy and local initiatives.

More recently, Maldives has ramped up its efforts, with a substantial part of the GDP spent on adaptation and mitigation measures in response to escalating climate change impacts. Simultaneously managing continued sustainable economic development, requisite levels of debt servicing and climate mitigation and adaptation efforts to keep up with escalating climate change impacts is an incredibly challenging task for governments of climate-vulnerable countries. This requires a carefully orchestrated balancing act and vigilant attention to foreseeable external events, and certainly not one that governments can manage alone.

<sup>&</sup>lt;sup>11</sup> Food and Agriculture Organization (2019) *Fishery and Aquaculture Country Profiles Maldives* Retrieved from <a href="https://www.fao.org/fishery/en/facp/mdv?lang=en">https://www.fao.org/fishery/en/facp/mdv?lang=en</a> Accessed 22 September 2022

<sup>&</sup>lt;sup>12</sup> IFRC Climate Centre (2021) *Climate Change Impacts on Health and Livelihoods: Maldives Assessment*. Retrived from <a href="https://www.climatecentre.org/wp-content/uploads/RCRC\_IFRC-Country-assessments-MALDIVES-3.pdf">https://www.climatecentre.org/wp-content/uploads/RCRC\_IFRC-Country-assessments-MALDIVES-3.pdf</a> Accessed 23 September 2022

<sup>&</sup>lt;sup>13</sup> GCCA+ (undated) Support to Climate Change Adaptation & Mitigation in Maldives. Retrieved from <a href="https://www.gcca.eu/programmes/support-climate-change-adaptation-and-mitigation-maldives">https://www.gcca.eu/programmes/support-climate-change-adaptation-and-mitigation-maldives</a> Accessed 22 September 2022

<sup>&</sup>lt;sup>14</sup> Small States Conference on Sea Level Rise, Male' 14-18 November 1989. Report prepared by Conference Secretariat. Retrieved from <a href="https://www.islandvulnerability.org/slr1989/report.pdf">https://www.islandvulnerability.org/slr1989/report.pdf</a> Accessed 13 January 2023

International assistance has been forthcoming for substantive climate adaptation measures: between 2009 and 2013, the Global Climate Change Alliance Plus Initiative (GCCA+) provided support for a €7.20mn project to develop and implement a climate change strategy and action plan, focusing on wetlands conservation, water desalination, coral reef monitoring and waste management.<sup>15</sup> In 2015, World Bank supported the government in a climate change adaptation project in selected islands aimed towards improving wetland and coral reef conservation and management, and the establishment of a solid waste management system to protect the coral reefs and the fragile island ecosystems.<sup>16</sup>

The Green Climate Fund (GCF) provided the Maldives with a grant of US\$28.2mn implemented in 2017 for managing climate change induced water shortages, in the provision of safe and secure freshwater to 105,000 people across a period of 5 years. <sup>17</sup> The project comprised of integrated water supply systems, decentralized dry season water supplies and improvements to groundwater quality. Groundwater becomes increasingly saline as a result of climate change induced sea level rise and variable rainfall patterns. Using observed sea levels at three stations located in the northern, central and southern regions of the Maldives, analysis suggests that upward trends in the mean sea level for the country: rough sea level has been recorded at 4.4mm per year<sup>18</sup>, but studies suggest this varies across the country with records indicating mean sea level rise at 3.46  $\pm$ 0.25 mm per year in the south (Gan: 1989-2015),  $4.38 \pm 0.36 \text{ mm}$  per year centrally (Male': 1991– 2015) and 4.22  $\pm$  0.36 mm per year at Hanimaadhoo in the north (1992–2015). <sup>19</sup> In a video documentary on water shortages in the Maldives, the project mentions in several places the possibility for private sector engagement to take up components of water supply and management as a potential business opportunity.<sup>20</sup> There are three Biosphere Reserves established in the Maldives – Baa, Fuvahmulah & Addu – with support from the Green Environment Fund (GEF), USAID and IUCN. These are learning spaces for testing approaches on sustainable natural resource development, conserving biodiversity and mitigating climate change impacts on local economies.<sup>21</sup>

Despite its history of environmental protection, sustainable development focus and climate change advocacy, the discussion around climate adaptation is relatively new in the Maldives as elsewhere. Climate adaptation is most easily understood in the context of infrastructural and system-wide interventions because of prominent physical infrastructure adaptation interventions. Prominent public sector climate adaptation projects most commonly take the form of system-scale intervention for protecting a common resource or public good, require coordination amongst

<sup>&</sup>lt;sup>15</sup> GCCA+ (undated) Support to Climate Change Adaptation & Mitigation in Maldives. Retrieved from <a href="https://www.gcca.eu/programmes/support-climate-change-adaptation-and-mitigation-maldives">https://www.gcca.eu/programmes/support-climate-change-adaptation-and-mitigation-maldives</a> Accessed 22 September 2022

<sup>&</sup>lt;sup>16</sup> International Development Association (2015) Project Appraisal Document on a Proposed Grant of US\$ 4.21mn to the Republic of Maldives for a Climate Change Adaptation Project. World Bank Group. Retrieved from <a href="https://documents.worldbank.org/en/publication/documents-">https://documents.worldbank.org/en/publication/documents-</a>

<sup>&</sup>lt;u>reports/documentdetail/468281467986350615/maldives-climate-change-adaptation-project-ccap</u> Accessed 23 September 2022

<sup>&</sup>lt;sup>17</sup> Green Climate Fund (undated) FP007 Supporting vulnerable communities in Maldives to manage climate change induced water shortages. Retrieved from <a href="https://www.greenclimate.fund/project/fp007">https://www.greenclimate.fund/project/fp007</a> Accessed 23 September 2022

<sup>&</sup>lt;sup>18</sup> Impact2C (undated) Social Change and Sea Level Rise in the Maldives. Retrieved from <a href="https://www.atlas.impact2c.eu/en/non-european-hotspot/maldives/social\_change\_slr/?parent\_id=33">https://www.atlas.impact2c.eu/en/non-european-hotspot/maldives/social\_change\_slr/?parent\_id=33</a> Accessed 13 Jan 2023

<sup>&</sup>lt;sup>19</sup> Wadey, M. Brown, S., Nicholls, J. & Haigh, I. (2017) Coastal floods in the Maldives: an assessment of historic events and their implications. *Natural Hazards* 89 131-159 <a href="https://doi.org/10.1007/s11069-017-2957-5">https://doi.org/10.1007/s11069-017-2957-5</a> Retrieved from <a href="https://eprints.soton.ac.uk/412275/1/Wadey\_et\_al\_Maldives\_paper\_2017.pdf">https://eprints.soton.ac.uk/412275/1/Wadey\_et\_al\_Maldives\_paper\_2017.pdf</a> Accessed 13 January 2023
<sup>20</sup>UNDP Climate (2017) Waters of Paradise – Adapting to Climate Change in the Maldives. Retrieved from <a href="https://www.youtube.com/watch?v=mKoppdJ6H4c&feature=emb\_imp\_woyt">https://www.youtube.com/watch?v=mKoppdJ6H4c&feature=emb\_imp\_woyt</a> Accessed 22 September 2022
<sup>21</sup> Corporate Maldives (2020, Oct 29) News: Maldives Boasts Not One; Three Biosphere Reserves, How Many Have you Visited? Retrieved from <a href="https://corporatemaldives.com/maldives-boasts-not-one-three-biosphere-reserves-how-many-have-you-visited/">https://corporatemaldives.com/maldives-boasts-not-one-three-biosphere-reserves-how-many-have-you-visited/</a> Accessed 13 January 2023

multiple stakeholders, are capital intensive, and have delayed or dispersed benefits to the community and economy or in some cases, simply negate or mitigate against ongoing difficulty. Other public sector climate adaptation strategies include introducing legislative, regulatory and policy-level measures that guide and facilitate action, for instance setting technical standards, environmental protection, conservation, standards for provision of utilities, building codes, crisis preparation and management and undertaking emergency response measures.<sup>22</sup>

Public sector adaptation strategies can also include the creation of adaptation information; these could mean information that shape actions and choices by individuals, institutions, or enterprises as well as technical information relating to climate and weather phenomena that can be used by these entities is collected and made available publicly. Climate adaptation infrastructure and system-scale interventions are seen as high-risk, cost-intensive and expensive, with limited earning potential and non-guaranteed benefits for private investors. For these reasons, it has been notably challenging to engage the private sector in the development, delivery, and maintenance of such interventions, without clear incentivization for private sector entities.<sup>23</sup>

Private sector investment and engagement is seen as a crucial component in meeting climate adaptation financing needs.<sup>24</sup> Currently much attention has been given to how to leverage private sector involvement in climate adaptation efforts globally, at national level and locally. At a national level, this has often translated into the promotion of policy-level dialogue and collaborative action through public-private partnerships, performance-based costing and other financing approaches. However, for reasons mentioned above, such collaborative public-private sector ventures are not always attractive options for entrepreneurs and businesses, especially in the developing country context. A second approach has been towards helping the private sector identify and unlock the potential of climate-smart business opportunities and investment, leading to market-driven solutions in managing climate impacts.<sup>25</sup>

Within this latter approach to encouraging market-driven solutions to climate adaptation and unlocking the potential for climate-smart business opportunities, there is a wide range of possible private sector adaptation strategies.<sup>26</sup> These include the development and deployment of new technologies through research and innovation, redesigning or developing adaptation-relevant products and services (such as insurance products, financial products, financial and advisory services), and investing in education, training and capacity-building. Some of these can be

<sup>&</sup>lt;sup>22</sup> Chambwera, M., G. Heal, C. Dubeux, S. Hallegatte, L. Leclerc, A. Markandya, B.A. McCarl, R. Mechler, and J.E. Neumann, (2014) Economics of adaptation. In: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 945-977. Retrieved from <a href="https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap17">https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap17</a> FINAL.pdf Accessed 14 October 2022

<sup>&</sup>lt;sup>23</sup> Altamirano, M. A. (2021). Leveraging Private Sector Investments in Adaptation: The evolving role of climate finance in enabling a paradigm shift. Retrieved from <a href="https://www.cmia.net/news/press-releases/mobilising-private-finance-for-adaptation-the-case-for-a-fair-transition-2/">https://www.cmia.net/news/press-releases/mobilising-private-finance-for-adaptation-the-case-for-a-fair-transition-2/</a> Accessed 24 September 2022

<sup>&</sup>lt;sup>24</sup> The definition of climate finance on the UNFCCC website includes private sector financing. Private investment in climate adaptation to close the gap was explicitly emphasized during COP21 in Paris 2015.

<sup>&</sup>lt;sup>25</sup> Climate-smart business and investment opportunities in emerging markets may be as high as US\$ 23 trillion (IFC 2016).

<sup>&</sup>lt;sup>26</sup> Chambwera, M., G. Heal, C. Dubeux, S. Hallegatte, L. Leclerc, A. Markandya, B.A. McCarl, R. Mechler, and J.E. Neumann, (2014): Economics of adaptation. In: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 945-977. Retrieved from <a href="https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap17\_FINAL.pdf">https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap17\_FINAL.pdf</a> Accessed 14 October 2022

undertaken jointly through collaborative public-private initiatives. The clearest arena of action for private sector adaptation strategy is in the development and amendment of enterprise management practices, choice of enterprise development and investment, and the use of resources.

Globally, it is estimated that climate adaptation efforts require US\$ 140-300 billion per year by 2030 to meet the climate needs in developing countries.<sup>27</sup> At COP21 in Paris 2015, developed countries committed to jointly mobilize US\$ 100 billion per year for climate action in developing countries. However, until 2022, a total of US\$ 43.2 billion have been pledged and US\$ 34.8 billion deposited to climate funds.<sup>28</sup> As noted in the UNEP Adaptation Gap Report of 2020, only 5% of available global climate funds are directed towards climate adaptation; the majority go towards mitigation efforts. There is an urgent need to close the climate finance adaptation gap.

The prominence of the climate and environment discourse in the Maldives have meant that over the years, communities and companies in the Maldives have implemented a range of measures to ensure environmental protection and promote sustainable development. 'Plastic-free' campaigns, working towards achieving net-zero and carbon-neutral economic activities, installation and use of renewables, preferred use of organic fertilizers, coral reef propagation, protection of endangered animal and plant species on land and in the sea, limiting use of fishing nets and other harmful methods are evident measures of community and private sector engagement and investment. However it is difficult to explicitly categorize these as primarily climate adaptation efforts. We will return to this question after having a closer look at the current situation of enterprise development in the Maldives.

## 3. Current Situation & Existing Challenges

Since the project focuses on engaging the MSME sector in climate adaptation, this section presents the key characteristics of the MSME sector and its operational context in the Maldives. In particular, the section provides an overview of the legislative and regulatory requirements, institutional arrangements, financial opportunities, the market situation and the awareness between enterprise development and climate change in the relevant sectors.

An MSME in the Maldives is legally defined as enterprises that fall into one of the following categories depicted in Table 1.

Table 1: SME Classification in SME Act

	No of full-time employees	Annual Revenue (in MVR)	Annual Net Profit (in MVR)
Micro	0-5	0 – 1,000,000	0-250,000
Small	6-30	1,000,001 - 10,000,000	250,0001-2,500,000
Medium	31-100	10,000,001 - 30,000,000	2,500,001- 5,000,000

The MSME sector is nationally recognized as a critical component in creating a resilient and diverse economy for the country. It is seen as an instrumental means of generating meaningful employment and livelihood opportunities in the islands outside Male,' promoting financial inclusion across the country and fostering inclusive growth. MSMEs make an important and valued

<sup>&</sup>lt;sup>27</sup> United Nations Environment Programme (2020) *Adaptation Gap Report 2020*. Nairobi. Retrieved from <a href="https://www.unep.org/resources/adaptation-gap-report-2020">https://www.unep.org/resources/adaptation-gap-report-2020</a> Accessed 13 October 2022

<sup>&</sup>lt;sup>28</sup> Climate Funds Update. Data Dashboard. Retrieved from <a href="https://climatefundsupdate.org/data-dashboard/#1541245664232-8e27b692-05c8">https://climatefundsupdate.org/data-dashboard/#1541245664232-8e27b692-05c8</a> Accessed 14 October 2022

contribution to employment and GDP directly and indirectly, primarily to the tourism, agriculture, construction, transportation, and the service industries. Examples of MSMEs include:

- Tourism guesthouses, water sports, excursions, diving & snorkeling, souvenirs, handicrafts, travel agencies, arts & crafts, accessories
- Agriculture fresh produce from islands that are catered to guesthouses (some guesthouses in Maldives have their own farm plots to produce fresh produce to contribute to sustainability)
- Fisheries shops that cater fishing products, businesses that produce products like *rihaakuru, mas mirus* and other value-added products
- Construction resorts, guesthouses, cafés and restaurants
- Transportation taxi services, ferry operation agencies, businesses that do excursions such as night fishing, diving, sandbank trips etc
- Service Industry small businesses and individuals who design and create accessories, spa and salon services, advertising and marketing companies that create content

MSMEs are particularly important in the atolls, constituting 80% of businesses. This is especially so in those atolls with smaller populations. According to the government business registry, as of 29 Dec 2022 the number of registered businesses in the Maldives is shown to be 38,878. <sup>29</sup> Legislation in May 2022 mandates new businesses to be registered and classified accordingly, if they qualify as MSMEs. Data suggests that over 80% of registered businesses are MSMEs. However, although registration is mandatory to obtain the full range of support and benefits for MSMEs, not all MSMEs are registered in the SME Registry. The SME Registry indicates over 5,200 registered MSMEs in the Maldives, <sup>30</sup> the majority of which is categorized as micro-enterprise sole proprietors and 165 are registered as a medium enterprise.

Table 1: Registered businesses in the Maldives by Entity Type

Sole	Cooperate				
Proprietorship	Company	Partnership	Society	FDIs	<b>Grand Total</b>
21,211	14,066	3170	117	314	38,878

Table 2: Registered MSMEs in the Maldives by Entity Type

	Sole Proprietorship	Company	Partnership	Cooperate Society	Foreign Company	Grand Total
Micro	2520	1368	138	2		4028
Small	490	565	39	1		1095
Medium	34	125	4	1	1	165
<b>Grand Total</b>	3044	2058	181	4	1	5288

Moreover, the Small Business report generated from data for the Household Income and Expenditure Survey (MBS 2019) of the Maldives Bureau of Statistics suggests that as many as 74%

<sup>&</sup>lt;sup>29</sup> Business Portal: Business Registry. Retrieved from <a href="https://business.egov.mv/BusinessRegistry">https://business.egov.mv/BusinessRegistry</a> Accessed 29 December 2022

<sup>&</sup>lt;sup>30</sup> Business Portal: SME Registry. Retrieved from <a href="https://business.egov.mv/SMERegistry">https://business.egov.mv/SMERegistry</a> Accessed 29 December 2022

of the small businesses<sup>31</sup> may not be registered. This in line with other research<sup>32</sup> that indicate a significant number of MSME businesses and entrepreneurs that operate in the Maldivian context do so without registration and at very small-scale. For instance, data from the HIES 2019 indicate that small businesses generate an average monthly profit of MVR 6,480.00, with range of MVR 1,958.00 to MVR 17,439.00. Many of these businesses are own account workers engaged in economic activity. As such, the registered businesses provide only a small snapshot of the scale and diversity of MSMEs in the Maldives.

According to the Ministry of Fisheries, Marine Resources and Agriculture (MoFMRA), there are 17,589 registered fishers and 7,536 registered farmers (farming 573.2 hectares of land).<sup>33</sup> The majority of farmers are subsistence and smallholder farmers, with a majority of farmers comprising women (53%). The government has issued and renewed licenses for 15 uninhabited islands for commercial fisheries, 50 uninhabited islands for commercial agriculture, and 8 additional inhabited islands for both commercial fisheries and agriculture activities. Within the Tourism sector, a total of 818 guesthouses, 148 vessels, 651 travel agencies, 245 dive centres and 3 yacht marinas are registered.<sup>34</sup>

# 3.1. Legal and regulatory requirements for SMEs and relevant sectors, including environment protection and CSR

The SME sector received very little attention until recently. In 2006, Ministry of Economic Development and Asian Development Bank (ADB) initiated the Private Sector Development Project to promote SMEs in the Maldives.<sup>35</sup> Introduction of micro-finance schemes, piloting the Line of Credit Facility, establishment of the Credit Information Bureau (CIB), and prioritizing the growth of SME sector as a means towards inclusive economic growth and financial inclusion took place during these project years.

The most relevant legislation to the MSME sector is the SME Act, which was implemented in 2013. The law provided annual budgetary allocations for SME-related financing and loans. Up until this Act, there were no specific laws and provisions related to the governance of the MSME sector and its financing. Business development and support services were recognized as a public good and provision made to enable access to business development and support services within Male' and in the atolls via the establishment of seven regional hubs. The Act laid the groundwork for the

<sup>&</sup>lt;sup>31</sup> Unlike the legislative definition of MSME, small businesses are defined here as those enterprises having less than 10 employers. No annual income or turnover was included in the definition. A total of 40,232 small businesses were counted in the survey. Sourced from MBS (2019) *HIES 2019: Small Business*. Retrieved from <a href="https://statisticsmaldives.gov.mv/hies-2019-small-business/">https://statisticsmaldives.gov.mv/hies-2019-small-business/</a> Accessed 30 September 2022

<sup>&</sup>lt;sup>32</sup> For instance, 19% of the employed population in the Maldives is engaged in the informal sector according to this study. The informal sector in this study is defined as any unregistered businesses, those with less than 5 employees and where employees were working in a living quarter, agricultural plot or no fixed location with no social security. Sourced from Maldives Bureau of Statistics/UNDP (2022) Informal Sector Survey 2021: *Rapid assessment of the impact of COVID-19 on the Informal Sector. Maldives*. Retrieved from

https://www.undp.org/sites/g/files/zskgke326/files/2022-

<sup>07/</sup>Rapid%20assessment%20of%20the%20impact%20of%20COVID-

<sup>&</sup>lt;u>19%20on%20Informal%20sector%20July%202022.pdf</u> Accessed 29 December 2022

<sup>&</sup>lt;sup>33</sup> Ministry of Fisheries, Marine Resources & Agriculture (MoFMRA) (2019) *National Fisheries & Agricultural Policy* 2019-2029. MoFMRA/Food and Agricultural Organization. Maldives. Retrieved from <a href="https://faolex.fao.org/docs/pdf/mdv205058.pdf">https://faolex.fao.org/docs/pdf/mdv205058.pdf</a> Accessed 20 September 2022

<sup>&</sup>lt;sup>34</sup> Ministry of Tourism, Maldives. Homepage <a href="https://www.tourism.gov.mv">https://www.tourism.gov.mv</a> Accessed 29 December 2022

<sup>35</sup> Sajny, A. (2019) Impediments to SME Growth in Small Island Developing States – the case of the Maldives.
Research and Policy Notes. RPN-19. Maldives Monetary Authority. Retrieved from

http://www.mma.gov.mv/documents/Research%20and%20Policy%20Notes/2019/Impediments%20to%20SME%20Growth%20in%20Small%20Island%20-%20The%20Case%20of%20Maldives.pdf Accessed 13 October 2022

establishment of the Business Centre Corporation (BCC) in 2017 and the SME Development Financing Corporation (SDFC) in 2019.

While the SME Act is pertinent to the policymaking, financing and supporting the growth of the MSME sector, a number of other business-related laws apply to businesses operating in the Maldives regardless of its status as an MSME. While regulations may differ markedly in some of its requirements and provisions depending on business status, businesses are generally required to be abide by the following laws and regulations, when and where it applies.<sup>36</sup> The most immediately relevant of these are Business Registration Act and the particular Act that refers to the type of business enterprise (e.g. Sole Proprietor, Company, Cooperative Society, etc.).

The Maldives Tourism Act determines the zones and islands for the development of tourism in the Maldives; the leasing of islands for development as tourist resorts, the leasing of land for development as tourist hotels and tourist guesthouses, the leasing of places for development as marinas, and the management of such facilities; and the operation of tourist vessels, diving centres and travel agencies as well as the regulation of persons providing such services. The Act provides requirements for obtaining permission by the Ministry of Tourism for the cutting down of coconut palms and trees on an island or land leased for development as a tourist resort, dredging of the lagoon of such an island, reclamation of land, or any other activity. Additionally, the Act further provides for the registration and licensing to operate tourist resorts, hotels or guesthouses, tourist vessels, diving centres, and for providing travel agency services, and the leasing of places for the development of marinas and licences for their operation.

The Maldives Fisheries Act of 2019 recognises the importance of maintaining marine life to protect the livelihoods and economy of those involved in the tourism ad fisheries sectors. The Act lays out measures for the sustainable use of fishery resources, combats illegal fishing, bans the use of harmful and dangerous fishing methods such as trawl net fishing, use of nets except for bait fishing and fishing for personal consumption, and forbids the use of explosives, chemicals and other poisons. People in the fisheries sector are entitled to pensions, education and training. There is no legislation strictly pertaining to agriculture as yet, although there are number of environmental regulations for the agricultural sector. Legislation currently applicable to the fisheries and agricultural sectors and to those operating within these sectors are listed in the Annex.<sup>37</sup>

The National Fisheries and Agriculture Policy 2019-2029 outlines the sectoral priorities for sustainable natural resource management, increasing market access and economic growth, and enabling institutional capacity building. The Policy also highlighted the means for strengthening the operative systems and capacity within the fishing and agricultural sectors. These included measures for sustainable yield and productive capacities, setting the standards for technological equipment and vessels used in the industries, and supporting the sectors to improve ecological resilience and promote use of sustainable programs and tools amongst communities, companies and other stakeholders. Regulations around the licensing of fishing vessels as well as the leasing and allocation of land either within or on nearby islands for farming and agricultural use are both relevant for these sectors. Land use allocation of plots for agriculture is a decentralised matter for island and atoll councils.

For all commercial and development activity in the Maldives, there are several environmental protection legislation and regulations. The most prominent is the Environmental Protection and Preservation Act and the various amendments pertaining to these. This Act established the

<sup>&</sup>lt;sup>36</sup> Business Portal: Law & regulation. <a href="https://business.egov.mv/Home/LawsRegulation">https://business.egov.mv/Home/LawsRegulation</a> Accessed 23 September 2022

<sup>&</sup>lt;sup>37</sup> Ministry of Fisheries, Marine Resources & Agriculture (MoFMRA) (2019) *National Fisheries & Agricultural Policy* 2019-2029. MoFMRA/Food and Agricultural Organization. Maldives. Retrieved from <a href="https://faolex.fao.org/docs/pdf/mdv205058.pdf">https://faolex.fao.org/docs/pdf/mdv205058.pdf</a> Accessed 20 September 2022

Environmental Protection Agency which bears responsibility and oversight for many of the key commercial and economic activities as well as to the provision of utilities. Legislation and regulations pertaining to a wide range of activity are noted; an inexhaustive list is provided in the Annex.

The Maldives does not have a formal set of legislative and regulatory framework for Corporate Social Responsibility (CSR) practices, although work was initiated on this a decade ago.<sup>38</sup> An initial study on CSR was undertaken to formulate a National Policy Framework for CSR in the Maldives and although recommendations were made, such a policy framework has not yet been formally adopted. The main findings of the study noted that the concept of CSR was not widely understood and the term itself was seldom used at the time of the study. At present, a number of prominent companies and corporations have CSR activities clearly marked on their websites and issue statements on their CSR activities. Companies are also more likely to have CSR policies that outline the scope of company CSR-related activities.<sup>39</sup> These activities fall largely into the three categories identified in the initial study: environmental protection and conservation, employee welfare and community engagement and participation. It is likely that there have been changes in the proportions of activities undertaken by companies within each category over the past decade. However no clear study is available on this.

### 3.2. Institutional arrangements supportive of enterprise development

Several institutional arrangements support the functioning of the MSME sector in the Maldives. Primarily among them:

- SME Development Financing Corporation: SDFC is a specialized financial institution providing financial products and ancillary services to MSMEs and entrepreneurial startups. Their lending terms target the MSME sector through more attractive terms than what is offered through existing banking systems. SDFC has issued a total of 765 loans to date totaling an amount of MVR 961,276.20, targeting a wide range of sectors. The Corporation provides loans of up to MVR1 million without collateral to provide access to finance for micro and small enterprises. SDFC provided special support and loans to MSMEs for business operation and for self-employed individuals as part of Covid support. It has been reported that SDFC needs to strengthen its credit management framework, build staff and operational capacity to meet the specific needs of the customer base, develop better webbased and mobile-based services, and continue expanding business services.
- Credit Information Bureau: Operating under the oversight of Maldives Monetary Authority, the CIB works to further reduce barriers to accessing credit. It serves as a onestop repository of credit information for financial institutions. Currently all banks and other financial institutions are members of CIB. Up to June 2018, CIB had a record of the credit histories of 76,223 individuals and 1629 corporations. CIB usage has gradually increased with over 5000 CIRs obtained by financial institutions to date.
- Business Centre Corporation: Established in 2017 in alignment with the SME Act 2013, it is mandated to support the development of SME sector under the supervision of Ministry of Economic Development and to steer the BCC Atoll Centers set up in 7 provinces across the country. BCC aims to assist MSMEs and entrepreneurs towards successful implementation of business practices through its advisory services. Regional BCCs provide

<sup>&</sup>lt;sup>38</sup> Shareef, F. & Sodique, H. (2010) Baseline Study on Corporate Social Responsibility Practices in Maldives. Male, Maldives: Ministry of Economic Development.

<sup>&</sup>lt;sup>39</sup> Abdulla, M. (2020) CSR practices in the Maldives: A Post Baseline Study. Sri Lanka Journal of Marketing Vol 6 (2) Retrieved from <a href="https://fcms.kln.ac.lk/dep/dmm/images/SLJM/6-2/Mohamed-Abdulla.pdf">https://fcms.kln.ac.lk/dep/dmm/images/SLJM/6-2/Mohamed-Abdulla.pdf</a> Accessed 13 October 2022

consultation and advisory services by assisting MSMEs in preparing business plans, providing advice on operations and finance, assisting with business registration as well as supporting enterprises in engaging with other government agencies. BCCs also provide a collaborative workspace for MSMEs, with access to WiFi and networking opportunities.

- o Authentic Maldives is an initiative of BCC that is a means to showcase and provide an outlet for local artisans work and find them global markets for their products.
- o Maldives Business Network is a platform to disseminate important information on the economy, finance and commerce with focus on business and commerce across a number of social media platforms.
- BML Community Fund and other projects offer support and opportunities for existing and emerging SMEs across Maldives
- SME Council: the SME Council was established in 2014 as an advisory body to the Ministry of Economic Development to develop an integrated strategy for the promotion of MSME Sector and to monitor and coordinate programs.
- Agro National Corporation (AgroNAT) is mandated to develop the agricultural sector. It
  aims to connect farmers to the market, enables efficient supply-chain for agriculture,
  provide technical expertise and training to farmers, expand the role of women in farming,
  and facilitating access to quality fertilizers across islands.
- MIFCO & other fisheries complex: located in four strategic geographic regions across the
  country, these act as points for procuring fish directly from fishers and lending logistical
  support to fishing vessels. There is a number of ice plants in place to sell ice to fishing
  vessels.

As part of the assistance to the Private Sector Development Project and in particular to support the SME sector, the Ministry of Economic Development set up the Business Portal which facilitated ease of registration for businesses. The regulations were streamlined. Sole proprietors require an *efaas* account and an ID Card copy. The registration fee is set for five years at MVR 500.00. Companies are charged an annual fee of MVR 2000.00 and require ID card copies of shareholders, shareholder Memorandum of Association and Articles of Association. A separate registration fee is charged. Registration processing takes 15 minutes and a registration certificate is subsequently issued. Companies, cooperative societies and partnerships are required to submit annual financial statements, director's report and auditor's report of the previous year to the registrar of companies. Sole proprietors have limited reporting responsibilities.

# 3.3. Financial opportunities, including current set of financial products available for enterprises and startup

A number of banks offer financing for enterprises, businesses and commercial ventures. However only SDFC have financial terms and conditions that are targeted towards start-ups, early-stage businesses and MSMEs. All other banks have high interest rates on business loans ranging from 10.5-13%. In contrast, the SDFC loans have interest rates between 4% and 9.5%.

SDFC also has a range of loans targeting MSMEs in different sectors and situations: local tourism, start-ups, agriculture, acquisition of assets, MSME business development, working capital and short-term needs. BML Islamic has a loan for those interested in starting or expanding guesthouses. The Commercial Bank of Maldives has a loan targeting women MSME entrepreneurs.

With regard to climate-relevant funding, BML has a green loan that enables customers to finance an environment friendly project focused on renewables or green markets, products and services. BML also offer a lower rate for fully electric vehicles. However, these are the only climate financing products available.

A separate Table of Financial Products provides a detailed overview of the financing available for businesses, including MSMEs in the Maldives. Please see this as a separate document.

## 3.4. Market situation and diversity of entrepreneurs

Tourism is one of the driving forces for the economic sector, accounting for 28% of the GDP. Its spillover effects benefits several of the other industries in the Maldives, including the agriculture and fisheries sectors. Demand for produce from the fisheries and agricultural sectors have been growing linked to the increase in population and equally the increased number of tourists that visit the country.

Agriculture has contributed to poverty reduction and improving the livelihoods and food security situation of island communities. Agriculture can be categorized as semi-commercial production on the islands and commercial production in long-term leased islands. Agricultural activity, at the subsistence and smallholder level, has long been a means for women to engage in commercial activity through the cultivation and sale of food produce, plant-based products and food-related products.

The Agriculture Survey conducted on 11 selected islands<sup>40</sup> indicates that 1 in 3 households in the islands live in an agricultural household, where income is generated from growing crops, leasing land for agricultural work or raising livestock. Agriculture includes commercial crop production (37%), floriculture (3.8%), and livestock (1.2%). Largely agriculture consisted of subsistence and smallholder farming. 53% of those who do commercial agriculture also consume crops daily and 43% do so sometimes. Only 3% grow solely for income generation. More women than men work in agriculture but where labor is acquired, it is primarily men who are hired.

The survey indicated that main short-term agriculture crops are ridged pepper, cucumber, watermelon, collard, pumpkin, banana, green chili, papaya, brinjal, taro & cassava. Crops can be harvested up to 4 times per year. In some varieties up to a third of the harvest can get damaged. Most crops are mainly sold by the farmers directly within the island or to nearby islands via buyers who visit the island Marketing to resorts are still comparatively low. Only a selection of the products is sent to Male', largely due to the lack of transportation facilities, difficult storage and transport conditions and because there are few links established with Male creditors. Only 1% of farmers engage in short-term crop value-added processing; these are mostly fried moringa leaves and chips in the form of sweet potato, taro, banana and cassava. However only banana and cassava appear to sell well. Long-term agricultural crops include banana, young coconut, mango, betel leaves, breadfruit, coconut, water apple, curry leaves, ramp leaves, and bilimbi. Of these, 5% engage in value added processing – making chips, pickles and by-products. These sell variously; for instance, 24% of processed breadfruit sold while 100% of banana chips did.

Basic agricultural information concerning land utilization, area planted, crop production and yield statistics (as well as information on livestock numbers and production) are lacking at a national level to inform policy and planning of development and business projects.<sup>41</sup> Until 2006, island councils were required to collect agriculture-related information and forward to the Ministry via the Atoll Office. However, due to levels of non-response and quality of the data collected, this was discontinued as a practice. Currently some councils do take extra measures to address the collection of such data and make it a requirement for extension, when leasing islands. The main form of data collection used at national level is the daily duration-defined collection of volumes

<sup>&</sup>lt;sup>40</sup> Maldives Bureau of Statistics (2019) Agriculture Survey 2019 for selected islands. Retrieved from <a href="https://statisticsmaldives.gov.mv/agriculture-survey-2019/">https://statisticsmaldives.gov.mv/agriculture-survey-2019/</a> Accessed 14 October 2022

<sup>&</sup>lt;sup>41</sup> Maldives Bureau of Statistics (2019) Agriculture Survey 2019 for selected islands. Retrieved from <a href="https://statisticsmaldives.gov.mv/agriculture-survey-2019/">https://statisticsmaldives.gov.mv/agriculture-survey-2019/</a> Accessed 14 October 2022

and wholesale and retail prices of commodities (veg, fruit and fish) arriving by boat to supply the market in Male. There is no national production data to verify how much of the crops are being sold at the Male' market. As per the available data in the survey, a total of quantity of 2,600 tons of agricultural crops and products amounting to a total value of MVR 43.5mn were brought from other islands for sale at the Male market.<sup>42</sup>

The sector has much potential for further growth and encouraging this is likely to empower those working in the sector, especially women. Although it is seen as having potential for the creation of employment opportunities, particularly for unskilled ad semi-skilled people, growth in this sector can only be sustainable through promoting the training and capacity building of those engaged in agriculture. Being able to engage with knowledge and information, understand business techniques and becoming financially literate are skillsets that those engaged in MSMEs need to acquire for effective growth.

Apart from structural regulation for the long-term lease of commercial islands and enabling the allocation of land parcels for semi-commercial agriculture, relatively little have been done until recently on promoting the production and supply of agricultural goods and services in the country. The establishment of AgroNAT has been helpful for connecting farmers to market, and to streamline the supply chain. More concerted efforts are required to further develop and strengthen the sector.

The fisheries sector contributed nearly 96% to the countries total merchandise export in 2018 totaling MVR 2.7billion. Exports include live ornamental fish, fish roe, smoked fish, fish chips fresh fish, chilled fish, frozen consumable fish. Over the past two decades, the fisheries sector has modernized and expanded with new larger vessels catching tunas. Annual fish harvest is increasing up to a peak of over 186,000 tons in 2005 and 2006, then declined up to 2009 with 117,000 tons and since has been gradually recovering with a catch of 143,300 tons in 2017. Although recognized as a potentially important activity no commercial aquaculture production operation exists so far.

Fisheries data have been collected continuously since 1959 since the renewal of fishing licenses is conditional on submitting logbooks when required. Fishing boat operators provide current reports of tuna and other offshore species catches. Although it has substantial value for the local economy, reef fisheries data collection is not required. Despite its growing success and international recognition of the quality of fish, the Maldives fishing industry faces several challenges at the global level, the most prominent is the higher tariff rate of 20% charged for Maldivian fish products in the EU and UK markets, <sup>43</sup> the biggest importers of premium quality Maldivian fish. As a middle-income country, Maldives no longer qualifies for low-tariff rates in these markets. Maldives would also find it difficult to quality for the EU demands and requirements to qualify for its low-tariff rates.

Equally importantly, fishing is a highly seasonal activity, with variable costs of production and fees charged for freight and handling. The total cost of fish can be as high as US\$4.75 per kg. It is reported that MIFCO makes a loss on every fish export. The fishing industry relies heavily on subsidies and requires domestic tax concessions both from home and buyer countries.<sup>44</sup> However, the Maldivian government is searching for new markets for Maldivian fish products where

<sup>&</sup>lt;sup>42</sup> It is presumed that this is for the reporting year 2019. There is no stated period for the statistics in the survey report.

<sup>&</sup>lt;sup>43</sup> Conservative Environment Network (undated) Pole and Line Fishing. Retrieved from <a href="https://static1.squarespace.com/static/5a3798f32aeba55a92e8d1ee/t/629f7cb558ab6254097f9bca/1654619320340/Pole+and+Line+Fishing+.pdf">https://static1.squarespace.com/static/5a3798f32aeba55a92e8d1ee/t/629f7cb558ab6254097f9bca/1654619320340/Pole+and+Line+Fishing+.pdf</a> Accessed 14 October 2022

<sup>&</sup>lt;sup>44</sup> Maldivian Financial Review (2022, August 28) India to cut duties on Maldivian fish exports Retrieved from <a href="https://mfr.mv/fisheries/india-to-cut-duties-on-maldivian-fish-exports">https://mfr.mv/fisheries/india-to-cut-duties-on-maldivian-fish-exports</a>. Accessed 14 October 2022

customers are willing to pay for premium fish. Recently, Maldives signed an agreement with India on zero duty tariffs on fish products; these agreements may go some way towards offsetting the costs of the fishing industry at a national level.<sup>45</sup>

MSME in tourism sector has also been growing encouraged by the legislative and financial support for guesthouse, hotels and other local tourism facilities. The MSME sector has been able to pick up niche and middle market international tourists while also providing for an increase in local domestic tourism. A transformation of the local hospitality industry has been enabled by a plethora of overnight accommodation in a variety of settings, such as room rentals, guesthouses and cafés. This is an important source of income for MSME entrepreneurs and island communities. While domestic tourism has been taking off across the country, it is notable that the flow of domestic travel from atolls to Male is mainly related to those seeking medical and healthcare services, while travel from Male' to the atolls were primarily for leisure and recreation. 46 Most domestic tourists use public transport, using inter-atoll and inter-ferry transport services.

The most significant impediment to promote and develop MSMEs is their lack of access to finance and the cost of accessing finance. This is exacerbated in the islands where there are limited banking facilities in outer islands. Attaining loans is also restrictive because of credit policies and high cost of lending or the collateral requirements that serve to constrain credit access for many MSMEs. <sup>47</sup> In addition, high start-up costs, limited access to markets, limited financial literacy and record-keeping, difficulty accessing dollars, policy inconsistencies, deficient labor skills and business start-up experience, particularly among youth and women hamper MSME development. The difficulties of business operation in Maldives means that the country has a ranking of 147 and a score of 53.0 in the World Bank Doing Business Report. <sup>48</sup>

Many women experience additional challenges because they do home-based, small-scale productions with low commercial returns<sup>49</sup>, with almost 44% of them employed in the informal sector. Women need support in drafting their business ideas into proper business planning and assistance ensuring financial feasibility. Common challenges for women include high start-up costs, limited access to finance, difficulty filing tax returns, high collateral requirements and a lack of banking facilities.<sup>50</sup> Currently SDFC allocates 25% of its loan portfolio to women, youth and persons with disabilities. Of SDFC's agricultural loans, 30% is reserved for women. A few banks provide a loan scheme dedicated exclusively for women. Women own fewer assets in general, for instance national statistics from 2017 indicate only 16% of cars and motorcycles are registered to women.

<sup>&</sup>lt;sup>45</sup> Maldivian Financial Review (2022, August 28) India to cut duties on Maldivian fish exports Retrieved from https://mfr.my/fisheries/india-to-cut-duties-on-maldivian-fish-exports. Accessed 14 October 2022

https://mfr.mv/fisheries/india-to-cut-duties-on-maldivian-fish-exports. Accessed 14 October 2022 

6 Ministry of Tourism (2016) Study on Domestic Tourism in the Maldives. Retrieved from

https://www.tourism.gov.mv/dms/document/522c4c6328fb592929baedc10119757d.pdf\_Accessed 13 October 2022

<sup>&</sup>lt;sup>47</sup> Maldives Financial Review (2021 November 4) Doing business in the Maldives. Retrieved from <a href="https://mfr.mv/smes/doing-business-in-the-maldives">https://mfr.mv/smes/doing-business-in-the-maldives</a> Accessed 13 October 2022

<sup>&</sup>lt;sup>48</sup> World Bank (2020) Doing Business 2020: Comparing Regulations in 190 economies. Retrieved from <a href="https://www.doingbusiness.org/content/dam/doingBusiness/country/m/maldives/MDV.pdf">https://www.doingbusiness.org/content/dam/doingBusiness/country/m/maldives/MDV.pdf</a> Accessed 13 October 2022

<sup>&</sup>lt;sup>49</sup> Zulham, A.Z., Hussain, I.A., Singh, J.B.K. & Ahmed, N. (2022) Women entrepreneurship in SMEs: A cross-sectional study on factors influencing their success in the Maldives. Retrieved from <a href="https://ejbm.sites.apiit.edu.my/files/2022/07/Paper-6-Factors-Influencing-the-Success-of-Women-Entrepreneurship-in-SME-in-Maldives.pdf">https://ejbm.sites.apiit.edu.my/files/2022/07/Paper-6-Factors-Influencing-the-Success-of-Women-Entrepreneurship-in-SME-in-Maldives.pdf</a> Accessed 22 September 2022

<sup>&</sup>lt;sup>50</sup> Premaratne, S.P., & Kudaliyanage, G. (2018) Issues, Challenges and Prospects of Women-owned Small and Medium Business Scale Enterprises in Maldives. International Journal of Scientific and Research Publications. Volume 6 (9) Retrieved from <a href="https://www.ijsrp.org/research-paper-0916.php?rp=P575845">https://www.ijsrp.org/research-paper-0916.php?rp=P575845</a> Accessed 23 September 2022

At the same time, a number of structural mechanisms can be used to ease the burden of MSMEs engaged in the tourism, fisheries and agricultural sector. For instance, improving capacity to do business, provide business knowledge and training and further expanding business opportunities for MSMEs. This can also include strengthening the institutional capacities to implement national tourism and hospitality, fisheries and agricultural plans in a way that is supportive of MSMEs. The recent move towards reducing import duty on several fisheries and agricultural equipment and materials used by MSMEs is intended to encourage MSME growth by limiting their burdens on business, however there are indications that these reductions in price have not been passed onto local MSMEs, with complaints from the fishing community noting that the prices are still high.

## 3.5. Awareness about the linkages between enterprise activities and climate action

One of the key studies regarding community level adaptation of fishery and agricultural sectors report that there is limited knowledge on how expected and emerging climate changes relate to agriculture, fisheries, food security and economic systems at large.<sup>51</sup> There was limited awareness on climate variability and future climatic changes and its impact on livelihoods and the economy. General awareness on environmental protection and sustainable development is higher.

In agriculture, most farmers use organic rather than chemical fertilizers, although the level of chemical pesticides are high. There seems awareness about not overusing fertilizers. The use of hazardous and dangerous agrochemicals is now being closely monitored, with relevant legislation<sup>52</sup> and regulation<sup>53</sup> to control the substances used for agricultural purposes. Farmers have reported that they undertake some additional care to deal with weather conditions – shade nets for the heat, raised beds and use of containers for the flooding.<sup>54</sup> However, this is not directly attributed to climate change, rather as a means of coping with weather conditions. There is increasing awareness of the need to manage fish stocks, although it is difficult to ascertain the reason for the increasingly irregular trends in fishing season. It is generally attributed to the change in local weather caused by global climate change and impact of the latter on sea water temperature.<sup>55</sup>

Difficulties in attributing the impacts of climate change and its impact on business is one of the key difficulties in encouraging private sector and MSMEs to engage in climate adaptation strategies. Ability to convincingly point to the costs incurred through climate change variabilities would be helpful in reassuring actors and bringing them on board. The introduction of adaptation pathways may be a useful way of discussing innovation for climate adaptation.

<sup>&</sup>lt;sup>51</sup> Shafeeqa, F. (2011). Madi Kilambu: A rapid assessment of perceptions: Part 2. Live & Learn.

<sup>&</sup>lt;sup>52</sup> Ministry of Fisheries, Marine Resources & Agriculture (2021) *Agriculture Pesticide Control Act* Retrieved from <a href="https://www.gov.mv/en/guidance-and-regulations/agriculture-pesticide-control-act">https://www.gov.mv/en/guidance-and-regulations/agriculture-pesticide-control-act</a> Accessed 13 January 2023

<sup>&</sup>lt;sup>53</sup> Ministry of Fisheries, Marine Resources & Agriculture (2022) *Approved Pesticide Registry* Retrieved from <a href="https://www.gov.mv/en/publications/approved-pesticide-registry-2022">https://www.gov.mv/en/publications/approved-pesticide-registry-2022</a>

Accessed 13 January 2023

<sup>&</sup>lt;sup>54</sup> Shafeeqa, F. & Abeyrathhne, R.M. (2022) Climate Adaptation by Farmers in Three Communities in the Maldives. Chapter 9 in Enamul Haque, A.K., Mukhopadhyay, P., Nepal, M. & Shammin, Md. R. (Eds) *Climate Change and Community Resilience: Insights from South Asia* Retrieved from

https://library.oapen.org/bitstream/handle/20.500.12657/51500/9789811606809.pdf?sequence=1#page=148
Accessed 28 December 2022

<sup>&</sup>lt;sup>55</sup> Food & Agriculture Organization. Fisheries and Aquaculture Country Profiles: Maldives Retrieved from <a href="https://www.fao.org/fishery/en/facp/mdv?lang=en">https://www.fao.org/fishery/en/facp/mdv?lang=en</a> Accessed 29 December 2022

## 4. Key Insights

#### MSME sector

- More support is needed for MSMEs in accessing finance as well as in financial and business capacities
- Encourage diversification of economic activities
- Improve networking opportunities and opportunities for building supply chain connections
- Improve financial inclusion through capacity building
- Increase access through technologies, for instance, widening online banking access, using technologies to ease bookkeeping and filing taxes
- Overcome structural constraints by provision of services such as improving public interatoll maritime transport as this is a major constraint to MSME growth in different sectors.

#### Climate Adaptation

- Legislative, regulatory and policy frameworks need to start taking into account climate adaptation strategies, with clearly designated potential roles for the private sector, including MSMEs.
- Capacity must be built up within financing and technical institutions to be able to calculate for climate change impacts, adaptation costs and the potential costs of failing to adapt. These will help guide public and private sector decision-making.
- Data collection is a priority area: baseline data on national production and economic activity levels are needed, as well as information on the contextual climate change variables that affect production. As heatwaves, storms, flooding and winds increase, it may be difficult to ascertain the actual climate change impacts on production and service delivery unless such data is maintained.
- One of the clear areas of work is in delineating the concepts of environment protection, climate mitigation and climate adaptation and being able to show how they may overlap in practice.
- Awareness-raising of climate change impacts on businesses and the economy requires further strengthening.
- Sector-specific climate adaptation strategies for MSMEs and private sector need to be detailed further together with technical experts on these matters.

#### **Annex**

#### List of Legislation and Regulations

#### **Business**

- Business Registration Act & Amendments and Regulations
- Companies Act & amendments and the General Regulation
- Partnership Act
- Cooperatives Societies Act and Regulation
- Sole Proprietorship Act
- SME Act and Regulation
- Foreign Investment Act
- Special Economic Zones Act
- Import Export Act & Amendments, Regulation including that on re-export
- Copyright Act
- Consumer Protection Act
- FDI Policy and amendments
- Regulation on Winding Up companies
- Regulation on Governing Duty Free
- Regulation on Employment Agency
- Regulation on Liquor and Pork
- Regulation on Copyright
- Regulation on Selling Fresh Fruits and Vegetables
- Regulation on Expatriate Accommodation
- Regulation on Freight Forwarding Service
- Business Visa Regulation

#### Fisheries and Agriculture

- Fisheries Act
- Plan Protection Law
- Foreign Investment Act
- Uninhabited Islands Act
- SME Act
- Cooperative Societies Act
- Three Bills were identified as being drafted for Parliament: Agriculture Bill, Pesticides Bill and Animal Health Bill

#### Tourism

- Tourism Act
- Construction Period Extension Regulations
- Development of Integrated Tourist Resorts
- Development of Private Islands
- Diving Regulations
- Guest House Regulations
- Hotel Regulations
- Regulation on the Protection and Conservation of Environment in the Tourism Industry
- Resort Regulations
- Symbolic Marriage Regulations
- Tourism Statistics Regulations

- Tourist Vessel Regulations
- Travel Agency Regulations
- Yacht Marina Regulations

#### **Environment Protection**

- Environmental Protection and Preservation Act and Amendment
- Maldives Environmental Impact Assessment (EIA) Regulation
- Climate Emergency Act
- Maldivian Land Act
- Water and Sanitation Act
- Decentralization Act
- Energy Act, Electricity Regulation
- Law on Protection of Plants
- Law on Uninhabited Islands
- Regulation on Long-term Leasing of Uninhabited Islands
- Regulation on Quarantine of Plants
- Pesticide Use in Agricultural Operations Regulation
- Regulation on Coral and Sand Mining
- Guidelines on Quarantine Procedures for Import of Plants, Part of Plants and Animals
- Legal Requirements for Cultivating Non-native Species
- Environmental Damage Liabilities Regulation
- Dredging and Reclamation Regulation
- Waste Management Regulations
- Uprooting, Cutting and Transportation of Palms and Trees Regulation
- Regulation for Protection and Preservation is Island Vegetation ad Flora of Maldives
- Management, Use and Control of HFCF Substances Regulation
- Regulation on Conservation of Old Trees
- Regulation on Fuel Handling and Storage
- National Wastewater Regulation
- Building Act and Maldives Building Code
- Land Act
- Land Use Planning Regulation
- Protected Areas Regulation
- Protected Species Regulation
- Regulation on Migratory Birds
- Hazardous Chemical Regulation
- Ozone Layer Protection Act, and Regulation