



UNDP Insurance
and Risk Finance
Facility



Development of Inclusive Insurance and Risk Financing

Diagnostic Study

The Maldives



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Abbreviations

ADB	Asian Development Bank
APEC	Asia Pacific Economic Cooperation
DRF	Disaster Risk Finance
DRI	Disaster Risk Insurance
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
HDI	Human Development Index
HIES	Household Income and Expenses Survey
IAIS	International Association of Insurance Supervisors
ICP	Insurance Core Principles
IRFF	Insurance & Risk Finance Facility
MATATO	Maldives Association of Travel Agents and Tour Operators
MATI	Maldives Association of Tourism Industry
MFBs	Microfinance Banks
MFIs	Microfinance Institutions
MMA	Maldives Monetary Authority
MoF	Ministry of Finance
MSMEs	Micro, small and medium enterprises
ODC	Other Depository Corporations
SDG	Sustainable Development Goals
SFDRR	Sendai Framework for Disaster Risk Reduction
SME	Small and medium enterprises
UNDP	United Nations Development Programme
USD	United States Dollar

Exchange Rate: USD 1 = MVR 15.42

Executive Summary

United Nations Development Programme (UNDP) in the Maldives and its global initiative Insurance and Risk Finance Facility (IRFF) carried out a diagnostic exercise to identify and develop opportunities in the areas of inclusive insurance and risk financing in the Maldives.

The diagnostic report articulates the insurance supply side, a picture of the demand side, the gaps and opportunities in the enabling environment and the financial capacity of the insurance industry in the Maldives. The recommendations from the diagnostic are intended to inform further collaboration between UNDP Maldives and relevant stakeholders in the government and the insurance industry to develop the appropriate insurance and risk finance solutions to build resilience for individuals and communities. The findings of the study reflect the insights gathered from the consultations with insurance sector stakeholders conducted jointly by UNDP and the Maldives Monetary Authority (MMA) and the collective view of subject matter experts engaged for this exercise.

The sustainability of country's fast-paced developmental projects remains highly vulnerable to the impacts of climate risks. While there have been climate-induced events of varied intensities in the past, it is estimated that the country is hit on average by 2 to 3 significant events of rainstorms and coastal flooding per year. Coastal flooding and excessive rains are believed to be the most frequent causes of economic losses in the Maldives, as annually on an average, the country faces rainstorms of variable intensities. Nearly 50% of all housing structures are also within 100 meters from the coastline, only few of which are capable of withstanding tidal floods, let alone tsunamis. Climate change is also expected to have a significant impact on the tourism sector, which is the main industry of the country.

The Maldives has shown impressive progress in economic reforms. Along with the development of the economy, the insurance market has also witnessed growth and development with high and stable premium revenue growth. Despite the negative impact of the COVID-19 pandemic on the economy, the insurance market has maintained a stable growth momentum. Total insurance premium revenue of the whole market reached \$75 million in December 2021, up 20.6% from the same period in 2020. Total assets of insurers are \$151.1 million, up 18.9% from the same period of 2020.

The legal framework for insurance business activities in the Maldives is being improved, moving towards compliance with international standards of regulation, and management and supervision of insurance business activities. Currently, there is no dedicated law on insurance in the Maldives and the insurance companies are licensed and operating under the primary law of 1981 MMA Act. This, however, comes with limitations both for MMA to effectively regulate the insurance entities as well as the industry which is yet to flourish due to limited room under the current legal framework.

Insurance solutions are currently unavailable for key economic sectors in the Maldives such as tourism and agriculture. The low levels of insurance awareness and absence of an appropriate value chain conducive to insurance distribution are some of the key challenges for insurance development.

There is no insurance association in the Maldives for representing and protecting the rights of Maldivian insurers and brokerage firms and to represent the insurance industry at relevant forums, in the process of drafting laws and regulations on insurance, providing education and training services, and providing other services such as mediation.

The Maldives is a country with abundant nature biodiversity, with extraordinarily rich marine biota ecosystems, including the coral reefs. Effective management of these natural resources is required, considering the risks that can disrupt and worsen the environmental conditions

and consequential economic losses. In Maldives, tourism and fisheries sector revenues are significantly dependent on the natural resources.

The following summarizes the recommendations based on the analysis of the findings of the diagnostic:

Explore development of tourism insurance: there is a growing economic opportunity area related to businesses providing tourism services such as guest houses, tour operators, and homestays.

Lay the foundations for insurance for natural capital: Deploying insurance for natural capital, specifically coral reefs.

Explore the potential for making disaster risk insurance for public assets compulsory: This would require a specific decree for insurance of public assets and infrastructure against disaster and climate risks.

The development of a comprehensive database of assets and infrastructure, including their financial valuations, will help decision-makers.

Develop agriculture insurance: it is considered as an important financial instrument.

Collaborate to develop the preconditions for scaling up insurance distribution: Increasing insurance distribution and developing the overall market outreach will require the diversification of insurance distribution channels and modalities.

Insurance regulatory development and capacity building: To lead and strategically plan for the Maldives insurance industry's development, MMA prepares a three-to-five-year roadmap for strengthening insurance capacity at all levels.

Develop human capital in insurance and risk financing for the staff of insurers.

1. Introduction

A significant level of partnerships and collaboration is important in the drive towards achieving the Sustainable Development Goals (SDGs). To counter the adverse effects of unsustainable macroeconomic changes due to globalization, technological developments, gender discrimination, and environmental degradation, an effective set of policies, legislation, and financial solutions is needed. One form of such financial solutions can be insurance and investment models that consider their potential impact on people, communities, and countries, especially the most vulnerable ones.

The global as well as the country context is exacerbated by significant gaps in the use of insurance¹ and risk finance². There is, for example, a huge protection gap in developing countries (including the Maldives), where generally less than 5% of losses due to disasters are covered by insurance, as compared to a 50% in high-income countries. These protection gaps are also prevalent beyond disaster losses, resulting in increased expenses in healthcare, and heightened number of properties, livelihood, and agriculture losses that impact on the future livelihoods of a country's citizens.

An enabling environment for inclusive insurance³ and risk financing is important not only to protect lives, livelihoods, and property from the impact of disasters, but also to provide coverage for sustainably protecting healthcare, employment, agriculture and food security. A multi-aspect disaster risk financing (DRF) with the help of insurance could potentially reduce losses from disasters through a range of innovative risk financing tools, such as parametric insurance and insurance-backed social protection.

1.1 Diagnostic rationale, objectives, and scope

The UNDP in the Maldives has a long history of development initiatives and endeavours in providing the government with long-term support that systematically links the public policy and funding resources. It has helped the government on various occasions in addressing the adverse impacts of disasters, climate change risks, pandemics, as well as their causal factors, while building resilience of the most vulnerable households and communities. The UNDP's new Country Program Document (CPD) for 2022-26 strives to enhance capacities to integrate disaster risk management (DRM) and climate change adaptation and mitigation into the development planning architecture of the Maldives. This diagnostic was carried out based on virtual consultations with more than 40 stakeholders which consists of insurers, financial regulators and other related stakeholders in the Maldives. Building on this alignment of interest and based on its vast experience and expertise, the UNDP through its Maldives Country Office and together with its global initiative, the Insurance and Risk Finance Facility (IRFF), has carried out this comprehensive diagnostic exercise to identify and develop opportunities for inclusive insurance and risk financing in the Maldives.

The findings of this study were validated through an in-person stakeholder consultation session held in Male on 29 September 2022 jointly by UNDP and the MMA. Innovative insurance solutions are seen as an important intervention which can support the country's plans to develop protection measures to help mitigate the impacts from various risks due to

¹ **Insurance** is an arrangement by which a company or the state undertakes to provide a guarantee of compensation for specified loss, damage, illness, or death in return for payment of a specified premium.

² **Risk financing** is the mobilisation of budgetary systems and financial instruments to predictably finance risk management activities to address the economic and developmental impacts of risks.

³ **Inclusive insurance** is a broader term denoting all insurance products aimed at the excluded or underserved market; rather than just those aimed at the poor or a narrow conception of the low-income market.

natural and man-made disasters. This report covers significant areas across the inter-related disciplines of the country's risk financing needs. In addition, the report will provide an update on Maldives' country profile and the knowledge relevant for inclusive insurance, including the demographic, socio-economic, and sectoral context for developing insurance and risk transfer solutions.

The Objectives of this report include:

- To provide a significant entry tool for the UNDP Maldives Country Office to assist the government and policymakers develop effective policy for inclusive insurance and risk financing and its integration to more effective management of disaster risk finance;
- To open opportunities for UNDP and its partners to engage with key stakeholders to develop solutions for inclusive insurance and risk financing in the country;
- To understand how best to integrate insurance and risk financing into the country's development frameworks.

One of the key objectives of this Diagnostic is to facilitate the development of climate and disaster risk insurance in the country. It is expected to open the discussion on innovative risk transfer needs, suggest the ways to close the protection gap, and recommend the channels of creating inclusive insurance.

The Diagnostic will define the underlying conditions needed for the development and implementation of insurance and risk finance. It will also help stakeholders better understand the gaps in information needed by insurers to set premium levels. A review of the existing enabling environment provides recommendations on what interventions are needed to develop more effective insurance and risk financing in the country.

The Diagnostic covers significant ground by articulating the evolution of the supply side, a picture of the demand side, the gaps and opportunities in the enabling environment i.e. government support, current regulatory environment, capacity and vision to develop the market, the financial capacity of insurance industry in the Maldives and the attitude towards developing new insurance products.

2. Underlying risk and development information

The Maldives is an island country, located in the south-west of Sri Lanka and having the smallest land size as a country in Asia, being an archipelago of 1,190 coral islands grouped into 26 atolls (187 inhabited islands, and about 167 islands with tourist resorts). With its strategic location astride and along major sea lanes in the Indian Ocean, the Maldives is one of the most prominent tourism destinations in the world, yet at the same time it is amongst the world's most climate risks-prone countries. The estimated population of the Maldives is 543,620 of which almost one-third live in the capital of the Maldives, in Male Island. Two seasons - dry season (from December to April, northwest monsoon) and rainy season (from May to November, southwest monsoon) - dominate the Maldives' weather.

The islands of the Maldives are classified into (i) inhabited islands; (ii) resort islands; and (iii) industrial islands. The total area of national land is 298 sq. km., and the length of coastline is 644 km. Around 44% of residential areas and 47% of infrastructure facilities are located within 100 m of the coastline.⁴ The country has a population density of 1,359 people per kilometer. Mean elevation of these islands is 1 to 1.5 meters. As such, the Maldives has long coastlines and low-lying land area.

The sustainability of the country's fast-paced developmental projects remains highly vulnerable due to its limited resilience against the impact of climate risks, especially due to the long-term impact of climate change. While there have been climate-induced events of varied intensities in the past in the Maldives, it is estimated that on average, the country is hit by 2 to 3 significant events of rainstorms and coastal flooding per year⁵. In addition, the country has experienced freshwater shortages during the dry season because of increased salinity of the ground water since the 2004 Indian Ocean Tsunami.

Globally, the damages associated with disasters and climate risks are showing an increasing trend. Climate change itself poses additional threats owing to various factors, such as sea level rise, the more intense and less predictable flooding, and storm surges. Coastal flooding and excessive rains are believed to be the most frequent causes of economic losses in the Maldives. Over 90% of the islands have been reported to flood annually, 97% are reporting shoreline erosion, and 64% of the islands experiencing erosion reported the issue as severe. Nearly 50% of all housing structures are also within 100 meters from the coastline, only few of which are capable of withstanding tidal floods, let alone tsunamis.⁶

Along with the catastrophic tsunami of 2004, Maldives has experienced local, recurrent hazards in the past years. However, precise data on damages and losses are not available, making it difficult to estimate the extent of the actual economic impacts.

Climate change is also expected to have a significant impact on the tourism sector, which is the main industry of the country. A UNDP study in 2015⁷ reviewed the impact of climate change on the Maldivian tourism industry and predicted that by 2020, the country could experience a loss of up to 10.4% of the tourism revenues due to climate change, further exacerbating losses of up to 18.2% by 2050.

⁴ Based on Census 2014, considering a sample of islands namely the Fonadhoo (2,266), Maamendhoo (896), Gan (3,080), Isdhoo (958) in Laamu Atoll and Meedhoo (1,871) in Addu Atoll with consideration of gender ratio from the same census.

⁵ Asia Disaster Reduction Center (ADRC). [Information on Disaster Risk Reduction of the Member Countries: the Maldives](#).

⁶ Nachmany et al 2015.

⁷ UNDP Maldives and Ministry of Tourism (2015): Economic costs and benefits of climate change impacts and adaption to the Maldives Tourism Industry, Tourism Adaptation Project (TAP)

A recent study⁸ has found that there is a significant dividend associated with building resilient infrastructure in the Maldives. However, given the country’s limited fiscal resources, particularly after COVID-19, the international community has a role to play by increasing cooperation to help fund the needed to increase the country’s resilience prior to the occurrence of natural disasters rather than helping finance the ex-post reconstruction only.

Despite the ongoing efforts made by the government and its development partners, each disaster event caused by cyclones, storms, drought, or saltwater intrusion, has led to adverse impacts due to increased vulnerabilities and low levels of resilience of communities in various parts of the country. Climate change is one of the main challenges of the Maldives’ government as the rise of sea level threatens the existence of the islands, which are on average only 1.5 meter above sea level.

2.1 Political Economy

The Maldives adopted a new constitution in 2008 which mandated a decentralised form of governance and envisaged a presidential system with an independent judiciary and legislature. In the following years, the country underwent major socioeconomic reforms with the introduction of a new system of taxation, a universal healthcare and a pension system. The country has quickly become part of the middle-income countries group, driven by the rapid growth of its tourism and fisheries sectors, though it still contends with a large fiscal deficit in 2022 as the country comes out of the Covid-19 pandemic. In 2017, the country attained access to global financial markets and issued its first ever sovereign bond to primarily finance its large-scale infrastructure projects. More recently, the COVID-19 pandemic increased government borrowing levels thus leading to a debt-to-GDP ratio of 113%⁹ by the first quarter of 2022. Table 1 is a snapshot of key economic indicators of the Maldives:

Table 1: Key economic indicators in the Maldives

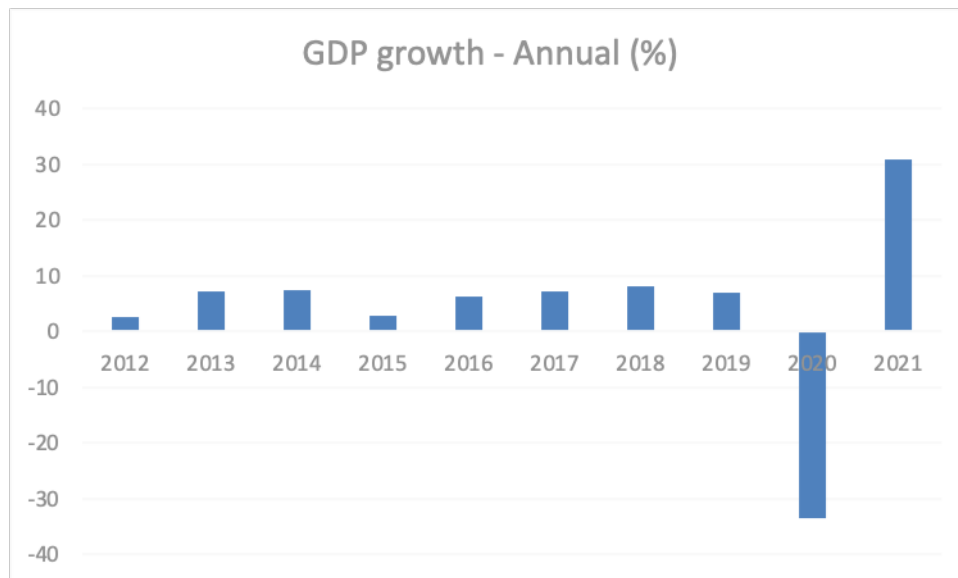
Year	GDP Current (In billion US\$)	GDP per capita, PPP (In US\$)
2017	4.75	18,058
2018	5.3	19,243
2019	5.61	20,334
2020	3.74	13,442
2021	4.89	18,232

Source: World Development Indicators

⁸ IMF Working Paper, 2020, ‘[Enhancing Resilience to Climate Change in the Maldives](#)’.

⁹ Maldives [government debt statistics](#) by Ministry of Finance

Figure 1: GDP growth (annual %) - Maldives¹⁰



Source: World Development Indicators

Diversifying the economy beyond tourism and fishing, reforming public finance, and increasing employment opportunities are near-term challenges facing the government. Over the longer term, the challenges include the impact of erosion and possible global warming on the low-lying country, where 80% of the land area is just one meter or less above the sea level.

2.2 Development Dynamics

The Maldives has been a development success; enjoying robust growth coupled with considerable development of the country's infrastructure and connectivity. It has also provided high quality and affordable public services for its people, resulting in impressive health and education indicators with a literacy rate approaching 100%, and life expectancy of over 78 years¹¹.

About a third of the population live in the centrally located capital city of Male and almost a tenth in southern Addu City; the remainder of the populace is spread over the 200 or so populated islands of the archipelago.¹² Though having limited land mass, with nearly 25% as the agriculture land and 10% as arable land and permanent crops spanning 10% of its land area¹³, the Maldives has been at the risk of extreme weather events and climate challenges, thus risking its growth potential and food security.

¹⁰ [World Bank national accounts data](#)

¹¹ Maldives SDG Update 2020, Maldives Bureau of Statistics

¹² CIA Factbook, 2022, [Maldives](#).

The Maldives is a developing country with the characteristics of an emerging economy such as sustainably high economic growth rate and an increase in the proportion of services sector in its overall economic structure. Tourism is the main driver of economic growth, fiscal revenues, and foreign exchange earnings in the Maldives. After the COVID-19 outbreak in March 2020, only about half a million tourists visited the country in that year, a third of the 2019 level, however, the recovery signs can now be seen in the tourism sector. A high dependence on tourism and limited sectoral diversification remains a key structural challenge as the country is highly vulnerable to external and macroeconomic shocks. Disruptions stemming from the pandemic and shocks due to recent global political conflicts further highlight the risks associated with reliance on a single economic sector i.e. tourism.

In terms of human development, the Maldives is ranked at 95 out of 189 countries with a Human Development Index (HDI) of 0.740 in 2019, leaving it as the second highest ranked country in South Asia, following Sri Lanka¹⁴. Between 1995 and 2019 the Maldives HDI value increased from 0.555 to 0.740, an overall increase of 33.3%. However, there is still much that remains to be done to bridge the gender gap and improve the female HDI value for Maldives (0.698) in contrast with males (0.756). A 2021 UNDP study found that in the Maldives, 19% of the employed population work in the informal sector, of which 43% are self-employed women engaged in small-scale business activities.¹⁵ The same study also found that women are more likely to be in informal employment and they face significant challenges in returning to the formal sector due to several social barriers.

As of February 2021, only 4.6% of seats in parliament were held by women. The Household Income and Expenditure Survey (HIES)¹⁶ of 2019 also suggests gaps in pay between men and women and lower participation of women in labour force compared to their male peers. Women had a national labour participation rate of 46% compared to the 77% for men while women earned 32% lower compared to their male peers.

To promote faster growth, the government has been rapidly scaling up infrastructure investments since 2016, thus helping boost construction activity, productivity growth, and medium-term growth prospects. Investments in physical and social infrastructure have also led to a reduction in poverty, with only 1.7% of the population estimated to be living below the poverty line (5.5 PPP USD/person/day) in 2019. After a sharp increase of poverty to 11% of the population in 2020, the poverty rate is estimated to have fallen to 4% in 2021 due to the economic recovery and is expected to return to pre-pandemic levels by 2023.¹⁷

Financing of the large investments through external non-concessional sources and sovereign guarantees have contributed to growing fiscal and debt vulnerabilities. Significant public investments are expected to continue though, due to the government's commitment to completing these projects within the five-year presidential term.

¹⁴ UNDP Human Development Report 2021/22

¹⁵ [Informal Sector Survey 2021](#): Rapid assessment of the impact of COVID-19 on informal sector in the Maldives by UNDP

¹⁶ <https://statisticsmaldives.gov.mv/hies-2019/>

¹⁷ The World Bank in Maldives: [Overview](#)

3. Market Conditions for Inclusive Insurance

Maldives has shown impressive progress in economic reforms, by traversing the legal journey while bringing liberalization in the financial sector and autonomy of the regulator. It is one of the few countries that recorded swift economic recovery after the devastating impact of the COVID-19 pandemic. The fiscal deficit is projected to decline to 16% of GDP¹⁸ in 2022 and steadily narrow in the medium term as revenues improve due to tourism growth and new revenue mobilization measures.¹⁹ Despite the narrowing of the fiscal deficit, public debt levels are expected to remain high. Prudent debt management remains critical to improving fiscal sustainability and lowering the cost of growth-enhancing investments, especially with large debt service obligations coming due in 2026.

3.1 Overview of non-life insurance market

Along with the development of the economy, the Maldives' insurance market has also witnessed growth and development with high and stable premium revenue growth, though the absolute industry size and premium base remains small, with an average growth rate of 11.7% per year.²⁰

The insurance industry is regulated by the MMA under the powers provided to it in the MMA Act of 1981. The Insurance Industry Regulation of 2004 and insurance guidelines set out specific criteria for authorization and other regulatory requirements to undertake business as insurers and insurance intermediaries in the Maldives.

As at December 31, 2021, there were 5 insurance companies (including one Takaful operator), 8 insurance brokers, and 42 insurance agents. Most of the insurers in the country are licensed as non-life (general) insurers, although a single insurer has been licensed to conduct life insurance services and has been transacting life insurance business. The total assets reached \$143.7 million, against the accumulated technical reserves of \$81.38 million. Insurance penetration and density²¹, during the year 2021, were 1.4% and \$126.1, respectively.

Despite the negative impact of the COVID-19 pandemic on the economy, the insurance market has maintained a stable growth momentum. According to MMA Annual Report 2021, while the profitability of the non-life insurance sector decreased due to high claims ratio during 2021, the profit margins remained strong, and gross written premiums increased.²² Total insurance premium revenue of the market reached \$75 million in December 2021, up 26.0% from the same period in 2020. Total assets of insurers are \$143.7 million, up 29.9% from the same period of 2020. At least 55% of these assets are invested back into the local economy estimated at \$83.25 million, up from 5.5% compared to the same period in 2020; total insurance reserves were estimated at \$81.38 million, up 66.1% from the same period of 2020.

MMA reported that the average risk retention of the Maldives' insurance industry has remained at 34.8% over the last five years, with an average net claim ratio of 43.5% and the net combined ratio of 72.7%. There is a wide range of products and classes of insurance provided by the Maldives' insurers, from motor to property to marine. However, a few insurers also specialize in specific products for example customized covers for tourist resorts.

¹⁸ [Medium Term Fiscal Strategy 2022-24](#)

¹⁹ [The World Bank in Maldives](#)

²⁰ [Key Indicators of General Insurance Business, 2017–22](#): Maldives Monetary Authority

²¹ Two key indicators that are used to determine the developmental state of the local insurance industry

²² Maldives Monetary Authority, [Annual Report](#), 2021.

Most of the insurers invest in safe and short-term investments, , mainly in fixed term deposits held with various with depository corporations, securities and equity markets. Investments in stocks and bonds are not uncommon, though stock investments are more common in blue-chip companies, despite investments in such equities being less liquid in the Maldives. The solvency regulations are yet to be issued by the regulator, thus currently there are no investment limits on the proportion of investments to insurer's equity in terms of the allocation of assets in each portfolio.

There is no locally domiciled reinsurance company in the Maldives. Depending on the insurance company and type of insurance lines, the reinsurance cession ratio ranges from 10% to 90%, though the average retention ratio has remained 35% over last five years. There is a wide variety of prominent international reinsurers doing business in the Maldives for large scale insurance products, though there is a lesser reliance on reinsurance in small-scale retail insurance products as these are usually retained by the local primary insurers.

As there are no solvency regulations and insurers do not have any restrictions to retain specific levels of risk or maintain a specific percentage of equity. Therefore, it cedes to the reinsurers as part of their own risk management strategy.

Generally smaller risks are retained by the local insurers but there is no standard pattern. Reliance on reinsurance varies from company to company. Stop-loss reinsurance arrangement is not common but some companies are using it. About 70% of reinsurance premiums are ceded in the form of treaty while remaining are in the form of facultative reinsurance.

Insurance in the Maldives is distributed through both direct and indirect channels. Most of the insurance companies have a traditional-style network of offices/branches mainly in the Capital City, and a limited presence in the southern City of Addu.. Although this it is costly to keep a network of physical office branches, it helps the insurers to do onsite risk and claims assessments.

The indirect distribution channel is through intermediaries including agents and brokers. Certain emerging distribution channels, such as bancassurance, are also now being used by insurers. However, the insurers generally rely on the agent networks with a direct outreach to the insurance customers. This provides an added advantage as the small businesses and customers can access insurance services across the country. The online distribution channel is developing in the Maldives, yet it is necessary to develop new platforms for this activity.

3.2 Legislation, Regulation, and Institutional Capacity

The legal framework for insurance business activities in the Maldives is being improved, moving towards compliance with international standards of regulation, management, and supervision of insurance business activities. Currently, there is no dedicated law on insurance in the Maldives. The insurance companies are licensed and operating under the primary law of 1981 MMA Act. This, however, comes with limitations both for MMA to effectively regulate the insurance entities as well as the industry which is yet to flourish due to limitations under the current legal framework.

The insurance bill is now in the process of being approved, it incorporates changes to ensure an alignment with the current economic context as well as the actual developmental needs of the local insurance market. Important aspects of the bill focus on capital management and solvency, operational requirements, dispute resolution mechanisms, alternative distribution channels, corporate governance, and reinsurance accounting requirements.

At present, there are no dedicated insurance products for disaster risks as well as agriculture risks in the country.

The next section highlights key stakeholders whose collaboration is important for the development of inclusive insurance in the Maldives.

3.3 Key Stakeholders

Ministry of Finance

The Maldives Ministry of Finance is responsible for curating a sound macroeconomic framework that leads to sustained growth, with the use of sustainable, non-inflationary fiscal policy. It formulates and implements fiscal and debt policies and formulates the national budget. The Ministry also ensures the submission of the government's financial statements to the People's Majlis and ensure effective management of the government assets. The Ministry is the shareholder of all State-Owned Enterprises (SOEs) and hosts the secretariat for Privatisation and Corporatisation Board (PCB) which is charged with providing the policy mandates for SOEs.

Maldives Monetary Authority

The Maldives Monetary Authority (MMA) is the central bank and the main regulator of the financial sector in the country. Established in 1981, the MMA derives its scope, regulatory powers, and mandate from the 1981 MMA Act. The MMA performs the functions of state management for currency, banking activities and foreign exchange; performs the central bank functions for issuing money, bank of credit institutions and providing monetary services to the government. It supports government's monetary policy; ensures the safety of banking operations and the system of credit institutions; ensures the safety and efficiency of the national payment system; and contributes to promoting socio-economic development. The MMA is responsible for supervising the insurance market in the country. It has the power to grant and withdraw licenses and has the authority to issue the regulatory framework (decrees, circulars and decisions) which provides guidelines for insurers and intermediaries, covering both the life and non-life insurance, as well as Takaful segment.

Capital Market Development Authority (CMDA)

The mandate to regulate capital markets of the country, falls under the purview of the Capital Market Development Authority (CDMA) which was established under the Maldives Securities Act in 2006. CMDA regulates listed companies, brokers, investment advisers, private investment funds, pension fund, custodians, credit rating agencies, stock exchanges and central depositories. The Maldives Securities Act also established the Maldives Stock Exchange (MSE) which has powers to make rules relating to membership of listed companies and listing rules of the stock exchange. The MSE is currently privately held and owns the Maldives Securities Depository (MSD) which undertakes the function of a central depository and provides clearing and settlement function for MSE. As of 2021, there are 10 listed companies, 3 dealers, and 2 investment funds registered with the Authority.

Ministry of Economic Development

The Ministry of Economic Development (MED) is the main Government ministry in charge of regulating trade and FDI in the country. The MED aims to develop policies related to trade and investment facilitation, labour, SMEs and employment. The Ministry is mandated by 15 pieces of legislation including all laws relevant for business registrations²³ and performs its functions and roles related to trade and investments, business services and conducting policy and economic research. The foreign direct investment (FDI) into the Maldives are guided by the Foreign Investments Act (1979), Special Economic Zones Act (2014) and under a range of

²³ Business Registration Act, Companies Act, Partnership Act and Competition Act.

policies created under these acts. The FDI policy outlines schedule of priority investment areas for the Maldives, minimum investment requirements, permitted level of foreign shareholding and the maximum tenure of investments.

Ministry of Tourism

The Ministry of Tourism strives to promote a sustainable and economically profitable tourism industry in harmony with natural environment, cultural resources, and the values of Maldivian people. Its functions include developing tourism at the national level, and carry out long-term planning, development, monitoring, and regulation. The Ministry is also responsible for coordination of developmental implementation through stakeholder collaborations and conducting research and statistical data collection, compilation and reporting for planning and execution of developmental plans for the tourism industry.

Ministry of National Planning, Housing and Infrastructure

The Ministry of National Planning, Housing and Infrastructure strives to make the Maldives an interconnected island nation with better prospects, enlightened with the environmental changes, not leaving anyone behind, and abiding by the principles of social services, economic opportunities, social justice, good governance, environment protection, and respecting human rights.

With a very broad mandate, it establishes the National Development Plan with relevant government authorities to ensure their development plans and milestones meet with the national development milestones. It arranges the development projects according to the priority levels of the projects and works with the relevant authorities to get the finances to implement the development projects.

This also includes planning and finalizing development projects to be carried out with the UN, regional and international organizations and other relevant authorities. It works to identify and evaluate the disasters caused by any natural phenomenon and other causes, evaluate the damages done to public buildings and other infrastructure and do research to reduce such damages.

Ministry of Fisheries, Marine Resources and Agriculture

The Ministry of Fisheries, Marine Resources and Agriculture (MFMRA) has the mandate to ensure the development and sustainable management of marine and agricultural resources of the Maldives. It works to transform the fisheries and agriculture sectors into a sustainably managed and market-oriented system that contribute to socioeconomic growth, food security and sustainable management of natural resources. It focuses on fisheries sector to ensure that it is sustainably managed vis-a-vis all marine living resources in the maritime zones of the Maldives. It also focuses on strengthening the agriculture sector by enhancing the capacities of crop and livestock producers and improving the value of agriculture produces by linking farmers to the market to achieve national food security and sustainable socio-economic development.

National Disaster Management Authority

The National Disaster Management Authority (NDMA) was established as per the Disaster Management Act (28/2015) as a successor of the National Disaster Management Centre (NDMC). The NDMA has been carrying out the functions related to hazard identification and mitigation, community preparedness, integrated response efforts, and recovery planning within the risk management context to address issues of vulnerability.

Some of the common thematic areas under the purview of NDMA, cutting across insurance, and focusing on emergency relief/response, disaster preparedness and mitigation include:

- Organizing and conducting programs to prepare the public in the event of disasters and raising government and public awareness of such events;

- Establishing and coordinating the legal and administrative system required to have government ministries, private sector, groups and organizations and individual citizens coordinate for any work that needs to be carried out in a centralized manner due to disasters, natural or otherwise;
- Ensuring that any developmental programs or a project conducted by various government ministries conforms to the national disaster risk reduction (DRR) standards as much as possible;
- Establishing a strong mechanism in which regional and international experience, information and other resources can be utilized for DRR;
- Conducting awareness programs on DRR in all regions of the Maldives on a continuous basis;
- Integrating DRR and DRM into the national education system and school curriculum and establishing means to deliver it;
- Facilitating training for government employees of relevant sector of DRR to enhance their knowledge on DRM and DRR;
- Establishing a disaster information database and making it accessible to public.

[Ministry of Environment, Climate Change and Technology](#)

The Ministry of Environment, Climate Change and Technology (MECCT) is the government's primary agency for mobilising finance for climate action. In addition the Ministry is also responsible for implementing government policies, regulations, programmes and projects related to the provision of clean water and appropriate sewerage services, provision of clean and affordable energy services, provision of clean and healthy environment free from pollution, protection of the islands from coastal erosion and leading the advocacy work for the rights of small islands states in the fight against climate change.

[Maldives Association of Tourism Industry](#)

The Maldives Association of Tourism Industry (MATI) is a non-governmental, non-profit organization. Since 1982 it has developed and promoted tourism in the Maldives and related matters. It coordinates with policymakers to align with laws and regulations relevant to the tourism industry. It also acts as the tourism industry's representative by supporting research and consultations.²⁴

²⁴ Official website of the [Maldives Association of Tourism Industry](#)

3.4 Market Demand

Opportunities to respond to the demand for inclusive insurance in the Maldives are emerging in the key sectors of tourism and of agriculture and in the need to protect properties from different perils.

3.4.1 Tourism sector in Maldives

The government's policy support to promote the tourism sector remains critical, since it is the backbone of the local economy. In the pre-COVID time, the Maldives had a thriving tourism industry. However, during the pandemic's peak, the country recorded a total of 555,000 tourists in 2020, ranking 122nd in the world in absolute terms; nonetheless, by putting the tourist numbers in relation to the population of the Maldives, the results show that there was one tourist per resident, ranking the Maldives as 44th in the world and 1st in South Asia. With the subsidence of COVID, the country is now seeing the rebound in tourist numbers with 1.3 million arrivals in 2021 and 1.08 million for just between January to August 2022.²⁵

The Maldives generated around \$1.41 billion in the tourism sector alone in 2021. This corresponds to 28.82% of its GDP and approximately 8% of all international tourism receipts in South Asia. Tourism and related services directly contribute to 40% of the economy, 80% of exports and half of total revenues.²⁶ While most Maldivians depend on tourism and fisheries for their livelihoods, any impact on tourism will be felt across all corners of the archipelago, being the single largest sector of employment.

Table 3: Latest tourism industry statistics²⁷

Resorts	Hotels	Guest Houses	Vessels
167	13	799	146
Dive Centres	Travel Agencies	Tour Guides	Yacht Marinas
217	610	16	3

Source: Tourism Statistics, Ministry of Tourism

In terms of critical areas for developing insurance required for the tourism sector, it is important to expand the scope of the coverage and include sub-sectors of tourism which may be small but potentially can bring high-impact, such as eco-tourism, guesthouses, dive operators, tour operators who can significantly affect the sustainability and contribution of tourism sector to the economy, as well as the protection against environmental risks contributed by the tourism sector. Offering insurance beyond the simple risks will help to diversify the insurance portfolio of the tourism insurance scheme and develop the market by making it large enough for efficient risk transfer.

The tourism sector stakeholders identified the risks faced by the sector into two main groups:

- **Climate risks**, such as coastal flooding, rainstorms, saltwater intrusion. Such risks are frequent and affect almost all parts of the country
- **Non-climate risks**, such as the global pandemic, other risks due to demand and supply issues

²⁵ [Tourism statistics](#)

²⁶ [Beyond Tourism: The evolving narrative of Maldives' growth](#)

²⁷ [Ministry of Tourism](#)

The ability for tourism operators, especially the small-scale ones to afford insurance is not high, mainly due to the low margins from their business and low levels of insurance awareness. It is therefore, necessary to form a value chain with close linkage and mutual support between stages/stakeholders in the chain. For instance, government support is needed in the early stages to create insurance habits, support value chain organizations with a combination of central and local stakeholders. There is a huge potential to develop the tourism-related insurance in the Maldives. One of the potential channels to develop the tourism insurance is by bundling across the tourism value chain. Therefore, these businesses can participate by supporting premium or including premium in the price of the services they sell.

Stronger coordination is needed among the stakeholders, including the relevant ministries, departments, and potential implementation partners like the Maldives Association of Tourism Industry (MATI) and the Maldives Association of Travel Agents and Tour Operators (MATATO).

These stakeholders have staff with the knowledge of insurance needs of clients, working closely with the tourism related businesses, and they can advocate for people as well as explain to the customers about insurance. Building capacities of these stakeholders to support tourism insurance will directly contribute to raising insurance awareness among the tour operators. In addition to various other possibilities, the expansive outreach of these stakeholders can also help in promoting the tourism insurance agenda in the country.

3.4.2 The agriculture and fisheries sector

The Maldivian fisheries industry reports catching 100,000 tons of tuna per year, and fish is the country's biggest export.²⁸ Despite this, agricultural and fisheries insurance solutions are inaccessible, with a market that is undeveloped and foreseen as complex for most farmers and fishers in the Maldives to understand. Weather index insurance can be a potential product for developing agriculture insurance in the future, although, with awareness-raising for farmers as a prerequisite.

i Weather index insurance

Weather index insurance is a relatively new form of insurance that farmers can use to help manage weather-related risks. It pays out claims based on an index, such as rainfall, measured at a local weather station or by satellite, rather than based on a consequence of weather, such as a farmer's crop yield. This is often more efficient in rural or remote parts of countries where traditional claims assessment remains a challenge. Unlike traditional crop insurance, the insurance company does not need to visit a farmer's field to determine premiums or assess damages; if the rainfall amount is below or above a pre-specified range/threshold, then the insurance pays out. Since the payout is not linked to the crop survival or failure, the farmer always has an incentive to make the best decisions for crop survival. This innovation significantly lowers the insurance company's transaction costs and risks, reducing insurance premiums and increasing accessibility.

Some of the issues that need to be considered when designing and implementing agriculture and fisheries insurance in Maldives include:

²⁸ [How a centuries-old tradition in the Maldives could safeguard tuna for the future](#)

- The insurance products and the risk coverage should be suitable for the needs of each island or farming group, as there is seen to be a huge polarization among the farmers' and fishers' risk protection needs;
- The policy wording should be simple and comprehensible by the farmers and fishers;
- There should be sufficient staff with insurance expertise and product knowledge, easing the difficulties in distribution, risk assessment, inspection and loss adjusting;
- In some locations and for certain income groups, people may not be able to buy insurance, either because they are mainly poor households (where premiums need to be subsidized by the government) or just because of their limited or lack of knowledge of insurance.

There are no notable agricultural insurance schemes or products in the Maldives, hence it is difficult to assess how profitable and sustainable, if at all, this line of business can be. Despite this, one thing is clear - that climate change will be causing disastrous impacts especially in the local agriculture and fisheries sector. Therefore, the need for insurance in this sector remains a critical need for it to be a sustainable local livelihood.

Though the sector is limited in its size and scope, there is still a strong need for the stakeholders to consider setting up an insurance scheme for agricultural and fisheries risks in the Maldives, on the lines of some prominent examples from around the world, like the ones in India, Spain, or the Caribbean Catastrophe Risk Insurance Facility (CCRIF). This would help the agriculture and fisheries insurance market in the Maldives grow more efficiently while spreading the risks and easing the pressure on premiums and profitability. The scheme can be a multipurpose vehicle covering multiple perils, ranging from crop, livestock, and aquaculture risks. Setting up a pool can also be helpful in terms of ensuring availability of payouts to farmers for replantation, thus saving the country from food scarcity, inflation and hiking prices.

UNDP's discussion with industry stakeholders discovered that despite their limited capacity to pay, if the agriculture households in the Maldives see the benefits of insurance to protect against disasters, they will find a way to pay an insurance premium. However, it might not be easy for low income households to purchase insurance products, due to limited financial means to cover the premiums but, if government can support in the initial stage in the form of premium subsidy, it will be helpful for low-income cohorts. UNDP discussions with industry experts suggest that the insurance premium accounts for 1-2% of the cost of agricultural production. However, due to limited insurance awareness among the poor and near-poor households, there is a reluctance to purchase insurance unless it is subsidized by the government, demonstrating the critical need for insurance awareness. Any insurance scheme should therefore, be rolled out with heavy awareness activities among the farming households.

With only 10% of the land estimated to be cultivable, agriculture is not seen a vast sector in the Maldives. However, it still accounts significantly in terms of sustaining the food security needs of the local population and can be segregated into at least three sub-sectors i.e. crops, livestock, and fisheries. Fisheries provide the principal source of animal protein for the population, and almost half of the catch is consumed locally. Considering the broader aspect of insurance, the insurance needs within the agriculture segment are not limited to the production value only, as the farming households also have risk protection needs to protect their houses, assets, income/livelihood, and health risks.

The stakeholders consulted as part of this diagnostic study have highlighted the importance of conducting a needs assessment to understand the requirements and risks faced by farmers to design insurance products covering at least their input costs. Depending on the various sizes of farmlands, varied levels of insurance coverage including microinsurance

suggested here has been interest shown to understand and learn from the microinsurance models of neighbouring countries to meet the social demand.

Also, stakeholders have shown interest in conducting risk assessment for bundling insurance with credit loans, especially against climate and disaster risks. There is a need for risk assessment to be done for the risks faced by cooperative farmers and these can be addressed with the help of insurance solutions.

Another significant environmental risk in the Maldives is caused by the unsustainable agricultural and farming practices. There is now an Act on Pesticides (under Fisheries and Agriculture Ministry) and the Ministry of Environment, Climate Change and Technology is also reported to be working on an overarching chemical bill. Most farmers, even if small, are using chemical fertilizers and pesticides which are causing run off into the ocean, especially after rainstorms and coastal flooding events, and thus affecting the ocean biodiversity and coral reefs. It is understood that a project on “elimination of persistent organic chemical” is also underway by the Ministry of Environment, Climate Change and Technology which also plans to launch studies on environmental risks due to the use of chemicals in the Maldives. There has been no significant study done by EPA on the potential of environmental risks and the opportunity to transfer those risks using insurance.

3.4.3 Property Insurance

In Maldives, there are currently 5 non-life insurers (including one Takaful operator) licensed to provide property and casualty insurance. The insured objects are properties such as residential and business assets, construction/erection works. There are no specific disaster risk or climate insurance products on offer. Disaster risks are covered under property, construction, and erection-risk policies (all-risks or named perils policy including disaster risk) or covered by endorsement/rider of the fire insurance policy.

The customers of property and casualty insurance in the Maldives are mainly enterprises and private sector organizations. Public and state organizations and properties managed by these organizations (offices, schools, hospitals, cultural facilities) are not found to be insured against the risks of disasters. The distribution channels for property and casualty insurance are direct and indirect channels. Direct distribution channel is the system of branch offices. Indirect distribution channel is intermediaries, including networks of agents and brokers over the country, depending on each insurer. In addition, the banking channel is also one of the fastest emerging distribution channels contributing to the expansion of the distribution network of insurers.

The property and casualty insurance business in the Maldives has been growing. The gross written premium has increased steadily every year, from \$49.76 million in 2017 to \$74.69 million in 2021. Gross claims have also increased from \$15.57 million in 2017 to \$29.18 million in 2021, while keeping the average gross claims ratio at 31.3%. However, with significant reinsurance support, the actual amounts of claim paid by domestic insurers has remained low and within considerable limits, thus protecting the financial bottom line of the local industry as the average net claims ratio of the industry remained 43.5% over last five years (2017 to 2021).

Table 4: Five year trend/average of the insurance industry in the Maldives

	Gross Written Premium (In US\$ million)	Gross Claims (In US\$ million)	Average Gross Claims Ratio (5-year average)	Average Net Claims Ratio (5-year average)
2017	49.76	15.57	31.3%	43.5%
2021	74.69	29.18		

Source: Maldives Monetary Authority

3.5 Supply and Providers

Access to insurance products is inadequate due to the lower affordability and limited awareness about insurance. Most insurance companies face challenges in increasing the insurance outreach that remains limited due to the high cost of delivery and operations from having to sustain a physical branch of networks. Hence, so far, the insurance companies have targeted mostly the medium to high-end segment of the market with their product offerings.

The country has greater scope to promote policies and legal frameworks to support the inclusive insurance agenda, such as microinsurance. There are currently no small ticket-sized insurance products for the low-income population.

There are currently 5 non-life insurers (including one Takaful operator) in the Maldives. The five-year averages (2017-2021) show that the property and fire insurance class enjoy the largest share in the industry's gross premium with 33%. The second and third largest insurance classes are the health and marine hull being 23% and 12% share in gross premium, respectively.

From an analysis of the portfolio of gross written premium of insurers²⁹, it appears that generally the commercial insurance in the Maldives is concentrated only on property side, seldom covering the disasters and that too only with a limited scope. Most of the insurance coverage for construction include property all risks (PAR), construction all risks (CAR), and erection all risks (EAR) policies, which are the long term policies often up to seven years of policy period. However, in the personal lines of insurance, only health and motor insurance are prominent insurance products.

According to insurance data from the MMA, motor, marine, and public liability insurance accounts for over 3% market share each, whereas engineering and personal accident have 2% and 1% market share, respectively and in terms of gross written premium, health insurance also makes another large share of the market.

Surprisingly, for a country where GDP and economic activities significantly depend on travel and tourism, there is less than one percent market share of travel insurance (0.21% average for last 5 years). This emphasizes how much the country needs to push the agenda of travel insurance, which will not only benefit the local industry but will also support the sustainability of its economic dependence on travel and tourism.

There is no insurance association in the Maldives to represent and protect the rights of Maldivian insurers and brokerage firms and to represent the insurance industry at relevant

²⁹ MMA Annual Report (2021), Statistics Bulletin and Insurance Sector specific data (table 11.1 to 11.3)

forums, in the process of drafting laws and regulations on insurance, providing education and training services, and providing other services such as mediation.

It has been observed that the usage of insurance in the country's low-income market still remains negligible as there is no evidence of insurers getting engaged in the business of microinsurance. While there is no agriculture insurance law in the Maldives, the microinsurance regulatory framework will also need to be established following the incorporation of the Insurance Law.

4. Market Conditions for Risk Finance

Disaster and climate risk management capacities have remained limited in the Maldives. The National Disaster Management Authority (NDMA) has been implementing several initiatives to further enhance the existing Disaster Risk Management (DRM)-related systems. Nevertheless, there are still challenges around functionality and integration of these systems to properly collect, collate, analyse and disseminate the disaster and climate change-related information that would enable the integration of risk financing solutions and support decision-making, in line with the targets of SDGs and the Sendai Framework for Disaster Risk Reduction (SFDRR).

There is a need in the country to establish a more robust DRM system which can standardize and harmonize disaster risk data from various streams and allow for assessments that can inform the development of risk reduction and risk transfer solutions, including insurance. These will be helpful in efficient dissemination of strategic information for various stakeholders, including the policymakers, decision-makers at the national and sub-national levels, private sector, general public, and development partners.

Currently the portfolio of disaster risk financing instruments in the Maldives does not include any standalone insurance product or scheme on disaster or catastrophic losses. This is being offered as endorsements or additional riders attached to the property, construction and erection all risk insurance policies. Government-supported agriculture insurance has not been fully explored and no policy or regulation on public asset insurance has been issued although stakeholders have indicated that preliminary discussions have taken place on mandating insurance for infrastructure projects, however these discussions are yet to yield actioned results. The consultations of this study also finds that the small and medium enterprises (SME) sector also remains largely out of the risk financing ambit with only a small number of SMEs covered by property insurance with limited disaster risk coverage included as endorsements or additional rider. It is important to note that even fire insurance is not mandatory for property holders in the country, even as fire has been recognized as a key risk. The regulatory framework for this type of product coverage is still not explicitly available.

4.1 The protection needs

In assessing risk financing needs, the first and foremost question to ask is on the type of risks for which risk transfer and protection is required. Such risks could be related to extreme weather events, slow onset climate changes, or just other hazards. There is a wide range of possible risks, including floods, storms, diseases, fires, landslides, tsunamis, earthquakes, and pest infestations.

Other implicit risks to consider include the loss of life, risks to health, loss of income and livelihood, increased gender disparity. These are additional elements that can also be included in the risk protection and risk transfer scheme.

Among major hazards in the Maldives, sea level rise is one of the biggest concerns that causes adverse impacts to the country with long coastlines and narrow and low-lying land. This could pose risks on 44% of settlement footprints on all islands which are within 100 meters of the shoreline, and more than 70% of all critical infrastructures that are within 100 meters of coastline.³⁰ It may intensify the impact of other natural hazards such as swell waves

³⁰ Unclearn.org

and storm surges. Among the major natural hazards, these are hazards that cause massive damage and are most sensitive to climate change. Swell waves occur more frequently than other hazards and it should be addressed with the highest priority. Southern regions in the Maldives tend to be more affected by swell waves and other climate hazards, which should be taken as the most important region to be addressed.

It is important to decide which of these prominent risks are on the priority list of the decision makers and against which the insurance products or other risk transfer instruments can be designed and applied. Some of the risks and their impact in the Maldives are shown in the figure below:

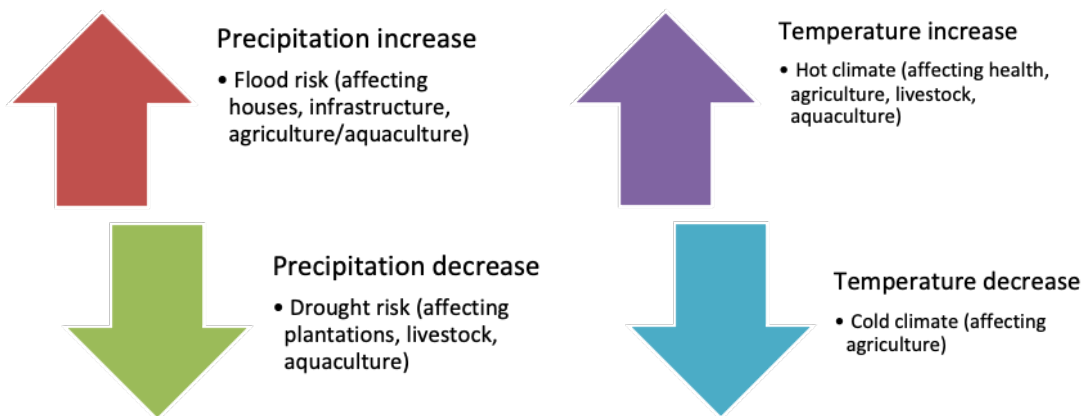


Figure 2: Climate change impact scenarios

An insurance scheme design needs to be clearly laid out to show how the scheme is going to cater to the risk transfer requirements of the beneficiaries or people who are covered through it. This varies from scheme to scheme, but the potential beneficiaries can be largely classified in three main groups as show in the figure below.

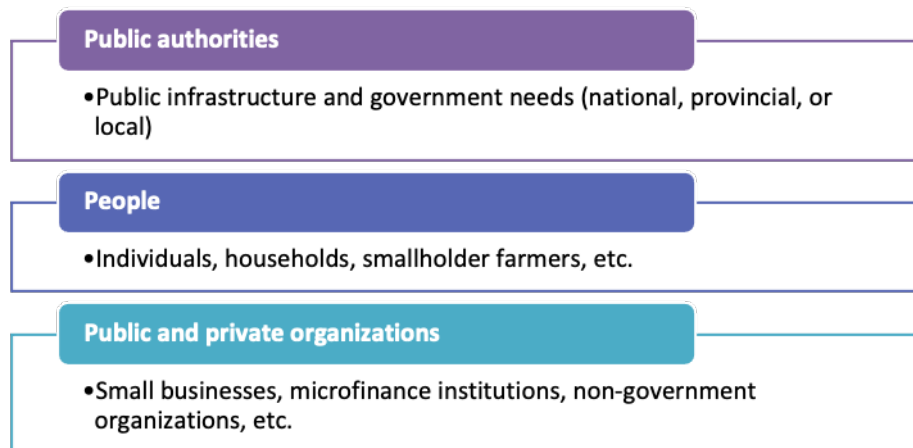


Figure 3: Insurance beneficiary groups

It will be important to prioritize the specific needs for each of these beneficiaries and objects and/or assets in different locations or provinces that will need to be protected against disaster impacts. Knowing this will help in streamlining the processes of data gathering, estimating

the potential hazards, their exposure and vulnerability, and arriving at suitable risk transfer product options.

4.2 Hazard profile

The Maldives is not among the most disaster-prone countries in the world, however, it remains highly susceptible to the risks due to climate change and the damages associated with such hazards, which are globally showing an increasing trend. Climate change itself poses additional threats owing to various factors, such as sea levels rise leading to severe saltwater intrusion, the more intense and less predictable flooding, and storm surges.

Coastal floods are believed to be one of the most frequent causes of economic losses in the country, as annually on an average, the Maldives is affected directly by several rainstorms and swell wave events of variable intensities. As most of the population and economic assets are in the low-lying coastal areas, the country is extremely vulnerable to the impacts of climate-related hazards and longer-terms impacts of climate change.

A recent study³¹ suggests that the climate change will have an impact on various sectors and resources such as tourism, fisheries, agriculture and food security, human health, water resources, and coral reef biodiversity in the Maldives. Among major hazards, the sea level rise can cause coastal erosion and intrusion of salt water to ground water. Furthermore, coastal erosion can lead to loss of beach, land, and infrastructure along coasts and can impact tourism, in a country where white sand beach attract tourists and resorts infrastructure sustains comfortable stay for the tourists. In addition, the coastal erosion will impact agriculture and food security. Intrusion of salt water will impact directly to water resources especially ground water and indirectly to agriculture and food security in which cultivation needs freshwater.

One of the key needs for the government of Maldives is to establish the risk transfer mechanisms, including insurance solutions for climate risks. To fulfil the information needs for the development of suitable insurance products, historical data on hazards, exposure, and vulnerability is required to be made available at national and sub-national level. This will also include data on loss and damage analyses at the provincial, district and commune levels. Also, for the development of suitable insurance products for infrastructure-related risks, there will be a need to have specific data on the exposed assets, including their financial values and restoration/ replacement costs.

4.3 Fiscal Impact

Since the disastrous 2004 Indian Ocean tsunami, the Government of Maldives has focused on creating a coordinated, strategic, and multi-sectoral approach to DRM. The Government has remained committed to putting disaster risk reduction (DRR) and climate change adaptation at the heart of the planning and budgeting process. It has supported strategic policy reforms under three pillars of this Strategic Action Plan (SAP): i) enhancing the institutional and regulatory framework to manage the impact of climate and disaster risk, ii) integrating climate and DRR in key sectors, and iii) enhancing the capacity to manage human health crisis preparedness and response. .

Amidst the global pandemic of COVID-19, the country strived to strengthen its core capacities to prevent, detect and respond to health emergencies when it worked with the World Bank to provide much-needed financial resources to address the impact of the pandemic on the

³¹ [Climate Risk Country Profile: Maldives](#)

population. Together with the Bank, it developed the Cat Deferred Drawdown Option (DDO) in response to a national multi-sector threat such as COVID-19.³²

Almost every year, the country suffers losses of varied intensity due to coastal flooding and storms, impacting a significant number of people and creating economic losses. This is further exacerbated by excessive logging, leading to reduced rainwater absorption, saltwater intrusion, leading to higher levels of seawater causing coastal erosion.

Another major contributing factor is the massively expanding tourism sector that has developed activities that can impact the natural environment. The archipelago suffers numerous storms, affecting lives and livelihoods, especially of the most vulnerable people. Global warming is causing more erratic rainfall, stronger rainstorms and higher sea levels and worsening the problems related to flooding. According to estimates³³, the value of economic losses is projected to rise dramatically and may be on an average of 2.3% of GDP by 2050 – one of the highest in this region. The government would need to consider its overall risk financing framework and assess the potential to incorporate additional instruments, including risk transfer mechanisms, so that financing disaster risk reduction and management benefits from ex-ante and ex-post budgeting.

³² [World Bank Financial Facility Strengthens Maldives' COVID-19 Response](#)

³³ [Climate Risk Country Profile: Maldives](#)

5. Insurance, risk finance and development integration

This diagnostic takes note of a few opportunities to integrate insurance and risk financing into development policies and priorities of the Maldives, specifically in the overarching strategies for the sustainable development goals and in the importance of natural capital to economic development and resilience-building.

The President of Maldives unveiled the Strategic Action Plan (SAP) 2019-23 encapsulating the implementation of 2030 SDG Agenda. It includes various specific targets corresponding to the global SDG targets as well as the Maldives' actioned approach towards achieving those goals. It is seen as the government's commitment to implementing the SDGs in the country. However, there is no mention of the potential use of insurance for disaster and climate risks. Insurance under this plan is focused only on its potential use for health and social protection perspectives. Some of the specific points include:

- Action 1.6 of the strategy states that there should be access to medical insurance schemes for all team members. In addition, action 1.6a requires a feasibility report for a national insurance scheme for players and officials in all national sports teams;
- Action 3.1c refers to establishing the emergency referral links for patient transfer with health facilities within the country in coordination with the social health insurance provider;
- Action 4.3c refers to establishing a mechanism to reduce cost of essential medicines by introducing generic drugs and a dispensing mechanism in the public health care system and for drugs covered under social health insurance scheme;

The SAP also talks about the overarching issues with the social protection system in general and particularly how the focus is on social assistance while not directly addressing the policy or its implementation of legal frameworks for social assistance, social insurance and labour market interventions. This has been resulting in a lifelong dependency on State assistance and welfare, often undermining other alternatives.

The country has introduced the Maldives decentralization laws through the Decentralization Act envisioning the role of local governments in supporting national authorities such as the NDMA in disaster events. The Article 23 (A-20) of the Act lists out the responsibilities of a local government to assist and cooperate with the relevant authorities in the event of natural and other disasters and to provide assistance and cooperation to the relevant authorities in the implementation of disaster mitigation and preparedness measures.

The Maldives is a country with abundant nature biodiversity, with extraordinarily rich coastal and marine biota ecosystems, including the coral reefs. Effective management of these natural resources is required, considering the risks that can disrupt and worsen the environmental conditions and consequential economic losses. One of the key drivers of biodiversity loss is climate change that cause asset damage and have a direct impact on main economic sectors such as tourism and fisheries businesses and livelihoods. Investment in natural capital also needs to be encouraged, to ensure they continue to provide protection and economic benefits to the communities. Understanding and reducing the threat of climate change can open ways to innovative business opportunities, leading to a more sustainable economy.

Coral reefs occupy only around 0.1% of the ocean floor but support 25% of all marine species³⁴. They are considered among the most biologically rich ecosystems on Earth and are a key asset for tourism³⁵ and fisheries as well as many other economic sectors. They provide food and resources for one billion people in more than 100 countries and territories.³⁶ In Maldives, tourism and fisheries sector revenues are significantly dependent on the long-term health of coral reefs. The numbers related to reef fisheries and its importance to local populations is somewhat underestimated, as in most of the cases the subsistence fishing catch is not included in the potential offered by country's coral reefs.

In addition to sustaining the tourism and fisheries sectors in the Maldives, since the coral reefs provide significant coastal protective services, it is reasonably affordable to insure a reef system than to continuously build new coastal defences. Maintaining the reef structure and its integrity will mean that reefs still provide services, avoiding greater losses that can incur in their complete absence. Using insurance as a mechanism to protect at-risk coastal ecosystems and communities in Maldives can help to gain access to payouts that will fund the ex-post reef repair activities. This not only supports nature recovery and restoration and rehabilitation of coastal communities, but also augments the agenda of conservation finance to protect marine ecosystems across the globe.

Reef insurance can also serve as a mechanism to protect at-risk communities and economy that depends on nature to protect them, their property, and their livelihoods. It can provide funding for reef ecosystems damaged by catastrophic events, and potentially make governments and coastal property-owners invest in coastal protection projects more comfortably and to use natural systems to insure against loss.

A study³⁷ modelled and analysed the possible interventions to achieve healthy reefs and expected economic net-benefits and returns on investment via strategic interventions, including marine protected areas for coral reefs. It found that by 2030, these interventions could potentially reduce the gap between the forecast benefits of a healthy reef and the current trend towards coral reef degradation by 70%. Using insurance means every dollar that is spent on coral reefs intervention helps better protect the reefs in the long term.

The Government has set up an Environment Restoration Fund, which is funded by the amounts of fines and penalties and directly under the financial control of the Ministry of Finance. The Fund has a management committee comprising of various ministries like finance, tourism and other stakeholders. The Fund is used to carry out the restoration works on the reefs for up to MVR 100 million of damages. One of the challenges for the fund is its capitalization. There is limited enforceability of fines as often it takes many years coupled with long litigation process to recover the fines. Therefore, it is critical to make necessary regulatory changes in the law to enhance the enforceability and recovery of fines. Also, often the cost of damages is much higher but the EPA cannot charge fines that are beyond its statutory limits. This Fund could be a potential vehicle for channelling the benefits of insurance payouts to coral reef restoration and protection.

Another critical area identified by stakeholders interviewed as part of the consultations for this study, is requiring restoration for the mangroves which are in a severely critical state, especially in the northern atolls. The EPA is conducting a study to identify the factors related the ongoing loss of mangroves and how to restore them. There is a potential need to understand the risks faced by any potential mangroves and seagrass bed restoration

³⁴ Census of Marine Life, n.d., Reaka-Kudla and Wilson (1997)

³⁵BIOFIN, 2016, 'BIOFIN Workbook - Mobilizing Resources for Biodiversity and Sustainable Development', *The Biodiversity Finance Initiative*.

³⁶[UN Ocean Conference](#)

³⁷ UNEP, 2018, [The Coral Reef Economy: The Business Case for Investment in the Protection, Preservation and Enhancement of Coral Reef Health](#).

projects, including the blue carbon and the carbon sequestration capacity of mangroves in the Maldives and how such risks can be transferred using insurance.

In many countries, the policymakers have in recent years started taking much greater interest in risk-transfer mechanisms, including insurance, especially for natural capital resources, such as coral reefs. This is demonstrated by the increasing number of countries engaging in initiatives related to disaster risk insurance and financing, and by the endorsement of risk transfer by the United Nations Framework Convention on Climate Change (UNFCCC) Paris Agreement as part of climate adaptation strategy, as well as the post-2020 Global Biodiversity Framework being negotiated under the UN Convention on Biological Diversity. This work is now stretching more and more into natural capital, with the UNDP as one of several development agencies increasingly identifying and implementing nature-based strategies (NbS) to support risk-transfer solutions.

6. Summary and recommendations

Considering the economic and financial vulnerability of the Maldives, especially to climate and disaster risks, there are various areas that can be addressed with the help of insurance and risk transfer solutions. The government should assume a stronger role as the policymaker and provide strategic guidance for the development of effective risk transfer solutions, that in turn can reduce the fiscal burden and facilitate economic development. A level-playing field with an enabling environment will pave the way for market-based insurance solutions, with lesser reliance on government support and subsidies in the longer term.

UNDP discussions with stakeholders indicate that risk financing and insurance solutions are recommended to be developed both at sovereign (country-level) as well as private sector-level, including the development of legislative frameworks and government policies on financial risk management, including insurance, for public and private assets, tourism and agriculture sectors, and other vulnerable sectors. The following are some of the key steps that are cross-cutting and common to most of the UNDP recommendations for implementing the required insurance and risk financing solutions in Maldives. These include:

- i. **Risk assessment studies:** These need to be carried out to quantify the exposure (financial values) and vulnerability estimates for various assets and economic sectors to be protected. For instance, the natural capital in the Maldives (coral reefs), public assets, agriculture, fisheries, and other risks at local and national levels;
- ii. **Market support and development initiatives:** These are important to enhance the risk transfer capacity, for instance, the development of data collection mechanisms and infrastructure, and regulations governing products, underwriting, financial reserves management of insurers, etc.;
- iii. **Support for pilot insurance schemes:** Support for such schemes will respond to critical risks to public property, tourism and agriculture sectors and natural capital, and taking note of key perils such as fire;
- iv. **Refinement and replication of insurance scheme at national level:** Based on the feedback and outcome of the pilot schemes, refinements can be made, and the schemes can be replicated at a national-level.



Figure 4: Cross-cutting steps for implementing insurance and risk financing solutions

There are opportunities for government to seek support from its development partners, including UNDP, to develop the insurance solutions, specifically to mitigate the risks from climate change and other disasters, such as:

- international expertise and insurance risk models to be made available to the Maldives;
- developing data collection formats and templates to support disaster and climate risk insurance;
- conducting risk assessments to develop insurance products;
- standardization of insurance products, claims assessment formats and procedures;
- creating insurance awareness among stakeholders; and
- building local expertise for risk assessment and loss adjustment.

The key recommendations that have been identified following our analysis of the information and data available to UNDP and stakeholders' feedback include:

6.1 Explore the development of tourism insurance

The Maldives tourism industry is keen to study and carry out adaptation initiatives to mitigate the risks of climate change and overexploitation of resources due to unsustainable tourism activities. A fifth tourism master plan is being worked on by the Ministry³⁸. In this draft, the Ministry has advised that it considers climate risk insurance important to protect the long-term sustainability of the industry. In the absence of insurance, however, the Ministry has been using a trust fund to manage the contingencies and liabilities. This Fund is managed by the Ministry, together with Finance Ministry and Ministry of Home Affairs, forming a committee to manage the trust fund. The use of tourism-related insurance need not necessarily be a replacement of the trust fund, but rather the trust fund pays an insurance premium instead of being used to fund the full value of recovery from damages or losses.

A non-climate risk which emerged from the pandemic was the inability of tourists to return to their home countries at the planned time because of international border closures which caused massive disruption and burden on local systems. Travel insurance market development can also address these challenges.

Credit and financial risks: The tourism industry has and still will face financial risk due to certain weak links in the complex chain of global tourism industry and operators. For example, the Maldives tourism industry was affected by the collapse of UK tour operator Thomas Cook, where a significant number of tourists who booked holidays with one of the world's oldest travel companies were in the Maldives when it went into liquidation, resulting in outstanding payments owed to several resorts. This calls for insurance and risk transfer solutions to protect not only the tourists but also the long-term viability of the industry.

Fire, property and third-party risks: In a country like Maldives where there is a high economic dependency on tourism activities, there is a growing economic opportunity area related to guest houses, safaris, and homestays. However, there are still no suitable insurance products to protect these small but growing businesses, and any adverse impact due to their business operations. Some of the resorts have invested in risk reduction measures, such as seawalls however, the guest houses and small-scale hotels which are closer to shorelines in the islands do not have means for such costly adaptation measures, and hence are more at risk.

Professional indemnity: Tour operators face significant risks due to factors that demand professional indemnity insurance or professional liability insurance. Often due to reasons beyond the control of tour operators, tourism clients suffer setbacks in their travel plans and consequently, the damaging costs are passed on to the tour operators. Here insurance is

³⁸ PSM news – Fifth Tourism Master Plan to be launched (<https://psmnews.mv/en/106543>)

much needed to cover for the risks associated with professional liability of tour operators. In addition, there is a need to consider bundling travel insurance with product offerings for travellers to protect them against the risks of cancellation and situations beyond control, like bad weather delaying the sea planes, thus missing the onward flights.

A national level insurance scheme is needed in this case to protect the viability of the tourism sector and decrease the instances of passing on the costs to the clients.

6.2 Lay the foundations for insurance for natural capital

Coral reefs of the Maldives are considered as the 7th largest coral reef system on Earth, representing 3.14% of the World's reef area.³⁹ The Ministry of Environment, Climate Change and Technology is cognizant of the critical challenges inflicted by the climate risks on these natural ecosystems. One of the most important risks is due to climate-related sea surface temperature increases, which has resulted in mass bleaching events and in the loss of coral reefs and coral cover at unprecedented scales in last 25 years. In addition, significant environmental damages are inflicted on coral reefs by marine hulls, which is something critical to be insured.

The Ministry has been keen to consider innovative solutions to encounter direct impact of hazards on coral reefs for which insurance solutions can be developed, such as coral bleaching, ocean warming, and reef damage losses due to tourism activities. The damages may include loss of reefs due to dredging and reclamation projects causing sedimentation. The Ministry has recently embarked on a project to understand and quantify the value of natural capital services in the Maldives, such as coral reefs. This is one step closer in the direction to understand the types of damages that can be made to coral reefs and the corresponding economic impact.

i Biosphere reserves – A potential vehicle for risk transfer

The Maldives has established 3 UNESCO designated biosphere reserves, for which trust funds are being set up that are managed by the local councils. One example of such biosphere reserve is the [Baa Atoll Conservation Fund](#). This decentralized structure has a role where the local governments can identify the risks faced by the local islands and the biosphere managed by them. Once the risks (hazards, exposure, and vulnerability) are identified, only then a suitable choice in developing insurance or other risk transfer solutions can be developed.

There are a few material issues and steps that need to be taken to achieve the progress towards scaled deployment of coral reef insurance in the Maldives. These are highlighted below:

- **Coral reefs need to be considered as public assets by the government:** Reef protection through insurance has not been prioritized by the government, unlike other areas such as fire and property insurance, which are being considered by the government for dwellings in the capital island city of Male. Coral reefs and other living creatures are classified as natural resources, instead of public assets, the government

³⁹ Dhunya et al, 2017, 'Coastal habitats of Maldives: status, trends, threats, and potential conservation strategies', *Int. J. Sci. Engineer*, vol.8, pp.47-62.

needs to consider them as the priority to be insured soon. It needs to be discussed whether the more than 2000+ coral reefs in Maldives can be classified as public assets instead of natural resources, and their insurability needs to be established under the potential insurance scheme.

- **The existing regulations need to be broadened in terms of their application for coral reef insurance development.** The existing definition of natural resources poses uncertainty on the insurability of coral reefs. There is a general concern as well as interest at the governmental level to protect and improve the quality of environment and support the restoration of ecosystem, coastal and marine environments that remain vulnerable to natural disasters. However, since coral reef insurance is a new area, the insurance regulatory framework is still limited in terms of the insurability of natural capital.

There is a need to make marine insurance a mandatory insurance that will include cover for third party damages, including the losses to environment, such as coral reefs.

6.3 Explore the potential for making disaster risk insurance for public assets compulsory

Disasters can severely affect both public and private assets. However, the loss of public assets and infrastructure, including energy sector projects, can bring more adverse consequences to public at large than caused by the damage to private assets. Maldives' strategy for financing the reconstruction and rehabilitation of public assets largely depends on the size of the event relative to its fiscal budget.

- **There is a need to make disaster risk insurance compulsory for public assets,** especially for the critical assets and important infrastructure. A government decree in this regard will be useful. MoF and NDMA, together with MMA, could work on developing a specific decree for insurance of assets and infrastructure against disasters and climate risks. This decree should be finalized in close consultation with relevant stakeholders, including insurance and reinsurance companies active in the country, as well as development partners who have been engaged in disaster and climate risk management in the Maldives. Finalization and issuance of this decree would help address many existing gaps in disaster risk insurance for public assets.
- **There is a need for a comprehensive database of infrastructure,** including the financial values of assets that will help the decision-makers determine the exposure, insurance premium and insurability of these assets. In preparation for the public property insurance program, a centralized database is needed to gather data on public buildings, their contents, and nationwide infrastructure needs to be developed (as part of the activity to develop a national, geo-referenced database of national assets) as well as a database of current insurance values. An analysis of this will help identify current blind spots and inefficiencies in the overall process and needs of insuring public assets. The existing data compiled by NDMA, mapped against potential geospatial information on property and infrastructure, would not be sufficient for insurance purposes, hence the need for it to be upgraded. The database will provide a structure for the national insurance portfolio of assets for placement in the insurance and reinsurance market. A national approach to insuring public assets would allow for economies of scale and diversification of benefits, and thus offering lower insurance premiums as well. Also, there is a need to offer standard, standalone

disaster and climate insurance products, without the need for an extensive yet regular property insurance coverage.

- **Insurers need to offer technical assistance to public entities** in the design of their disaster and climate insurance coverage. A disaster and climate risk insurance program in the Maldives will be useful in the longer run, where as a starting point, government needs to prioritize the assets that it would like to protect. Also, it is important that support is provided to insurers/reinsurers in terms of data, tools, and capability to calculate suitable premium for disaster risks. Standardized terms and conditions for the property insurance policies need to be developed in collaboration with the insurers and reinsurers, who provide the risk capacity, to help the government identify the public property risk exposure and the insurance needs.
- **There is a need to institutionalize budgetary allocations to pay for insurance premiums** and make available the adequate information to select cost-effective insurance coverage. In case of covering for public property, expenditure for disaster and climate risk insurance should be listed in government expenditures and budgetary plan.

The risk of fire is one of the main hazards in the capital city of Male, being one of the world's most densely populated cities. It is understood that one of the leading insurance companies has been discussing the potential insurance solution with NDMA while offering to modify the existing housing insurance product and to include the perils related to catastrophic fire risks. However, it is difficult to increase the penetration of such products as most people do not buy insurance unless it is made compulsory. The government must consider making such products as compulsory through a public scheme, where part of the premium is contributed by the property owners, while part is funded through a national scheme.

Since the losses due to flooding and other environmental risks are on an increasing trend, there is a need to invest in risk reduction measures along with insurance so that there are lesser claims and cost of insurance can remain affordable.

6.4 Develop agriculture insurance

Developing effective and sustainable agriculture insurance solutions will remain critical for food security and sustainability in the Maldives. Building upon the existing needs for agriculture insurance and addressing the gaps in risk protection, effective solutions need to be developed for crop, livestock and fisheries sectors.

Despite the complete absence of agriculture insurance in the Maldives, it is still considered as an important area. The insurers and reinsurers have not been able to explore the potential of this line of business, mainly due to limited risk assessment skills and inadequate understanding of the farmers' needs.

One of the effective means of developing and promoting agriculture insurance in the Maldives could be through the distribution channels that are closest to the farmers and farming households, such as the island associations. There is a need to carry out a risk assessment of the farming members/customers and offer suitable agriculture risk products that can be linked up with the services already being availed by the farmers.

Support is critical to be provided to insurers and reinsurers, in terms of tools and capacity to calculate suitable premium and design suitable products, with minimum exclusions so that farmers are encouraged to buy insurance that is also supported by government subsidies.

Most farmers are considered low-income earners, a regular support from the government in the form of subsidy will be useful for the short and medium-term. However, to make it a long-term sustainable solution, the “smart subsidy” should be directed towards reducing the transaction costs and delivering the product, thus benefiting the overall objective for risk reduction in the longer term. Support from development partners will remain critical in this area.

Stakeholders were keen to see a pilot national crop insurance scheme developed and implemented with public funding for a certain period, ideally it will be scalable to multiple islands in the future and for multiple crops. This will allow several insurance companies to participate in the scheme with a priority for insurers that have access and outreach to the other islands. To start this pilot, a unified agriculture risk database should be established with clear criteria on risks and losses, followed by establishing a risk-sharing mechanism between the original insurer, reinsurers and the government, where the government acts as the reinsurer of last resort.

It is recommended that a feasibility report on an agriculture insurance scheme is carried out. While this agriculture insurance scheme may focus on crops, it can be linked to the fisheries sectors as well. Government’s involvement in the formation of the pool will be crucial.

Agriculture insurance schemes exist in various forms and shapes in many countries and often remain heavily subsidised by the government. The private insurers do not offer suitable multiple peril agriculture insurance products because the crop losses are highly correlated among farmers and can cause insurers to face significant losses due to their individually limited financial capacity. However, a pooling arrangement will provide the capacity to cope, at a price, with systemic risks associated with disaster events that involve much larger loss compensations.

6.5 Collaborate to develop preconditions for scaling up insurance distribution

Technology can play a key role by diversifying insurance sales channels, promoting new distribution channels such as online sales, mobile platforms, and social media. Due to the continuous economic development amidst frequent disasters and epidemics, the insurance awareness and demand among the public is gradually increasing. This is also evident from the growth rate shown by the industry’s annual gross written premium, insurance penetration and density.

There is a need to bundle insurance with existing and relevant products of suppliers and service providers that can help address the challenge of insurance distribution and lowering the delivery costs.

Index-based insurance can be helpful in addressing various types of risk transfer needs in the Maldives. However, adequate insurance awareness, enabling environment, and suitable data monitoring systems need to be established to promote index-based insurance in the country. As a starting point, a suitable guidance and instructions through a decree should be issued by the government covering specific issues around parametric/index-based insurance schemes.

Development of index-based insurance products, which are currently non-existent in the Maldives, by the local insurers can be helpful in addressing various types of risk transfer needs in the Maldives. Support is needed for insurers to help them in product design and technical support for the underwriters, claim managers, and loss adjusters.

Meso-level organizations, such as associations in the Maldives, can play a clear role in expanding the insurance outreach to farming and low-income households, especially in the rural areas.

Over time and with the massive ongoing land reclamation projects, water channels have been disturbed, thus causing significant increase in losses due to coastal flooding and increase in claim incidences. This has a major deterrent effect on the underwriting operations and capacity of insurers, who have not been consulted on the long-term local infrastructure development plans. If this continues, it will have a major impact on insurance premium pricing as well as on increasing deductibles, thus affecting the overall business and economic sustainability, and specifically making it harder for insurers to get the reinsurance capacity. One of the solutions to encounter such industry-wide challenges is to consider how a country level insurance pool can be created so that every insurance policy goes to the pool and the pool acquires joint reinsurance capacity at better terms and conditions. Such a pool can be considered for risks such as fire, and disaster events.

- **In Maldives, there is a critical need to develop local loss adjustment capacity** as there are not many insurance loss adjusters available in the market, thus causing a major challenge against local risk capacity development. This becomes exacerbated in insurance claim events such as the marine salvage operations where claim costs can become unreasonably high for insurers considering the limited supply of local salvage operators.
- **The absence of an insurance act is a major challenge.** Introducing a comprehensive and overarchingly empowering insurance law will help bring more transparency to the industry and promote towards consumer protection. The current draft includes features that will introduce a dedicated consumer complaints or grievance handling process and establish an Insurance Ombudsman for insurance dispute resolution matters. The introduction of a dedicated law on Takaful can create a level playing field for current and future Takaful operators in the Maldives, which can address core issues such as the mandatory deposit requirements for Takaful operators.

It is important that just like the requirements for foreign vessels, the local boats and ships should also be required to have Protection & Indemnity cover. It is noted that currently, only small number of business and clients opt for this type of cover, such as resorts, and that too by following the best practices

There is a strong need to work on raising insurance awareness and education, especially around critical areas, such as the agricultural insurance, disaster and climate risk insurance is an area where development partners like UNDP can support. One of the possible ways could be to partner with the supply-side stakeholders (insurance companies) and work with the demand-side stakeholders (tourism sector, agriculture farmers, island associations).

Major and accelerated reclamation projects are contributing to massive infrastructure development in the country, yet they are also harming coral reef systems. Post COVID-19, the government is reviewing how to diversify the country's economic composition by reducing their reliance on tourism and further developing its agriculture and fisheries sectors. A collaborative role is important to be played by the Ministry of Economic Development, MOF and MMA to develop more innovative insurance products based on market needs, especially introducing the technology-based solutions in fintech or insurtech.

There is a needed to curb fronting by increasing local retention capacity and encouraging foreign investors in the insurance sector in the Maldives.

6.6 Insurance regulatory development and capacity building

Capacity limitations being one of the main challenges, there is an urgent need for a roadmap to strengthen insurance regulatory capacities at all levels. The roadmap must aim to strengthen the supervisory powers of the MMA, assess the existing gaps in the legal authority and regulatory framework to implement the insurance law, forge international relations to improve the insurance sector, facilitate market development and capacity building of its personnel.

Achieving this feat will require expertise and knowledge in the insurance field, however, MMA has an opportunity to access expertise and technical support from development partners who have a vast range of expertise in the insurance sector. There is room to build the capacity of its insurance supervising staff through training and hands-on learning opportunities.

The roadmap can be divided into various segments such as regulatory framework development, supervisory support, product development and capacity building.

A starting point will be an assessment of the existing regulatory framework. This will help in drafting the provisions in accordance with the Insurance Core Principles (ICPs) issued by the International Association of Insurance Supervisors (IAIS) and the international best practices, with an approach to set out where the MMA want to see the country's insurance sector in the next five to ten years.

In addition, there is a need for a comprehensive set of regulations to be issued for significant areas such as the Solvency; Insurance Intermediaries; Reinsurance; Internal Controls; Consumer Protection and Dispute Resolution; and Survey and Loss Adjustment. Continued consultative dialogues need to be carried out with all key stakeholders, including civil society participants, through technical level workshops and roundtable meetings, to conduct policy reviews, develop recommendations, consult on the draft or proposed regulations and specific products.

6.7 Develop human capital in insurance and risk financing

Most insurers in the Maldives report that most of their staff are university educated but have no formal training or certification in insurance. They get trained only on-the-job in insurance-related technical areas. There is still a need to create a formal system of insurance training and certification. This can be done by establishing a training system that is capable of providing specialized training and certifications not only for the insurance underwriting, reinsurance, and claims staff but also for the growing number of required specialists in various areas, such as the loss assessment and adjustment.

Such a training facility can provide training and support on the demand side by training the government departments and public policymakers on the use of insurance. In terms of insurance education and capacity building of policymakers, training to raise the knowledge levels will be necessary. A segmented array of insurance training should also be provided to agriculture ministry officials, island councils, since they have a direct engagement with the farmers.

Pursuing these recommendations will facilitate the development of effective insurance and risk transfer solutions in the Maldives. It is expected to open the discussion on innovative risk transfer needs, suggest the ways to close the protection gap, and recommend the channels of creating inclusive insurance.