

CENTER FOR EXCELLENCE

IN DISASTER MANAGEMENT & HUMANITARIAN ASSISTANCE

WWW.CFE-DMHA.ORG

INDIAN OCEAN





MALDIVES

Disaster Management Reference Handbook

December 2024

Disaster Management Reference Handbook Series Download books at https://www.cfe-dmha.org/Publications/Disaster-Management-Reference-Handbooks











































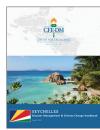






CFE-DM





CFE-DM











Acknowledgements

The U.S. Agency for International Development / Bureau for Humanitarian Assistance (USAID/BHA) at U.S. INDOPACOM and USAID/BHA South and Central Asia Office;

Security Cooperation Offices and Defense Attaché Offices at U.S. Embassy Maldives;

Major Christopher Cory, Director, Montana State Partnership Program, Montana National Guard;

Major Elizabeth Hewett, U.S. Air Force, Montana National Guard and Deputy Chief, Office of Defence Cooperation, U.S. Embassy Colombo;

Bobby Ray Gordon, Joseph Althouse, Bernard Carey, Multinational Humanitarian Assistance and Disaster Relief, J712 Multinational Planning Augmentation Team, U.S. Indo-Pacific Command (INDOPACOM);

Ganesh Navaratnam, Regional Civil-Military Relations Coordinator, Health, Disaster, Climate and Crisis Unit, Asia Pacific Regional Office, International Federation of Red Cross and Red Crescent Societies;

Kashif Naseer, Director, and Aishath Azleena, Policy Manager, Policy and Planning, National Disaster Management Authority, Government of Maldives;

LTC Mohamed Inayath, Maldives National Defence Force;

and Kilian Murphy, Program Specialist, Preparedness for Response and Recovery Department, Asian Disaster Preparedness Center (ADPC).

Front Cover

Maldives Coastline by Asad Photo Maldives on Pexels.com. https://unsplash.com/photos/aerial-photography-of-green-island-and-clouds-z8W1FiPh9Oo

Disclaimer

This handbook has been prepared in good faith based on resources available at the time of publication. Information was gathered from the public domain, from local and government sources, as well as from subject matter experts. Where possible, a link to the original electronic source is provided in the endnote (reference) section at the end of the document. While making every attempt to ensure the information is relevant and accurate, the Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM) does not guarantee or warrant the accuracy, reliability, completeness, or currency of the information in this publication. Each handbook is a working document and will be updated periodically as new and significant information becomes available. We hope that you find these handbooks informative, relevant, reliable, and useful in understanding disaster management and response. We welcome and appreciate your feedback to improve this document and help fill any gaps to enhance its future utility. For feedback, comments, or to request a printed copy please email cfe.dmha.fct@pacom.mil. Please visit our website to download copies of this publication and other products (https://www.cfe-dmha.org). All parts of this publication may be reproduced, stored in retrieval systems, and transmitted by any means without the written permission of the publisher.

Table of Contents

· ·	
Letter from the Director	
About the Center for Excellence in Disaster Management & Humanitarian Assistance	
Executive Summary	
Country Overview	
History11	
Culture and Demographics	
Ethnic Makeup	
Key Population Centers	
Language14	
Religion14	
Vulnerable Groups	
Economics	
Government	
Environment22	
Geography22	
Borders24	
Climate24	
Disaster Overview	
Disaster Overview	
Climate Change	
Climate Change	
Climate Change	
Climate Change	
Climate Change 26 Hazards 28 History of Natural Disasters 30 Country Risk 37	
Climate Change 26 Hazards 28 History of Natural Disasters 30 Country Risk 37 INFORM Risk Profile 38	
Climate Change 26 Hazards 28 History of Natural Disasters 30 Country Risk 37 INFORM Risk Profile 38 World Risk Report 39	
Climate Change 26 Hazards 28 History of Natural Disasters 30 Country Risk 37 INFORM Risk Profile 38 World Risk Report 39 ND-Gain Matrix 40	
Climate Change 26 Hazards 28 History of Natural Disasters 30 Country Risk 37 INFORM Risk Profile 38 World Risk Report 39 ND-Gain Matrix 40 UN Multidimensional Vulnerability Index 41	
Climate Change 26 Hazards 28 History of Natural Disasters 30 Country Risk 37 INFORM Risk Profile 38 World Risk Report 39 ND-Gain Matrix 40 UN Multidimensional Vulnerability Index 41 Organizational Structure for Disaster Management 43	
Climate Change 26 Hazards 28 History of Natural Disasters 30 Country Risk 37 INFORM Risk Profile 38 World Risk Report 39 ND-Gain Matrix 40 UN Multidimensional Vulnerability Index 41 Organizational Structure for Disaster Management 43 Lead Government Agencies in Disaster Response 43	
Climate Change 26 Hazards 28 History of Natural Disasters 30 Country Risk 37 INFORM Risk Profile 38 World Risk Report 39 ND-Gain Matrix 40 UN Multidimensional Vulnerability Index 41 Organizational Structure for Disaster Management 43 Lead Government Agencies in Disaster Response 43 Disaster Relief and Emergency Response 45	
Climate Change 26 Hazards 28 History of Natural Disasters 30 Country Risk 37 INFORM Risk Profile 38 World Risk Report 39 ND-Gain Matrix 40 UN Multidimensional Vulnerability Index 41 Organizational Structure for Disaster Management 43 Lead Government Agencies in Disaster Response 43 Disaster Relief and Emergency Response 45 Armed Forces Role in Disaster Relief 49	
Climate Change26Hazards28History of Natural Disasters30Country Risk37INFORM Risk Profile38World Risk Report39ND-Gain Matrix40UN Multidimensional Vulnerability Index41Organizational Structure for Disaster Management43Lead Government Agencies in Disaster Response43Disaster Relief and Emergency Response45Armed Forces Role in Disaster Relief49The International Red Cross and Red Crescent Movement52	

Disaster Management Communications	65
Early Warning Systems	65
Information Sharing	69
Infrastructure	74
Transport	74
Airports	75
Seaports	76
Roads	79
Railways	79
Waterways	79
Schools	80
Disaster Risk Reduction in the Education Sector	81
Communications	82
Utilities	85
Power	86
Water and Sanitation	89
Health	92
Health Care System Structure	93
Health Strategies and Surveillance	95
Communicable Diseases	97
Non-Communicable Diseases	99
Training for Health Professionals	100
Women, Peace, and Security	101
Conclusion	103
Appendices	104
DoD DMHA Engagements in the Past Five Years (FY 2019-2024)	104
International/Foreign Relations	107
Participation in International Organizations	110
Force Protection/Pre-Deployment Information	111
Passport/Visa	111
Safety and Security	111
Emergency Contact Information	112
Currency Information	112
Travel Health Information	112
Sendai Framework	115
Country Profile	118
A compression of A blancointings	
Acronyms and Abbreviations	130

Figures

Figure 1: Structure of the Global Multidimensional Poverty Index	18
Figure 2: Map of Maldives in Comparison with the U.S	23
Figure 3: Map of Maldives	25
Figure 4: Locally Identified Hazard Patterns in Maldives	29
Figure 5: Map of Tropical Cyclone Ockhi	36
Figure 6: INFORM Risk Index, Maldives (2025)	38
Figure 7: WorldRiskIndex 2023 Overview	40
Figure 8: Notre Dame Global Adaptation Initiative's Country Vulnerability Index	41
Figure 9: The Multidimensional Vulnerability Index Framework	42
Figure 10: Organizational Structure of the National Disaster Management Authority	44
Figure 11: Emergency Response Coordination Mechanism in Maldives	46
Figure 12: Disaster Management Coordination at National and Local Levels	47
Figure 13: Emergency Response Framework at National Level	47
Figure 14: External Aid Coordination in Maldives	49
Figure 15: Range of Military Operations of Maldives National Defence Force	50
Figure 16: Operational Structure of Maldives National Defence Force	51
Figure 17: Geographic Area of Responsibilities of Maldives National Defence Force	51
Figure 18: Organizational Structure of Maldivian Red Crescent	52
Figure 19: Map of Maldivian Red Crescent's Presence	53
Figure 20: Addu City Police Force Incident Response Coordination	54
Figure 21: Composition of City, Atoll, and Island Maldives Police Service Taskforce	54
Figure 22: Public Health Emergency Coordination Framework	56
Figure 23: Community Workflow Diagram for Disaster Risk Management	63
Figure 24: Early Warning Alert Coordination	66
Figure 25: Strategic Transport Goals under the Jazeera Dhiriulhun Concept	74
Figure 26: Map of Atolls and Channels of Maldives	79
Figure 27: National and School Level Planning, Preparedness, and Emergency Response Framework .	81
Figure 28: Evolution of Renewable Energy Installations in Maldives (by kilowatt)	88
Figure 29: Maldives' Sustainable Development Goals Health Targets Status (2024)	93
Figure 30: Health Sector Emergency Management System	96
Figure 31: Top 10 Causes of Death (2011-2021)	100
Figure 32: UN Sendai Framework for Disaster Risk Reduction 2015-2030	116
Figure 33: Population Pyramid, Maldives (2023)	120

Photos

Photo 1: World's First Underwater Cabinet Meeting Led by President Mohammed Nasheed	12
Photo 2: South Asia Clean Energy Forum, 2024	60
Photo 3: Dhonis (Traditional Mechanized Wooden Boats)	76
Photo 4: A Bokkura (Inter-island Transport and Reef Fishing Boat)	77
Photo 5: Teachers and Students Conducting Tsunami Drill and Training	82
Photo 6: Solar Photovoltaic Installations at Addu City	88
Photo 7: Inauguration of the South Asia Regional Energy Partnership Maldives	89
Photo 8: UN Women Organized Women's Participation and Leadership Workshop in Maldives, 2010	5102
Photo 9: Exercise Atlas Angel Participants	105
Tables	
Table 1: Multidimensional Poverty Index for Maldives in Comparison to Regional Countries	19
Table 2: Administrative Atolls of Maldives	22
Table 3: Cities of Maldives	22
Table 4: Sample Island List by OneMap	24
Table 5: Climate Modeling Scenarios (RCP and SSP)	27
Table 6: Qualitative Hazard Assessment for Maldives	31
Table 7: Emergency Support Functions and Corresponding Lead Agencies	64
Table 8: Agencies Responsible for Issuing Early Warnings	66
Table 9: Threshold Levels for Implementing Alert	67
Table 10: Protocol for Defining Alert Level	67
Table 11: Codes and Runway Lengths for Maldives' Main Airports	75
Table 12: List of Available Berths at Malé Commercial Harbor	77
Table 13: CDC Advice Regarding Vaccine- or Prophylaxis-Preventable Diseases, Maldives	114
Table 14: CDC Advice Regarding Non-Vaccine- or -Prophylaxis-Preventable Diseases, Maldives	114

Letter from the Director

Maldives has emerged as a key player in the global climate change discourse, contributing to discussions and initiatives to mitigate the impacts of natural hazards. As a Small Island Developing State (SIDS), Maldives has substantially improved its disaster risk reduction and response capabilities since the 2004 Indian Ocean Tsunami. The nation actively engages with various United Nations agencies and collective groupings of Asian, Indian Ocean, and Pacific states while enhancing bilateral civilian and military partnerships, including with the United States (U.S.). The U.S.-Maldives relationship encompasses diverse areas, among them environmental cooperation and climate change initiatives. This multifaceted relationship fosters resilience within the Maldivian context and facilitates the development and practice of emergency response strategies. The U.S. Agency for International Development (USAID) is pivotal in supporting Maldives' efforts toward inclusive economic growth and bolstering the resilience of marginalized and disaster-affected communities.

The collaborative engagements between Maldives and U.S. armed forces encompass a series of subject matter expert exchanges and joint military exercises. In June 2022, CFE-DM conducted a three-day training session on Humanitarian Assistance and Disaster Response (HADR) in collaboration with the Maldives National Disaster Management Authority (NDMA) to bolster HADR interoperability and disseminate best practices for effective civil-military coordination during disasters. In May 2023, CFE-DM organized a four-day workshop titled "Strengthening City-Level Emergency Management in the Maldives," in partnership with Montana National Guard through the State Partnership Program. To facilitate partnerships aimed at strengthening climate resilience among SIDS, CFE-DM participated in the "Building Climate Resilience in SIDS: Partnerships for Adaptation in the Indian Ocean Region" conference held in September 2024 in Kurumba, Maldives. These initiatives are critical in enhancing military operational capabilities tailored to disaster response scenarios and improving regional preparedness and response frameworks.

This Maldives Disaster Management Reference Handbook contextualizes the historical, social, economic, and climatic factors underpinning domestic and international initiatives to enhance resilience to natural and anthropogenic hazards in Maldives. The publication elucidates the nation's disaster management practices, outlining the systematic frameworks that equip communities with the tools necessary for effectively coping with emergencies. Its primary objective is to serve as a resource for personnel and planners within the U.S. armed forces who may engage alongside Maldivian counterparts in disaster response operations in Maldives or who may be involved in collaborative disaster response exercises.

Sincerely,

Joseph D. Martin, SES

Director

About the Center for Excellence in Disaster Management & Humanitarian Assistance

Overview

The Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM) is a United States (U.S.) Department of Defense (DoD) organization comprised of nearly 30 subject matter experts that provide academic research, civil-military coordination training, and operational insights to support decision making before, during, and after crises. The Center is designed to bridge understanding between humanitarians, civilian, and military responders. CFE-DM partners with a diverse group of governmental and nongovernmental actors, as well as academic institutions to increase collaborations and capabilities in humanitarian assistance and disaster response. While maintaining a global mandate, the Indo-Pacific region is our priority of effort and collaboration is the cornerstone of our operational practice. The Center is a direct reporting unit to U.S. Indo-Pacific Command (USINDOPACOM) and is located on Ford Island, Joint Base Pearl Harbor-Hickam, Hawaii.

Vision

Resilient Joint Forces, Allies, and Partners that are fully prepared to respond across the spectrum of humanitarian crises.

Mission

CFE-DM builds crisis response capacity in US and Partner militaries, enhances coordination and collaboration with civilian and foreign partners, and strengthens those relationships to save lives and alleviate human suffering before, during, and after humanitarian crises in a changing climate environment.

Contact Information

Center for Excellence in Disaster Management and Humanitarian Assistance 456 Hornet Ave JBPHH, HI 96860-3503 Telephone: +1 (808) 472-0518 https://www.cfe-dmha.org

EXECUTIVE SUMMARY

The Republic of Maldives (hereafter referred to as Maldives) is an archipelago of nearly 1,200 low-lying islands, located south-west of India and Sri Lanka. The archipelago is one of the most dispersed countries in the world, with approximately 530,000 people inhabiting around 200 islands, spread across 35,000 square miles. Maldives has five cities, including Addu City in the south, Kulhudhuffushi City in the north, and Malé City in the central region. Malé is historically the center of government, economic, and social activity, and it is also one of the most densely populated cities in the world. However, the dense urban environment stands in contrast to Maldives' rural islands, which are far more remote in terms of geography and, until recently, in terms of social services.

Maldives' hazard profile consists of infrequent, high impact events, such as tsunamis and epidemics, and much more frequent, low impact events, such as heatwaves, droughts, and floods, which have a cumulating effect in the long term. Under climate change projections, Maldives is bracing for more frequent, more intense low impact events, with particular focus on sea level rise (SLR), flooding, coastal erosion, ocean warming, and acidification. However, Maldives is ahead of many SIDS in the institutionalization of its disaster management and disaster risk reduction framework. Tourism and fisheries are extremely vulnerable to external shocks of disasters. A small disruption in the global supply chain affects food security and can greatly impact the cost of and access to food and fuel for the Maldives.

Following the 2004 Indian Ocean Tsunami, Maldives established a national disaster management organization to coordinate national response efforts. In 2015, the Disaster Management Act formally established the NDMA and set into motion the development of

a framework, involving all parts of government and civil society, while also delegating disaster management authorities down to the local city, island, and atoll levels.

At the national level, the NDMA maintains a National Emergency Response Force, consisting of Maldives National Defense Forces, the Health Protection Agency, Maldives Police Service, Maldivian Red Crescent, the Environmental Protection Agency, Ministry of Housing and Infrastructure and other organizations which are mandated to provide assistance in the event of a disaster. The National Emergency Operations Plans Volume I and II set forth operating procedures and provide direction for different hazard categories, involving a whole-of-society approach to disaster response.

At the local level, the Community Emergency Response Framework establishes communitybased, trained emergency response teams, managed by local island and city councils. In the event of disaster, local community emergency response teams are the first to respond and will coordinate with the National Emergency Operations Center, managed by the NDMA, when events exceed the local capacity to respond. Maldives is taking proactive steps in disaster risk reduction (DRR) by strengthening its disaster management framework, implementing a robust early warning system and integrating climate change adaptation strategies and projects. Coastal protection projects include seawalls, reef restoration, and land reclamation to combat sea-level rise and storm surges. Key adaptation initiatives include its National Adaptation Program of Action and multiple renewable energy projects focused on reducing Maldives' carbon footprint. Maldives also collaborates extensively with international and regional partners to enhance its resilience through financial support and technical assistance.

COUNTRY OVERVIEW

History

Strategically located in the Indian Ocean, Maldives was an important crossroads in the ancient Indian Ocean trade routes for thousands of years. Merchants sought refuge on the islands from rough seas while waiting for favorable winds to set sail to their destination. Others were attracted to the Maldives by the abundance of pearls, spices, coconuts, dried fish and, in particular, cowry shells, which were accepted currency in much of the world through the 16th century. This resulted in a rich heritage of cultural and ideological fusions, shaping a unique cultural identity in Maldives.¹

Maldivians were expert boat builders. Seagoing craft, called *dhoani* or *dhoni*, became known for their durability and, to this day, remain part of Maldives' cultural heritage. The tradition of seafaring is equally important, and some of the earliest schools in Maldives were navigation schools. To go beyond the archipelago, islanders used the direction of the monsoon - Hulhan'gu (the south-west monsoon) and Iruvai (the north-west monsoon). The season for sailing into the Bay of Bengal and Eastern Indian Ocean was during the south-west monsoon, from mid-April, whereas the northeast monsoon, which began mid-December, marked the time when islanders traveled to the Arabian Gulf and the east coast of Africa.²

Following a wave of Arab and Persian migrants who arrived beginning in the mid-10th century, Islam was officially adopted in Maldives in 1153 CE.³ As such, existing rulers became sultans, whose dynasties would last for hundreds of years. For example, the Malé dynasty ruled for 235 years; the Hilali dynasty followed and ruled for over 170 years. In 1558 AD, the sultanate was disrupted when the Portuguese forcibly established themselves in Malé and sent Christians to each atoll to act as "headmen." The Portuguese were expelled in 1573 by Maldives' greatest national hero, Mohammed Thakurufaan, who led expeditionary forces and successfully

pushed out the Portuguese, killing their self-declared "Sultan," Captain Adiri Adiri.⁴ After Thakurufaan, the Utheemu dynasty ruled until 1700 AD. In the early 18th century Maldives was attacked by a Malabar raiding party dispatched by the Ali Raja of Cannanore. The Maldivians eventually repelled the Malabar forces, but the Utheemu dynasty collapsed and gave way to the last house of sultans, the Huraage dynasty, which ruled until 1968.⁵

In 1645, the Sultan of Maldives conducted the first state visit to the Governor of Ceylon, forging a longstanding relationship with Ceylon (now Sri Lanka), which is still enjoyed to this day.⁶ In 1658, the Dutch East India Company expelled the Portuguese and took control of Ceylon and Maldives which became protectorates of the Dutch. In 1796, the Dutch were expelled by the British, and both Ceylon and Maldives were incorporated as British protectorates. Following independence, Ibrahim Nasir became the first President of the Second Republic in 1968. He is credited for gaining Maldives independence, nationalizing the fishing export industry, and opening the country to tourism. However, the economy struggled in the 1970s largely due to the collapse of the dried fish market affecting exports to Sri Lanka, and the closing of the Royal Air Force Gan Airfield in 1975.7 The last British troops left in 1976. In 1978, Nasir resigned and went into exile; he was tried and convicted by the opposition for plotting a coup but was later pardoned.8

In 1978, Maumoon Abdul Gayoom was nominated to succeed Nasir as President. He would serve for six terms and a total of 30 years. During Gayoom's presidency, Maldives embarked on a long-term plan to modernize and democratize the nation. However, many felt his government was authoritarian, pointing to significant human rights concerns, particularly when political opposition threatened Gayoom's hold on power. Under Gayoom, Maldives joined the International Monetary Fund (IMF) and the World Bank, and it was integral in establishing

the South Asian Association for Regional Cooperation (SAARC) in 1985.9 Yet Maldives also experienced frequent political turmoil. In the 1980s, there were three attempts by the opposition to overthrow the government. The third coup attempt in 1988 brought international attention as 80 mercenaries from the People's Liberation Organization of Tamil Eelam (PLOTE) took over and controlled Malé city, until Indian military intervention was requested and cleared the militants from the capital, as part of Operation CACTUS.¹⁰ In 2003, protests broke out following the torture and death of a 19-yearold man, Hassan Even Naseem, who had been serving a drug-related prison sentence since the age of 16. Additional protests in 2008 broke out when eight former security officers who were originally sentenced to death for the 2003 killing, had their sentences reduced to house arrest.11

The 2004 Indian Ocean Tsunami had a devastating impact on Maldives. Immediate damages totaled approximately US\$470 million, or about 62% of Gross Domestic Product (GDP). About 7% of the population was displaced, 25% of islands suffered damage to major infrastructure, and 15% of islands experienced a significant disruption in water supply. The tsunami brought long-standing issues to the forefront of national attention, including the need for greater economic diversification, the country's environmental vulnerability, and the inherent difficulties of servicing a broadly dispersed population.¹²

Finally, in 2005, civil unrest broke out again when Mohamed Nasheed, an open critic of the president and opposition leader was arrested. Following constitutional reform in 2007, multi-

party elections were held, and Nasheed defeated Gayoom with 54% of the vote. 13 President Nasheed took office in 2008 and served one term, before resigning under significant political pressure. He was known internationally for his efforts to address climate change and bring increased awareness to rising sea levels. In one famous instance, Nasheed held a cabinet meeting underwater to draw attention to the dangers of climate change; this session is shown in Photo 1.14

Nasheed's administration was also characterized by frequent unrest. In 2011, the Chief Justice of the Maldives Criminal Court was arrested, triggering large anti-government street protests which resulted in confrontation with government security forces. In 2012, Nasheed resigned - or was forced, according to some reports - from office and was replaced by then Vice President, Dr. Mohamed Waheed Hassan. Hassan served as President until a fresh election in 2013 was won by Abdulla Yameen Abdul Gayoom, the half-brother of former President Maumoon Abdul Gayoom. Nasheed was arrested several times thereafter, and in 2015, he was sentenced to 13 years in prison.15 He was given asylum in the United Kingdom (UK) in 2018, after seeking medical attention there.

President Abdulla Yameen's tenure saw shifts in domestic and international policies. Maldives left the Commonwealth in 2016 after the Commonwealth had raised concerns over the detention of political leaders. ¹⁶ By 2018, ahead of the next election, most of the opposition figures were in exile or in prison. The Supreme Court of Maldives directed the government to release political prisoners, including former





Photo 1: World's First Underwater Cabinet Meeting Led by President Mohammed Nasheed

president Nasheed. The United Nations (UN), U.S., European Union (EU), Sri Lanka, and India formally requested the Government of Maldives (GoM) release prisoners and allow for a free and fair election. The government then declared a State of Emergency and arrested two judges, the ruling party leader, and former president Gayoom.¹⁷ Yameen also encouraged greater religious conservatism, called for enhanced police powers, took a decidedly anti-India stance, and sought to strengthen ties with People's Republic of China (PRC) and Arab states.¹⁸

When Ibrahim Solih won the presidential election in 2018, Nasheed returned to active politics and would serve as Speaker of Parliament until 2023, when he resigned and created a new political party, The Democrats. 19 Solih had the backing of an opposition political bloc, and during his term, Maldives made great strides in reducing corruption and increasing transparency.²⁰ Despite the impact of the Coronavirus Disease 2019 (COVID-19) pandemic on imports and tourism, the economy bounced back. Solih led with a decidedly pro-India stance in contrast to his predecessor's pro-China leanings, and his administration also shored up diplomatic ties with other countries.²¹ Solih even canceled a free trade program with China that had been signed in 2017.²² The Free Trade Agreement (FTA) would eventually be signed again in 2024 and is scheduled to go into effect in 2025. Most recently, in November 2023, Dr. Mohamed Muizzu became Maldives' seventh president.23

Culture and Demographics

Evidence suggests Maldives was first inhabited as early as 1500 BCE by Aryan immigrants, people of ancient Iran and the northern Indian subcontinent; they promulgated the Vedic religion, a precursor to Hinduism. Though historic evidence is limited, early inhabitants may have come from the Dheyvis tribe of northern India, or perhaps from the Uttar Pradesh region, whose migrants also settled Sri Lanka around the same time. Subsequent migrations are said

to have occurred at regular intervals, from southern India and Sri Lanka.²⁴ According to oral tradition, the first monarch ruled the islands around 500 BCE, and people from the central region of the Indian subcontinent brought with them the Buddhist faith.²⁵

The culture of Maldives is a blend of South Asian, Arab, and African influences. Dhivehi is the official language of Maldives and has its roots in Sanskrit, Arabic, and Sinhala. Dhivehi possesses its own script and an oral tradition rich with folklore and historical accounts of the islands. While Islam is deeply rooted in all aspects of culture and society, evidence of Buddhism can be found in archaeological findings, crafts, and boatbuilding.²⁶

Maldivian attire is distinct from its South Asian neighbors. The "*Mundu*," is a casual sarong worn by men and wrapped and folded in a specific way. "*Dhivehi Libaas*," are brightly colored dresses, in red, green, or blue, custommade with intricate embroidery, using a technique called "*kassabu viyun*."²⁷

Hats are also popular and represent the connectedness of Maldives with other nations. On any given day, a Maldivian man might wear a Persian kaffiyeh to protect from sun, a straw hat for fishing, hand-woven from coconut palm fronds and reminiscent of the Japanese Edo-era, and a different hat for prayers, called "*Thaakihaa*," reminiscent of East African styles.²⁸

Maldivian cuisine revolves around seafood, and tuna is the primary source of protein. Coconut and rice are also staples. Preparations often include a combination of spice and curry. Traditional music involves big drums, "bodu beru," made from coconut wood and goat hide. The style has its origins in East African traditional dance and song.²⁹

Ethnic Makeup

Maldivians are a mixture of Sinhalese, Dravidian, Arab, Australasian, and Africans resulting from historical changes in regional hegemony over marine trade routes in history.³⁰ Resident Maldivians make up approximately 75% of the total documented population. The remaining "Resident Foreigners" are mainly from South Asia, but also from Philippines, Egypt, Iran, and the Russian Federation.³¹

A "resident" is considered a person, foreign or Maldivian, who has lived or intends to live in Maldives for more than one year. More than 26%, or 132,493, of the documented population are considered Resident Foreigners, the majority of which are mainly men, ages 20–44. Within the age band of 30–39, there are more foreign males than Maldivian males. Within the non-admin islands (which excludes Malé), 75% of the population are foreigners, living and working in the tourism industry and associated sectors.³²

In addition to the official population, there are an estimated 30,000–60,000 undocumented foreigners living in Maldives. These workers are considered foreign migrants and generally come from Bangladesh, India, Sri Lanka, and Thailand. (Please see the Vulnerable Groups section for more information.)³³

Key Population Centers

Maldives' population is one of the most dispersed in the world, with its people inhabiting approximately 200 of the total 1,192 islands in the archipelago, which spread across 90,650 square kilometers (km²; 35,000 square miles [mi²]).³⁴ According to the most recent census in 2022, the resident population of Maldives was just over half a million, or 515,132, though the current population is estimated at closer to 530,000 in 2024.³⁵ About 40 islands have a population below 500, and the majority of islands each have a population range of 500-999 people. Three islands – Hithadhoo, Kulhudhufushi, and Malé – each have populations of more than 10,000.³⁶

Importantly, 44% of settlements in Maldives sit within 100 meters (m; 328 feet) of the coastline, due to extremely low elevations and relatively small island sizes. The main population centers are found in the Greater Malé Region (Malé Atoll, K), Hithadhoo island/city in the south (Addu Atoll, S, previously Seenu Atoll), and Kulhudhufushi island/city in the north (Haa Dhaalu Atoll, HDh).³⁷

The capital city, Malé, has one of the highest population densities in the world, more than

65,776 people per km² (25,396 mi²), per a 2013 count by the Ministry of Environment. Approximately, 42% or 212,138 of Maldives' residents live in Malé. The urban Malé region includes four wards – Henveiru, Galolhu, Machchangoalhi, Maafannu – and three islands – Hulumaale, Villimaale, and K.Hulhule. The most populated areas in Malé are Hulhumalé and Maafannu, with 31% and 22% of the Malé population, respectively.

Maldives' population is increasingly urban. In 2000, just 27% of the population lived in Malé, compared to 42% in 2024. The government expects the population in Malé to grow to 300,000 by 2030. The World Bank assesses urban population growth at 0.5% and rural population growth at –1.3%. Hulhumalé in the capital city region has experienced the greatest growth, increasing 16.82% from 2014 to 2022.³⁸

Language

Dhivehi is the national language of Maldives. Dhivehi is an Indo-European language, related to Sinhalese, the official language of Sri Lanka. The Thaana script is derived from Arabic and is used to write Dhivehi. Although Maldivians learn to recite the Quran in Arabic, most do not speak or understand Arabic. English is considered a second, unofficial language. Both British influence and the government's desire to build a successful tourism industry encouraged the development of western-style education with English-medium schooling. Thus, most Maldivians under the age of 65 years speak and write English proficiently. Minority languages, such as Sinhalese, Gujarati, and Malayalam, are present and spoken by foreign nationals, especially those working in the tourism sector.³⁹

Religion

The religion of Maldives is Islam.⁴⁰ Maldives officially adopted Islam in 1153 CE, and the country commemorates this history annually on the 2nd of Rabi' al-Akhir on the Islamic calendar; this date falls in late November 2024 but moves forward on the Gregorian calendar by 10-12 days each year because the Islamic calendar has only 354-355 days in a year. Islam was brought

to Maldives by a wave of Arab and Persian migrants in the 10th century. Prior to this, the earliest settlers to Maldives came from the Indian subcontinent and brought with them the faith and traditions of Buddhism, elements of which can still be found in archaeological sites and in oral traditions.⁴¹

The 2008 Constitution firmly established Islam as the official state religion. The Supreme Council for Islamic Affairs was replaced by the Ministry of Islamic Affairs (MIA), whose mandate includes the performance of duties required under the Protection of Religious Unity of the Dhivehi People Act. MIA controls all matter related to religion and religious belief, including requiring imams to use governmentapproved sermons in Friday services. The government maintains ownership and control of all mosques, including maintenance and funding. Foreign residents such as teachers, laborers, and tourists, including on resort islands, are free to worship in their own residences, but congregating in public for non-Islamic prayer is illegal, as is encouraging local citizens to participate in such activities.⁴²

All citizens are required to be Muslim, according to the 2008 Constitution. Public office holders, including the President, must be followers of Sunni Islam. The law states that both the government and the people must protect religious unity, and propagation of any religion other than Islam is a criminal offense. The law criminalizes "criticism of Islam" and speech "in a manner likely to cause religious segregation." The penal code permits the administration of certain Sharia punishments, such as flogging, stoning, and amputation of hands.

A main principle of the Disaster Management Act of 2015 (28/2015) states, "disaster management must be in accordance with the religion of Islam," and in the case of an appeal for humanitarian assistance, the "Disaster Management Council has the prerogative to reject assistance that is not in conformance with Islamic religion, culture, and social etiquettes."⁴⁴

While the Maldivian people are predominantly followers of Sunni Islam, there is a small community of Shi'a, descendants

of Indian traders. Maldives also has small populations of Hindus and Buddhists; however, these minorities are not officially recognized.⁴⁵

Non-governmental organizations (NGO) have reported persistent online and in-person threats against individuals perceived to be insufficiently Muslim. Threats included calls to implement Sharia penalties for those who criticized Islam and references to persons perceived as criticizing Islam as being "western agents." 46

Vulnerable Groups

To understand the national context for vulnerable populations in Maldives, it is important to understand the vulnerabilities of Maldives as a SIDS. Vulnerabilities include, but are not limited to, lack of monetary and fiscal policy options to mitigate global economic shocks; a lack of inclusion, especially of youth and women, which in turn puts pressure on the labor market; environmental risks due to climate change and natural hazards; and risks associated with water resource management, food security, and waste management. Maldives has multiple macro-economic features that limit its policy options in growth and development. This includes a narrow economic base with high dependency on tourism, substantial reliance on imported food, medicine and health equipment, and oil supplies for energy, limited local food production, and stress on available natural resources.47

Women, children and youth, the elderly, people living with disability, and migrants are among the most vulnerable subsets of Maldivian society. Their exposure and vulnerability to hazard impacts are increased by reduced access to educational or training opportunities, limited access to income-generating opportunities and productive assets, living with a disability, living in poverty, living in the atolls, coming from a broken home, having a different gender identity or sexual orientation, or coming from a minority religion or ethnic group.⁴⁸

Children and Youth

Over the last four decades, Maldives experienced massive economic development and

social transformation, which led to significant improvements in primary school enrollment, life expectancy, and maternal mortality rates. Along with the government's national health insurance scheme, which offers essential healthcare coverage, these factors have dramatically improved living conditions and quality of life for children and youth. However, malnutrition, disparities in school attendance, and child protection concerns remain primary challenges.⁴⁹

According to the 2022 Census, children ages 17 years and younger account for 31% of the population. This total marks a decline from 48% in 2014. The disability prevalence rate among children is 4%, for ages 5-10 years. Generally, children in Maldives reside with both parents; the percentages are 79% in Malé and 71% in the atolls. On average across Malé and the atolls, 8% of children live in jobless households.⁵⁰

Maldives has strengthened its focus on protecting children and adolescents, however some 15% of adolescents have been sexually abused at least once, with rates among girls double that for boys. Some inequality exists as child protection systems on remote islands can be weak and uncoordinated. In addition, the close-knit island community context often characterizes abuse and violence as a "family issue" to be resolved at home, thus making addressing and reporting these issues difficult.⁵¹

In Malé, 10% of students are living without their parents, according to the Ministry of Education (MoE). Many of those students are child migrants, who arrived in the city at the age of 16 or 17 years for upper education options that are unavailable in their island homes. For example, only a fraction of schools in Maldives provide all three options of study science, commerce, and arts - at the secondary school level, and adolescents must relocate if they want to continue learning. As a result, children are vulnerable to gang related crime and drug offenses, and the Maldives Police Service (MPS) reports an increase in juvenile crime from 2023 to 2024. Material conditions in prisons are reportedly inadequate, and juveniles are not segregated from adults or from serious offenders. Likewise, youth do not receive rehabilitation

services nor access to education or psychosocial support while in detention.⁵²

Women

Maldives has made significant progress toward gender parity within the education system, and maternal indicators such as adolescent birth rates (8.9 births per 1,000 women aged 15-19 years) and marriage before age 18 (2.2% of women aged 20-24 years old were married before age 18) continue to decrease. However, women do not enjoy equal labor force participation, and gender-based violence remains a concern.⁵³

Labor force participation among women has declined during recent decades. In 2023, the labor force participation rate among women in Maldives was 42.6%, versus 78.6% among males within the same age demographic of 15 years and above.54 In general, many formal jobs are held by expatriates, with local employment low and, in the tourism sector, fixed by law at 51% of the total. The largest employers of locals are the public and informal sectors, both of which are dominated by women employees.⁵⁵ The informal work sector is largely absent from official statistics, and because it is undocumented and unregulated, women are both vulnerable to exploitation and generally without access to social protection. For example, during the COVID-19 pandemic, many women were the first to lose their income, and at least 54% of women experienced a reduced income, compared to 40% of men.⁵⁶

Social norms and societal values hamper efforts to support women's reproductive health and protect women from gender-based violence. In 2018, 6.1% of women aged 15-49 years reported that they had been subjected to physical and sexual violence by a current or former intimate partner in the previous 12 months. Moreover, women of reproductive age (15-49 years old) often face barriers with respect to their sexual and reproductive health and rights. Despite progress made, in 2017, 29.2% of women had their need for family planning satisfied with modern methods.⁵⁷

While Maldives law criminalizes domestic violence and rape of both men and women,

including spousal rape, concerns exist that the government does not adequately enforce the law. The Ministry of Gender, Family, and Social Services provides psychological support to survivors and conducts social inquiry assessments of cases submitted to MPS. However, statistics from the six months to July 2022 showed that MPS received 879 reports of domestic violence and 59 reports of rape and sexual assault. Of these, 289 domestic violence cases and 59 reported rapes were investigated, and only three cases and two cases, respectively, resulted in charges being filed.⁵⁸

Importantly, in 2022, the UN Working Group on discrimination against women and girls recommended increasing women's participation and decision-making related to climate action and environmental protection. According to the Intergovernmental Panel on Climate Change (IPCC), research from Maldives suggests women and men do not possess equal capacities to use mobility as a strategy to adapt to climate change. Women are less able to employ migration as an adaptation strategy due to gender norms, social expectations, economic structures, religious doctrines, and cultural practices.⁵⁹

People Living with Disabilities

Nearly 10% of Maldivians over the age of 5 years live with at least one disability. Approximately, 35% of those living with disability experience more than one disability. The prevalence of disability increases with age, and 58% of the population age 75 or older experience at least one disability. Persons aged 50 years or older are more likely to experience a disability which affects mobility or walking.⁶⁰ Among children aged 5-17 years, 4% live with a disability. Youth with disability have less access to education and are less literate in English. Particularly in urban areas, the proportion of youth living with a disability and who are "not in employment, education, or training" (NEET) is disproportionately higher than youth not living with a disability - 22% and 42% respectively, in Malé. In Maldives, jobs done by persons living with a disability are largely informal. Women living with a disability are more likely to work

in the informal sector, and four in five women living with a disability work in informal jobs.⁶¹

Climate change disproportionately affects the daily lives of people living with disabilities, as disaster preparedness programs and early warning systems are often inaccessible to them. The largest population of persons with disabilities live in Malé, followed by Addu City, Haa Dhaalu (HDh), Raa (R), and Kaafu (K) Atolls. Under medium-to-high-range climate change scenarios, 50% of the disabled population in Maldives will be exposed to high rainfall and related impacts by 2060.⁶²

The Disaster Management Act 2015 mandates that Maldives develops inclusive frameworks to support vulnerable populations, including persons living with disabilities, before, during, and post disaster.

Refugees

Maldives lacks a robust infrastructure for the protection and support of refugees and asylum seekers, as it is not a signatory of the 1951 Convention relating to the Status of Refugees or its 1967 Protocol. This leaves a gap in national policy toward refugees within the context of the existing disaster management frameworks. Thus, the law does not provide for granting asylum or refugee status, and the government has not established a system for providing protection to refugees.

Maldives has outlined a framework for managing internally displaced person (IDP) during crises, focusing on their sustenance during and post-displacement, with some reference to contingency planning. The framework, aligned with international standards, emphasizes early recovery and sustainable livelihoods post-displacement. 65

Migrant Workers

Maldives is a destination country for international migrant workers, primarily from Bangladesh, India, Sri Lanka, Thailand, Nepal, and the Philippines. Maldives is also a transit country for international migrants from the Middle East, South and West Asia, and Sub-Saharan Africa to Europe. Migrant smuggling

has recently emerged as an area of concern in Maldives. An increase in irregular migration movements has been recorded, as well as a surge in detected fraudulent travel and identity documents, and a range of other fraudulent practices linked to recruitment practices, work contracts and visas for foreign workers. Such practices have also led to international migrant workers being trafficked and situations of forced labor.⁶⁶

Around 26% of the population of Maldives are migrant workers, and one-third of them are undocumented. Migrant workers are more likely to experience barriers to social and economic services, resulting in disproportionate challenges during times of crisis. For example, migrant workers face challenges in reporting cases of exploitation or potential cases of human trafficking, seeking access to justice and redress mechanisms, protection, and other assistance that may be needed.⁶⁷ During 2020, President Solih announced that the government would repatriate unregistered Bangladeshi nationals living in Maldives. The Ministry of Foreign Affairs, the Ministry of Economic Development and Trade, and the Bangladeshi High Commission collaboratively began a repatriation exercise. As a result, close to 9,000 unregistered migrant workers were repatriated under the program as of March 2023.68

Expatriate labor is allowed into Maldives to meet shortages. The Maldives Bureau of Statistics (MBS) reported approximately 132,493 registered expatriate workers in the country in 2022; they were mostly employed in tourism, construction, and personal services. The government reported approximately 63,000 unregistered expatriate migrant workers, but non-governmental sources estimate the number is even higher.⁶⁹ Where migrants reside, often the living quarters house many people well beyond the living capacity of the residence. Often in Malé, this means that one bed or one sleeping spot is shared and occupied by two to three people depending on their working schedules.⁷⁰

The Maldivian Red Crescent (MRC) maintains a robust Migrant Support Program. MRC is part of the Global Migration Task Force, Asia Pacific Migration Network, and the Protection, Gender & Inclusion South Asia Network.⁷¹

People Living in Poverty

From the UN-adopted 2030 Agenda for Sustainable Development, Sustainable Development Goals (SDG) 1 is to end poverty in all its forms everywhere. The global Multidimensional Poverty Index (MPI) measures acute multidimensional poverty across more than 100 developing countries. It does so by measuring each person's overlapping deprivations across 10 indicators in three equally weighted dimensions: health, education, and standard of living. The health and education dimensions are based on two indicators each, while standard of living is based on six indicators. Figure 1 illustrates this breakdown.⁷²

Maldives' MPI estimation is based on 2016/2017 survey data and indicates that 0.8% of the population in Maldives (4,000 people in 2021) is multi-dimensionally poor, while an additional 4.8% is classified as vulnerable to multidimensional poverty (25,000 people in 2021). The intensity of deprivation, which is the average deprivation score among people living in multidimensional poverty, is 34.4%. The MPI value, which is the share of the population that is multidimensionally poor adjusted by the

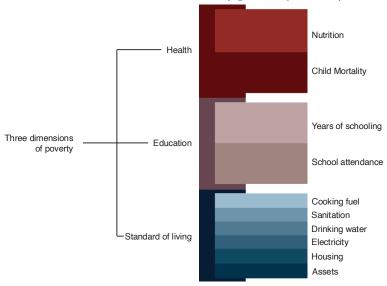


Figure 1: Structure of the Global Multidimensional Poverty Index

intensity of the deprivations, is 0.003. Health is the greatest contributor to multidimensional poverty in Maldives. In comparison, Nepal and Sri Lanka have MPI values of 0.074 and 0.011, respectively, and the MPI value for the South Asia region is 0.09. Table 1 describes the most recent MPI for Maldives relative to these countries and the South Asia region.⁷³

Other poverty indicators show that the unemployment rate was 4.6% and the proportion of population living below the National Poverty Line was 5.4% in 2019. In the same year, the proportion of the employed population living below US\$2.15 Purchasing Power Parity per day, age 15 or older, was 0.1%.⁷⁴ In 2020, amid the COVID-19 pandemic and the subsequent global recession, Maldives' real GDP fell by 18.6%, while the poverty rate increased from 2.1% to 7.2% from 2019 to 2020.

The distribution of people living in poverty is not equal across Maldives' geography and demographics. In five of the country's six regions, almost 50% of the population is poor. Approximately, 87% of people living in poverty – 82,761 – live outside Malé. Poverty is greater in female-headed households in the atolls, in households with children younger than 17 years of age, and in households with a family member who lives with a disability.⁷⁵

Civil Society Serving Vulnerable Populations in Maldives

Several NGOs in Maldives focus on support services for vulnerable populations: Advocating the Rights of Children, Blind and Visually Impaired Society of Maldives, Maldives Association of Persons with Disabilities, Maldives Autism Association, Maldives Deaf Association, Hope for Women, Maldives Red Crescent, Society of Health Education, and Zero Waste Parley Soneva Namoona. Care Society, in particular, serves persons with disabilities and has made disaster risk reduction one of its objectives. It worked with Action Aid International on the Tsunami Rehabilitation and Reconstruction Program from 2005 to 2008.⁷⁶

Economics

Over the last four decades, Maldives has experienced massive economic development and social transformation. The national economy depends heavily on tourism and fisheries, and the country depends almost entirely on imports for both food and fuel. The combination of these factors means Maldives is highly exposed to global price and supply shocks, as well as trade and financial disruptions – e.g., conflict and pandemics. Moreover, all sectors are highly exposed to the impacts of climate change. Finally, domestic fiscal challenges pose significant risks, and a sharp decline in official reserves and persistent fiscal imbalances have raised concerns about liquidity and solvency, making it difficult for Maldives to access quality financing, which is essential for the government to undertake reforms.

Maldives achieved annual average GDP growth of 5.1% annually from 2000 to 2019. Post-pandemic, the economy grew by 8.1% in 2022 and by 4.1% in 2023. Economic growth has been driven mainly by international tourism

			Heed	multidimension		Population share (%)		imension to	to overall	
	Survey year	MPI value	Head- count (%)	Intensity of deprivations (%)	Vulnerable to multidim ensional poverty	In severe multidim ensional poverty	Below income poverty line	Health	Education	Standard of living
Maldives	2016/2017	0.003	0.8	34.4	4.8	0.0	0.0	80.7	15.1	4.2
Nepal	2019	0.074	17.5	42.5	17.8	4.9	-	23.2	33.9	43.0
Sri Lanka	2016	0.011	2.9	38.3	14.3	0.3	1.0	32.5	24.4	43.0
South Asia	-	0.091	20.5	44.6	17.9	6.9	9.2	27.9	33.7	38.3

Table 1: Multidimensional Poverty Index for Maldives in Comparison to Regional Countries

but has also been fueled by public debt and infrastructure loans from India and China. In 2012, Maldives was the first country in South Asia to achieve and maintain the Upper Middle-Income Country (UMIC) status, which is defined by the World Bank as a country with a Gross National Income (GNI) per capita of between US\$4,036 and US\$12,475 for fiscal year (FY) 2012.⁷⁷ During this period of stable economic growth and poverty reduction, the government was able to invest in the social sectors. For example, from 2014 to 2021, the government spent an average of 42% of its annual budget on health (14%), social protection (15%), and education (13%), sectors that, together, account for roughly 14% of annual GDP.78

During the COVID-19 pandemic, in 2020, Maldives was forced to shut down its tourism industry, causing the economy to contract by 33.5%. In response to the pandemic, government rolled out a massive vaccination program and revived the tourism industry; the economy subsequently rebounded with GDP growth of 37% in 2021. However, the economic stimulus was fueled by external debt, and the resulting pressures of the pandemic combined with years of borrowing and overspending led to a fiscal crisis in 2024, when public debt reached US\$8 billion or 122.9% of GDP.79 The World Bank and IMF have warned that Maldives is at "high risk of debt distress," after years of unsustainable borrowing. In August 2024, Fitch Ratings, a credit rating agency, downgraded Maldives' Long-Term Foreign Currency Issuer Default Rating to "CC," citing an increased risk of default, falling foreign exchange reserves, rising external debt service, external imbalances and high current account deficits, reliance on support and reforms, limited external financing flows, extensive public investment, and heavy dependence on imports. Despite these fiscal challenges, Maldives' economy is expected to grow.80

Maldives' Strategic Action Plan 2019-2023 includes the concept of the "Blue Economy" - the "sustainable use of the ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of the ocean

ecosystem."⁸¹ Like other SIDS, Maldives is constrained by the absence of land-based mineral resources and by a limited ability to develop its agriculture sector. The Blue Economy vision recognizes that the economy and well-being of Maldives is tied to the health and wealth of the natural ocean environment. The largest contributors to the economy - tourism and fisheries - are highly dependent on the well-being of the ocean, coral reefs, beaches, and marine life. The "blue economy sector" consists of six subsectors: fisheries and marine resources; agriculture; tourism; subject matter experts (SME); labor, employment, and migration; and economic diversification.⁸²

Tourism

Tourism contributes approximately 30% of GDP and generates more than 60% of foreign currency earnings. Tourism combined with related service sectors contributes 40% of GDP, 80% of exports, and 50% of total national revenue. The tourism sector experienced significant growth from 2009 to 2019 before the pandemic-related decline in 2020. The tourism industry is recovering and reached a record of 1.88 million tourist arrivals in 2023. The main tourist markets are India, Russia, and China, with a resurgence of Chinese tourists in 2023 and 2024.⁸³

Although the government emphasizes the importance of economic diversification, tourism continues to be the main economic activity, to include major investments to expand the country's capacity to handle more visitors. The government has initiated massive promotional activities targeting Chinese tourists, to include the arrangement of direct flights, and projects a 40% increase in tourist arrivals from China in 2025. Maldives is also aiming to open 20 new resorts and to complete the Velana International Airport (VIA) passenger terminal by end of 2024 to accommodate higher tourist arrivals.⁸⁴

Fishing

Since the introduction and subsequent rapid growth of tourism in 1978, the fishing industry has been the second largest contributor to the Maldives economy, contributing between 3% and 12% of the country's GDP. However, the fishing industry's contribution is in steady decline due to a combination of increasing tourism and related economic sectors and the impacts of climate change. Fisheries are important for creating employment, engaging 11% of the labor force in 2015. Fish is a staple food in Maldives and comprises some 85% of total animal protein consumed by the population. In addition, fish and fish products make up more than 90% of total exports.⁸⁵

The current government has embarked on diversification of the national economy and promotion of the fishing sector. Maldives Fisheries and Ocean Resources Marketing and Promotion Limited plans to introduce fish products and related services in foreign markets, and in 2024, the government signed trade agreements with both China and Türkiye to bolster fish exports.⁸⁶

Agriculture

The agricultural sector of Maldives is based primarily on coconuts and other tree crops, with only 4,000 hectares (9,880 acres) cultivated with other agriculture crops. Food security in Maldives is unique as the country depends on imports for most of its food needs, including rice, which is the country's staple grain. Outside of Malé, fishing and subsistence agriculture are the main sources of food security and livelihoods for the vast majority of the people. To address this challenge, Maldives is integrating food security into national planning. It has removed tariffs on imported food items, agricultural inputs, and fuel, and is intensifying and diversifying agriculture and fisheries. Maldives is also promoting and strengthening small and medium enterprises in both these sectors, while providing financial support for small growers and fishers in rural areas.87

Climate change is central to all discussions about food security in Maldives, because it is adversely affecting crops and fish stocks and reducing land area as the sea level rises. Developing agriculture as the third pillar of the economy, after tourism and fishing, is one of the

priorities of the 7th National Development Plan, which is being implemented at present.⁸⁸

Government

Maldives is officially known as "Republic of Maldives," or Dhivehi Raajje (ISO-3166 codes: MV/MDV).⁸⁹

The Republic of Maldives is a multiparty constitutional democracy. The constitution provides citizens the ability to choose their government in free and fair periodic elections held by secret ballot and based on universal and equal suffrage. The government consists of three branches: executive, judicial, and legislative.

The President is head of state and government and is the commander-in-chief of the Maldives National Defence Force (MNDF). The President is elected by absolute majority vote through a two-round system, to serve for a five-year term, with a limit of two terms.⁹⁰

The judicial branch is the highest court for interpretation, protection, and enforcement of the constitution. Judges are appointed by the president in consultation with the Judicial Service Commission, and upon confirmation by voting members of the Peoples's Majlis. Maldives uses an Islamic (Sharia) legal system with English common law influences, primarily in commercial matters. Maldives has a three-tier court system: a supreme court, high court, and first instance superior and lower courts. There are approximately 200 judges across all tiers. The supreme, high, and superior courts all sit in Malé City. There are magistrate courts on the islands. The 2008 Constitution declared Islam the state religion and mandated that judges rely on Sharia when the constitution and legislation are silent on a legal issue. When interpreting a law or regulation, courts are directed to consider Islam along with international law and the decisions of foreign jurisdictions; however, legislation found to be contrary to Islam is void. Maldives criminal code incorporates the application of Sharia punishments for certain offenses including murder, apostasy, and drinking alcohol.⁹¹

The legislative branch consists of the Maldivian People's Council, or the People's

Majlis. It is a unicameral assembly with 93 members, elected by plurality vote in single-member constituencies, to serve for five-year terms, with no term limits.⁹²

There are 22 geographic atolls, organized into 20 administrative atolls. An "atoll" is defined as a collection of islands and includes both administrative (admin) islands and non-administrative (non-admin) islands. Admin islands are islands with official councils, whereas non-admin islands may be resorts, industrial islands, islands under development or leased for agricultural or fisheries purposes.⁹³

The People's Majlis, located in Malé, houses members from 20 administrative atolls and five city councils. Each administrative atoll is headed by an atoll council, and each of the five cities are led by city councils. Islands are categorized into administrative islands and non-administrative islands. Administrative islands are led by island councils. Non-administrative islands do not have councils but report to the administrative atoll level.

Atolls in Maldives are often referenced by letter codes, reflecting their Dhivehi name. For example, Addu Atoll bares the Dhivehi name "Seenu." Thus, the letter code often used by Maldivians is "S." Less commonly, a letter code may reflect the Latin, or English, name of the atoll. In this case, the Latin letter code for Addu Atoll would be "A." A list of the 20 administrative atolls and their letter codes and the 5 cities are listed in Tables 2 and 3, respectively. 94

Environment

Maldives lies approximately 230 Nautical Miles southwest of the Indian peninsula. The country's northernmost point is approximately 129 km (80 mi) to Minicoy, part of the Indian Union Territory of Lakshadweep. The islands of Maldives lie across the equator, which runs between two of the country's atolls - Gaafu Dhaalu Atoll (GDh) and Gnaviyani Atoll (Gn). Given this location, Maldives sits on five major international shipping lanes. The majority of maritime traffic travels through the "8-Degree Channel," which lies between Maldives' Haa

Atolls by Letter Code	Atolls (English)	Atolls (Dhivehi)
AA	North Ari Atoll	Alifu Alifu
Adh	South Ari Atoll	Alifu Dhaalu
В	South Maalhosmadulu	Ваа
Dh	South Nilandhe Atoll	Dhaalu
F	North Nilandhe Atoll	Faafu
GA	North Huvadhu Atoll	Gaafu Alifu
Gdh	South Huvadhu Atoll	Gaafu Dhaalu
Gn	Gnaviyani	Gnaviyani
НА	North Thiladhunmathi	Haa Alifu
Hdh	South Thiladhunmathi	Haa Dhaalu
К	Male' Atoll	Kaafu
L	Hadhdhunmathi	Laamu
Lh	Faadhippolhu	Lhaviyani
М	Mulakatholhu	Meemu
N	South Miladhunmadulu	Noonu
R	North Maalhosmadulu	Raa
S	Addu Atoll	Seenu
Sh	North Miladhunmadulu	Shaviyani
Th	Kolhumadulu	Thaa
V	Felidhu Atoll	Vaavu

Table 2: Administrative Atolls of Maldives

Maldives Cities
Addu City
Male City
Fuvahmulah City
Kulhudhuffushi City
Thinadhoo City

Table 3: Cities of Maldives

Alifu Atoll (HA) and India's Minicoy. This channel is a major east-west shipping route. Each year, over 70,000 ships and an estimated US\$18 trillion worth of goods transit this channel every year.⁹⁵

Geography

Maldives is an archipelago in the Laccadive Sea, in the Indian Ocean. It is part of the Lakshadweep-Maldives-Chagos group of islands, which are the top of a vast undersea mountain range, the Chagos-Laccadive Ridge.

Oriented generally north to south in a double island chain, Maldives possesses a large territorial sea and covers an extensive latitudinal gradient, stretching approximately 850 km (528 mi) from north to south and 130 km (80.7 mi) from east to

west, as shown in Figure 2.96

The two island chains of the archipelago line up in roughly parallel north-south direction, between 74°E and 72°30'E and 7°10'N and 0°45'S. Maldives has a total land area of 298 km² (115 mi²) within an Exclusive Economic Zone (EEZ) of 974,000 km² (376,064 mi²). More than 99% of Maldives' territory comprises the sea.

The Maldives archipelago consists of 1,192 islands. According to the Law of the Sea (LOS) Convention, an atoll is "composed of small pieces of land that are permanently above water at high tide surrounded by the open sea and enclose or partially enclose a lagoon." The atolls of Maldives range in size from 3 to 3,200 km² (1.16-1,988 mi²). The islands also vary in size, ranging from 0.06 to 6 km² (0.037-3.7 mi²) in area. 98

The Maldives atolls are surrounded by reefs, many with deep, natural channels and lagoons. Within each atoll, the central lagoon is generally shallow and surrounded by a submerged coral reef. The distribution of islands within each atoll also varies. In some atolls, the islands are located around the periphery, while others have the islands spread across the atoll. The islands themselves are predominantly flat and sandy,



Figure 2: Map of Maldives in Comparison with the U.S.

with lush tropical vegetation, coconut palms, and mangroves.⁹⁹

Maldives has one of the lowest elevations in the world, with its highest point approximately 2.4 m (7.9 feet [ft]) above sea level, and an average elevation of 1.5 m (4.9 ft). Approximately 80% of the land area is less than 1 m (3.3 ft) above sea level. Notably, approximately 14% of urban areas have an elevation no higher than 1 m (3.3 ft). By sector, 13% of agricultural lands and 22% of the energy infrastructure are also no higher than 1 m (3.3 ft) above sea level. 101

Maldives' geography is dynamic. The natural land formations are exposed to both near-term frequent and severe weather and to long-term SLR. The government is actively pursuing land reclamation as part of its development strategy. As of 2020, Maldives had more vegetated land cover than built-up areas. Of its total land area of 250 km² (155 mi²), approximately 21 km² (13 mi²) and 17 km² (10.6 mi²) were allocated for beaches and island resorts, respectively. As of 2017, there were approximately 60 islands with reclaimed land. 102

Map Sources

Given the dynamism of the country's land, it can be challenging to maintain accurate maps. OneMap is an authoritative source and is developed and maintained by the Maldives Land and Survey Authority under its mandate to create the national chart and maintain the national land registry (https://onemap.mv/). OneMap maintains a consolidated list of all islands, in Excel spreadsheet format, listed by Feature Code (FCODE), longitude/latitude, island category, economic sector, usage, and primary government agency. A sample of the list, maintained by Maldives Land and Survey Authority, is provided in Table 4 below.¹⁰³

An additional resource is the Multihazard Risk Atlas of Maldives, Geography – Volume 1, published in March 2020 by GoM in partnership with the Asian Development Bank (ADB). The Atlas provides a basemap for each atoll and some islands, with a particular focus on land management and land reclamation. The atlas is derived from data provided by several

FCODE	Atoll	Island Name	Capital	Longitude/ Latitude	Area	Category	Sector	Usage	Primary Agency
LD0029	Thaa	Lhavaddoo	N	73° 17′ 28.362″ E/ 2° 18′ 20.770″ N	3.177465		Tourism		МоТ
LD0357	Gaafu Dhaalu	Maavaaruloo	N	73° 30′ 37.737″ E/ 0° 20′ 9.303″ N	90.943344	Industrial Island	Aviation	Airport	MoTCA
LD0046	Lhaviyani	Felivaru	N	73° 23′ 10.422″ E/ 5° 28′ 37.169″ N	46.705251	Industrial Island	Fisheries	Fish Processing	MoFMRA
LD0105	Raa	Gaaun'doodhoo	N	73° 0′ 56.575″ E/ 5° 44′ 58.098″ N	16.415565	Industrial Island	Fisheries and Agriculture	Mixed Usage	MoFMRA
LD0004	Alifu Alifu	Maalhos	N	72° 43′ 9.216″ E/ 3° 59′ 11.059″ N	32.453251	Industrial Island			

Table 4: Sample Island List by OneMap

ministries and agencies, including the Civil Aviation Authority, Land and Survey Authority, Ministry of Economic Development, Ministry of Environment, and Ministry of National Planning and Infrastructure. Note, recent realignments in the central government may result in differing ministry and agency names. Figure 3 shows a basemap of Maldives' atolls and islands from the atlas. 104

Borders

Maldives does not share a land border with any other country. It shares maritime borders with India, Sri Lanka, and the British Indian Ocean Territory (Chagos Islands), which may be in the process of shifting to Mauritian control as of the writing of this handbook. Maldives signed an agreement to establish an EEZ maritime boundary with India in the Arabian Sea; that boundary went into effect in 1978. Sri Lanka shares a trijunction point with Maldives and India; it is situated approximately 320 km (200 mi) from each country's coast. The point was established by agreement on 31 July 1976. 106

Climate

The Maldives has a warm and humid tropical climate, where average daily temperature ranges from 25°C to 32°C (77-89.6°F), with slight variations throughout the year. The country has two distinct seasons guided by the monsoons. The South-West monsoon, known locally as the Hulangu Monsoon, tends to be the wet season and extends from mid-May to November. The North-East monsoon, known locally as Iruvai Monsoon, tends to be the dry season and extends from January to March. The months of April and

December are considered transitional periods. The warmest period starts in March and may extend through mid-May until the onset of the South-West monsoon. The highest and lowest temperatures ever recorded in Maldives are 36°C (96.8°F) and 18.2°C (64.8°F) in 1991 and 2002, respectively.¹⁰⁷

The annual average rainfall is about 2,130 millimeters (mm; 83.9 inches [in]). The southern atolls receive more rainfall than the northern and central atolls. On average, the southern atolls receive about 2,218 mm (87.3 in) of rainfall per year, while the central and northern atolls receive 1,966 mm (77.3 in) and 1,779 mm (70 in), respectively. In general, the southwest monsoon brings more rainfall than the northeast monsoon, and more rainfall is experienced in the southern atolls than in the northern and central atolls. Notably, the precipitation pattern in Maldives is changing with climate change. 108

Inter-annual temperature and precipitation trends in the Indian Ocean, and particularly around Maldives, have a complex relationship with global climate circulation. For example, Maldives may experience extreme weather variations due to phases of the El Niño Southern Oscillation (ENSO) and the Indian Ocean Dipole (IOD), and these phenomena tend to follow multi-year, variable cycles. 109

Seasonal surface winds, between May and October, tend to affect the northern atolls. While Maldives is not highly exposed to tropical cyclones, the northern atolls are particularly exposed to high winds, which can reach 96.8 knots (180 km / 112 mi per hour), and which are generated by cyclonic weather systems. 110

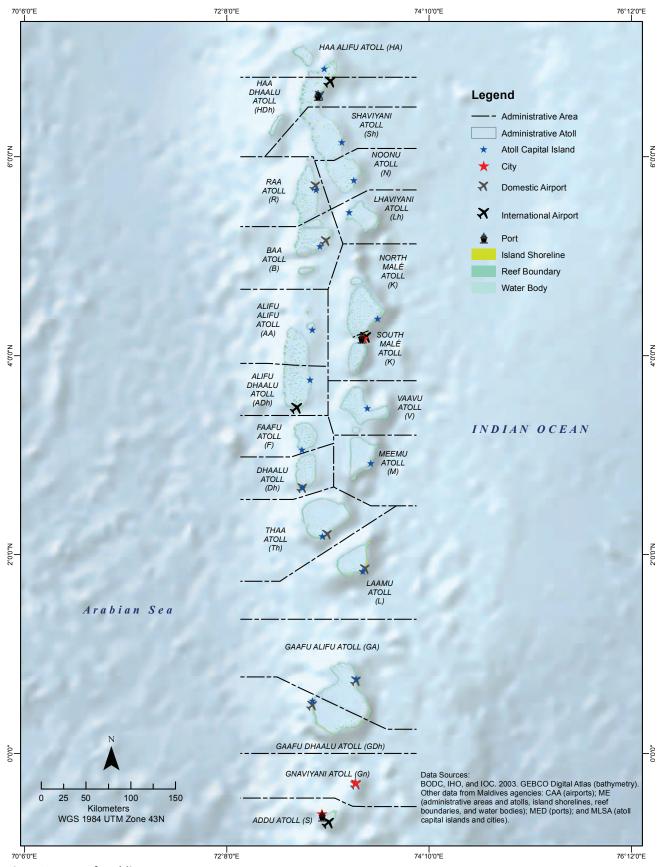


Figure 3: Map of Maldives

DISASTER OVERVIEW

Maldives is exposed to both sudden-onset and slow-onset hazards, in both natural and manmade hazard categories. Tsunamis and epidemic have been the most impactful hazard events in Maldives' history; however, the effects of climate change - heatwaves, droughts, and floods - are increasingly a concern as they are expected to be both more frequent and more intense in the near future.111 The geography of Maldives plays a crucial role in its vulnerability. The country is approximately 443 km (275 mi) from its nearest neighbor, India. Moreover, the country is geographically dispersed and low-lying. Due to these characteristics, Maldives experiences the impact of slow-onset, climate change-influenced hazards more rapidly.¹¹²

Climate Change

Maldives is a low-lying, small-island state, and climate change and related hazards threaten its natural environment, economic development, and the health and well-being of its people. According to the World Bank Group, the two main climate risks in Maldives are: 1) SLR, flooding, and coastal erosion, and 2) ocean warming and acidification.¹¹³

SSPs, RCPs, and the IPCC

Representative Concentration Pathways (RCP) and Shared Socioeconomic Pathways (SSP) were developed by groups of researchers to explore how the world might change given different scenarios. RCPs and SSPs provide climate modeling data used in climate assessment reports, published by the IPCC.

RCPs describe four pathways with different levels of greenhouse gas and other radioactive forcings that might occur in the future. SSPs explore five scenarios based on population, economic growth, education, urbanization, and technological development, which, combined, might reduce emissions and achieve mitigation targets. SSPs also define different baseline worlds which could happen in the absence of

international efforts to address climate change. Table 5 explains the most commonly used RCP and SSP scenarios.¹¹⁴

Recent efforts to increase the geographic accuracy and applicability of climate projections to the local level (downscaling a course resolution of 100 km² [38.6 mi²] to 5 km² [1.9 mi²]), are particularly relevant for Maldives given its make-up of small islands, many with an area of less than 10 km² (6.2 mi²). Therefore, based on high-resolution climate projection information, a joint program by United Nations Development Programme (UNDP) and United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) further elaborates the climate risks particular to Maldives and its component regions; they are rising sea levels, changing precipitation patterns, increasing frequency and intensity of extreme weather events, shifting climatic zones and seasons, declining biodiversity, and changing ecosystems. 115

SLR is the greatest threat to Maldives; 80% of Maldives' landmass lies less than 1 m (3.3 ft) above mean sea level, and 40% of its population lives within 100 m (328 ft) of its coastline. Approximately 36% of all buildings are located within 100 m (328 ft) of the shoreline, and 71% of buildings are located within 200 m (656 ft) of the shoreline. From 1992 to 2015, the average annual SLR was less than 4 mm (0.16 in). Baseline climate projection data shows an acceleration of SLR to 6-12 mm (0.24-0.47 in) per year under RCP 8.5, or a cumulative SLR of 1 m (3.3 ft) by 2050, but data that has been geographically downscaled illustrates that the threat is much greater. 116 Downscaled projection data indicates that the northern and central atolls may see an SLR of up to 0.95 m (3.1 ft) by 2040 (under SSP2 and SSP3 scenarios) and 1.06 m (3.47 ft) and 1.08 m (3.5 ft) by 2060 (under SSP2 and SSP3 scenarios, respectively). 117

In general, rainfall is expected to decrease in Maldives' southern atolls and increase in the

RCPs	SSPs
RCP2.6 A low RCP that represents a low concentration of greenhouse gases in the atmosphere in 2100, where global averages include 1.0°C increase, 0.4 m sea level rise, small increase in extreme weather events, and a low cost of adaptation required due to high efforts to curb emissions.	SSP1: Sustainability (Taking the Green Road) A sustainability-focused SSP that represents a world where growth and equality are prioritized. Key characteristics include: Rapid transition to clean energy and low-carbon technologies. Strong emphasis on social welfare, education, and health. Reduced global inequality and a shift toward sustainable practices in consumption and production.
RCP4.5 A medium-low RCP that represents a medium concentration of greenhouse gases in the atmosphere in 2100, where global averages include 1.8°C increase, 0.47 m sea level rise, moderate increase in extreme weather events, and a medium cost of adaptation required due to medium-high efforts to curb emissions	SSP2: Middle of the Road (Taking the Conventional Path) A "middle of the road" SSP that assumes a continuation of current trends, where socioeconomic developments follow a moderate trajectory. Key characteristics include: • Moderate economic growth and technological progress. • Some improvements in environmental management, but limited efforts toward full sustainability. • Moderate levels of inequality and a relatively stable international order.
RCP6.0 A medium-high RCP that represents a high concentration of greenhouse gases in the atmosphere in 2100, where global averages include 2.2°C increase, 0.48 m sea level rise, moderate increase in extreme weather events, and a medium cost of adaptation required due to medium-low efforts to curb emissions.	SSP3: Regional Rivalry (A Rocky Road) A "rocky road" SSP that represents a fragmented world where countries prioritize national security and economic interests over global cooperation. Key characteristics include: • High levels of inequality and regional fragmentation. • Limited technological innovation and slow economic growth. • Low levels of international cooperation and climate action. • Strong focus on national priorities, often at the expense of global challenges.
RCP8.5 A high RCP that represents a high concentration of greenhouse gases in the atmosphere in 2100, where global averages include 3.7°C increase, 0.63 m sea level rise, large increase in extreme weather events, and a high cost of adaptation required due to low efforts to curb emissions.	SSP4: Inequality (A Fork in the Road) An inequality SSP that represents a world where inequality rises significantly, leading to highly unequal distribution of wealth and access to technology. Key characteristics include: High inequality, with significant gaps in wealth, technology, and education. Technological advancements are not equally distributed, exacerbating disparities. Social divisions create challenges for global climate action and cooperation. Rapid technological advances in rich countries, but limited impact in poorer areas.
2°C increase in temperature is recognised as the threshold at which climate change becomes dangerous.	SSP5: fossil-fueled Development (Taking the Highway) A fossil-fueled development SSP that represents a world of rapid economic growth fueled by fossil energy, with a high level of technological innovation and urbanization. Key characteristics include: • High economic growth driven by energy-intensive industries. • Heavy reliance on fossil fuels, leading to high emissions and environmental degradation. • Technological innovation, but with limited focus on sustainable technologies. • Urbanization and industrialization, with little emphasis on climate change mitigation.

Table 5: Climate Modeling Scenarios (RCP and SSP)

northern and central atolls. This is a reversal of current conditions, in which the southern islands tend to receive more annual rainfall than the northern islands. However, significant uncertainty remains in these climate projections, as the sea and air temperatures within the vicinity of Maldives have very complex relationships with global climate circulation phenomena, such as ENSO and the IOD. 119

The most significant risk from SLR and rainfall is increased flooding, not only from

gradual encroachment of water, but from the heightened magnitude and frequency of extreme events. Based on 2050 climate scenarios, these events, classified as "1-in-10-year" and "1-in-100-year" events, have the potential to damage up to 3.8% of capital assets, which is equivalent to US\$1.1 billion or 17.7% of GDP. At present, the tourism industry is most challenged with increasing storm surges, which result in flooding and erosion, which, in turn, make infrastructure less reliable. ¹²⁰ Flooding also exacerbates water

insecurity in Maldives, which no longer has sufficient suitable surface water sources. Largely due to population growth, per capita renewable water resources have decreased from 300 m³ (79,250 gallons) in 1964 to 55 m³ (13,530 gallons) in 2020, the lowest rating among Maldives' regional peers and SIDS. To meet demands, freshwater is provided by a combination of shallow groundwater, rainwater harvesting, and desalination.¹²¹

Ocean heating is a major concern for Maldives, whose coral reefs cover a surface area between 2,697 km² (1,675 mi²) and 4,510 km² (2,802 mi²). Maldives depends heavily on marine resources to support its economy namely the fishing and tourism industries – to support the livelihoods of local communities, many of whom rely on coral reefs for food and small income. Rising sea surface temperatures associated with climate change have led to an increased incidence of coral bleaching, with the most severe events happening in 1998 and 2016. After the 1998 event, corals recovered to nearly pre-shock levels until the next bleaching event in 2016. Coral bleaching is cyclical, and corals can recover if they have necessary time. However, climate change shortens the duration between ocean heatwaves and intensifies them, making it harder for corals to recover.122 The combined effects of ocean heating, coral degradation, and ocean acidification could spell a total loss of access to migratory fish species. While Maldives has been applauded for continuing its sustainable practice of pole-and-line fishing, which preserves the coral reef and its ecosystem, initial estimates indicate fish species such as tuna will respond to a stressed coral reef ecosystem and increased ocean temperatures by migrating to cooler waters in the southeastern Indian Ocean, far from where Maldives' fishers can access then. Since the Maldives fleet operates within its EEZ, the migration of the tuna species will challenge historical fishing patterns and behaviors. 123 Under the medium climate projection scenario, SSP2-4.5, total fish catch in Maldives can be expected to decline by 15% in the period 2041-2060 and by 60% in the period 2081-2100. 124

Maldives is committed to a development trajectory that is focused on the blue economy, good governance, and promoting sustainable island life. The government has established a robust climate policy framework, including the Climate Change Policy Framework (2015), Nationally Determined Contribution (NDC) 2020 update and implementation plan (2018), Climate Emergency Act (2021), Maldives Energy Act (2021), and a national roadmap for Early Warnings for All (2024). The National Adaptation Plan (NAP) for climate change and the next NDC update for 2025 has been initiated.¹²⁵

Because Maldives is considered a UMIC due to a relatively high GNI per capita and other factors, it has less access to assistance and funding for disaster risk reduction or climate change adaptation funding from the international community. The UN MVI reveals an adaptation financing gap of approximately US\$45 million on average annually - meaning Maldives needs nearly US\$70 million annually to meet adaptation goals but receives, on average, approximately US\$22 million annually.¹²⁶

Due to relatively higher GNI's coupled with lack of local data, debt tends to be more expensive for SIDS. Maldives is classified by the IMF as a country in "high external debt stress." In fact, total Public and Privately Guaranteed external debt makes up 62.9% of Maldives' GNI, third only to Cabo Verde and Jamaica in the SIDS category. Thus, Maldives is recognized as a top priority for debt relief through debt swap mechanisms, especially debt-for-climate and debt-for-nature.¹²⁷

Hazards

As a SIDS, Maldives is considered more exposed to hazards and experiences the impact of hazards differently than non-SIDS. SLR is the greatest long-term threat to Maldives because SLR increases the probability of land inundation. Maldives is extremely exposed to coastal hazards, and coastal hazard events have become more frequent in recent decades. Beyond SLR and coastal hazards, the country is also exposed

to earthquakes and tsunamis, cyclones, thunderstorms, flooding, drought, storm surges, strong winds, and tornadoes. 128

Local Hazard Identification

Maldives' DRR Strategy (2024-2030) details a list of locally identified hazards in accordance with the Hazard Information Profiles (HIP) developed by the United Nations Disaster Risk Reduction (UNDRR) and the International Science Council (2021). The hazards are recognized by Maldives' NDMA, and there are technical leads for each hazard. Local hazard identification is critical, given the general absence of downscaled hazard-related data available in many international databases.

The hazards identified in the DRR Strategy are evaluated by NDMA based on three measures: frequency and exposure, magnitude and sensitivity, and overall significance with adaptive capacity. NDMA identifies 48 distinct threats, falling within six primary categories. Most hazards fall within the following three categories: meteorological and hydrological hazards, environmental hazards, and technological hazards.¹²⁹

Across all categories, the following hazards are classified as "very high" significance – surface water flooding, tsunami, coastal erosion and shoreline change, pollution, fire, solid waste, plastic waste, marine accident, and supply chain failure. Hazards with "high" significance include coastal flooding, swell waves, atmospheric depression or cyclone, tropical cyclone, deforestation, loss of mangroves, coral bleaching, sand mining, SLR, oil pollution, explosion, drain and sewer flooding, epidemic, and pandemic.¹³⁰

Notably, the National Emergency Operations Plan (NEOP) Volume I identifies two hazards with high frequency and high probability of occurrence – urban fire and water shortage. Such hazards are not always recognized by external partners yet consume a disproportionate share of government resources. Figure 4 illustrates hazard patterns commonly cited by the GoM.¹³¹

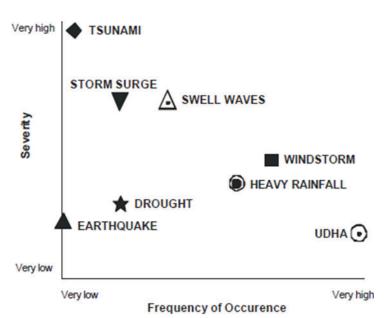


Figure 4: Locally Identified Hazard Patterns in Maldives

Urban Fires and Water Shortage

Urban fires are particularly dangerous. As the population density is among the highest in the world, many people are displaced when an incident occurs. In 2022, there were a total of 128 fire incidents, and 61 incidents were reported by NDMA for 2023. More than 50% of the reported fires occurred in Kaafu Atoll, where more than 41% of the population resides. The government estimates MVR19 million (US\$1.2 million) was committed to fire relief from 2018 to 2023, and more than MVR1 million (US\$65,149) was allocated in 2023. 132 While most fire incidents occur in urban areas, fires in non-urban areas pose different challenges. Isolated islands are vulnerable to damage to critical infrastructure. For example, in 2014, a water generator unit broke down as a result of fire, and the damage cut off drinking water to over 150,000 people in Malé.133

Water security is a primary issue, as Maldives does not have suitable surface water sources. It has the lowest internal renewable water resources per capita compared to regional peers, and its sources are significantly lower than the average of SIDS. Per capita renewable water resources are also declining, largely due to population growth.¹³⁴

Groundwater in atoll islands is found in a layer of freshwater known as a freshwater lens,

which is located 1–1.5 m (3.2-4.9 ft) below the land surface. The freshwater lenses are particularly prone to pollution from saltwater intrusion and human activities, and they are vulnerable to seasonal rainfall variability and the longer-term threat of precipitation due to climate change.¹³⁵

The demand for freshwater is met by a combination of shallow groundwater, rainwater harvesting, and desalination. However, each year, the government must assign significant amounts of resources for water distribution to guarantee water availability. During disasters, the process becomes more expensive and challenging. For example. during the dry seasons of 2009 and 2010, supplying of desalinated water to over 90 islands came with the expense of around MVR9,884,485 (or US\$640,000), and the cost was expected to rise with fuel prices to cover the long distances between islands. 136

Table 6 shows a qualitative listing of hazard assessments and a schematic of hazards and their significance to Maldives; which is located in the Maldives DRR Strategy (2024-2030).¹³⁷

History of Natural Disasters

The following is a list of natural disasters in Maldives in the last ten years, 2014-2024.

August 2024 - Flood

In May 2024, the Maldives Meteorological Service (MMS) forecast that seasonal rainfall during the 2024 South-West Monsoon Season would be above normal, especially in the central and northern parts of the country. 138 In August, MMS issued warnings that heavy rain, high winds, and swells, especially during high tide, were likely to hit Maldives over a 3-5-day period. On 13 August, MMS issued a White (Informational) Alert for the southern islands, a Yellow (Advisory) Alert for the central islands, and upgraded the alert to Orange (Warning) for the northernmost islands. MMS cited record rainfall of 231.5 mm (9.1 in) in one day, alongside winds averaging 27-32 km (17-27 mi) per hour over northern and central Maldives,

and 21-37 km (13-23 mi) per hour over the southern region. Wind gusts were expected to reach 96 km (60 mi) per hour.¹³⁹

NDMA reported that they had received hundreds of requests for assistance due to flooding in houses. As of September 2024, total damage to buildings and personal belongings was valued at MVR1,084,169 (US\$70,632). Some estimates indicated that nearly 200 houses were flooded in Malé City alone. 140

NDMA initiated relief efforts on 13 August and aided affected households, including relocating residents. The MNDF was activated to dewater streets and supply sandbags. On 14 August, President Muizzu declared the day a public holiday and appointed himself head of the taskforce to monitor and facilitate emergency response.¹⁴¹

August 2024 – Fire

On 22 August 2024, a major fire broke out at Marinedo Marineworks, a vessel fabrication facility located on Thilafushi island, approximately 7 km (4.3 mi) west of Malé City. NDMA coordinated the response to the fire. Airport Fire & Rescue Service assets were mobilized and later deployed at the request of MNDF Fire and Rescue Service (FRS). Maldives Transport and Contracting Company Public Limited Company (MTCC) provided firefighting resources, as well as landing craft and speed boats to move manpower and assets.

Damage from the fire was estimated at MVR30 million (US\$1.9 million). The warehouse was a complex of single story and three-story buildings, with adjacent warehouses belonging to other businesses. Reportedly, the fire was under control within an hour once responders were on the scene. The total response effort included MNDF, MPS, MRC, Maldives Housing Development Corporation, MTCC, and NDMA personnel.

December 2023 - Epidemic

Between 1 and 2 December 2023, a series of health screening events held for migrants discovered more than 30 positive cases of Lymphatic Filariasis; most cases were in

Hazard type	Hazard	Hazard Overall Significance	Synonyms included in HIPs by UNDRR & ISC	Dhivehi name
	Lightning	Low	Bolt, Thunderbolt	ב' נ' נ' נ' לי
	Heatwave	Low	None identified	"אינאיק ה'נאדין "אינאיל אינאיל אינאי
	Thunderstorm	Medium	None identified	ע'קצב'צ'ן פַנק'צ'ב'צ'ית
	Coastal flooding	High	Storm surge, coastal inundation	r²g²ξα°r°5 "メイッタл
	Surface Water Flooding	Very high	Surface detention, Depression storage)" (")" (")" (")" (")" ()" ()
ical	Haze	Low	Not available	ترنسر° ورُسوْ
golo	Smoke	Medium	Not relevant	در ^د س ^و
l hydr	Ocean Acidification	Medium	Not available	יליציאה ציבאילית איליליקיילי
anc	Rogue Wave	Medium	Freak wave, Extreme storm wave.	9"# 'žo
gical	Sea Water Intrusion	Medium	Saltwater intrusion, saltwater encroachment	״° פ''יילי
Meteorological and hydrological	Storm Surge	Medium	None found	ב'צ'יצ' נ'ק'צ' ליק'צ' א' א'' א'ל' א'ל' א' א''ק'
Z e	Swell waves	High	Not available	אצא''נא''ת
	Tsunami	Very High	Not Identified	2%
	Squall	Medium	Gust wind	وكرُ وَارِ
	Depression or Cyclone (Low Pressure Area)	High	Not identified	ה''38 לפיל איצ' ה''38
	Tropical Cyclone (Low Pressure Area, depression)	High	Typhoon	°7''3''\$
Geohazards	Earthquake	Low	Earth tremor	ריציו ציילים
	Air Pollution (Point Source)	Medium	Point source emissions, fugitive emissions	אָפָק פָאד' ח'דע' ("מ"ל") אַפּק פּאד' ה'הלילילה" מ'קניאי 'פְאי'ק'ה'ל"ל -מ'ס'ס'מ''(
	Ambient (Outdoor) Air Pollution	Medium	Poor Air Quality, Smog	אין אחת א' צית (ב'צ'צ'צ')
	Biodiversity Loss	Medium	None identified	""" '" '" '" '" '" '" '" '" '" '" '" '"
	Forest Declines and Diebacks	Medium	Stand level dieback, Canopy level dieback	ארנאיל ווק ייקי אונית
ental	Deforestation	High	None	ב'ריליציאילי (ב'פ'פ'פ'פ') רייל' אנ'ליק'פ'אי'ת')
Environmental	Forest Invasive Species	Medium	Forest pests	ږ °س "وسو °و ستۇئستۇ ئى دائىرىزى ئىچە د
Envi	Wildfires	Low	Bush fires, landscape fire, forest fire	577 157679 36475 157511
	Loss of Mangroves	High	Mangrove deforestation	ערקי ק"י לי לי-ינסית" ייניי <i>ס</i> קחרית"
	Coral Bleaching	High	Not identified	א' ק'ד'ק'פ'ית
	Coastal Erosion and Shoreline Change	Very High	Shoreline process	p³45°/4
	Sand Mining	High	Not identified	ר'צ'יר איני
	Sea Level Rise	High	Not identified	מציצו האצירות
	Eutrophication	Medium	None identified	מראין אָל

Table 6: Qualitative Hazard Assessment for Maldives

Hazard type	Hazard	Hazard Overall Significance	Synonyms included in HIPs by UNDRR & ISC	Dhivehi name
a	Microplastics	Medium	Nano particles	ָנ <i>ֶלֶי</i> ישְׁעִי עֹיתַזָּ
Chemical	Leaks and Spills	Medium	Not applicable	פַּרֶּאלא אַפֶּאל אוֹאלאָפָּ אָל ע'פֿאית"
ט	Oil Pollution	High	Oil spill	トチャップ とりろう
	Pollution	Very High	Contamination, Poisoning	פאנאלת איצינית
	Fire	Very High	Not Applicable	الركة وَّلِيْرُ مِنْ أُورِثُ كَا رِيْمِ النِّهِ الْمِيْرِ النِّهِ الْمِيْرِ النِّهِ الْمِيْرِ النِّهِ
	Building Collapse	Medium	Catastrophic Building failure	אָליליפָּ' הְלֹלְילֶים אוֹמָים אוֹמָים איני פֿאָר אַילים אינים
	Explosion	High	Not applicable	ي و م
	Solid Waste	Very High	Not applicable	מ'ת ז' דאוריים'א
gical	Plastic Waste	Very High	Plastic pollution, plastic debris, plastic trash	ב צ'נ' מיצי ל מ'נ' מ'נ' אינ' מ'נ' אינ' אינ'
Technological	Drain and Sewer Flooding	High	Drainage flood	י <i>ת זק 'דק' דק' ח</i> ק" ית איז ע- 6"ז <i>ר</i> ק' ריק"
Tec	Marine Accident	Very High	Not available	"אית ב' א' צ' א"ק א"
	Water Supply Failure	Medium	Water scarcity	צ'ית" ע'יתוצ'ית
	Supply Chain Failure	Very High	SMC Failure	ミラメットゥチェー "ドラ れらケッー"ハラ
	Power Outage/ or Blackout	Medium	Electricity failure, Electricity disruption, Power cut	מ'צמ"ע ליתש"ע
	Road Traffic Accident	Medium	Road Traffic Incident, Accident	הנאצור 'הצית דקצ' ק"דק אי
	Air Transportation Accident	Medium	Not available	פאָב' מצק'נ'ד'ל נ"דן
Health	Epidemic (outbreak)	High	Not applicable	บรีซิซิก์ภ / นิวูรุฐภ
Неа	Pandemics	High	Not applicable	"69 7"/h

Table 6: Qualitative Hazard Assessment for Maldives (cont.)

Kulhudhuffushi City, located in the northern region of Maldives. The source of the disease was assessed as stemming from individuals who, in the previous six months, had travelled to the Maldives from regions where the disease was endemic - including Bihar, Uttar Pradesh, Gopalganj, and Tamil Nadu regions in India, and Comilla in Bangladesh.

In response, the Ministry of Health (MoH) and Health Protection Agency (HPA) carried out additional screenings, with a particular focus on the migrant community. The MRC was requested to support prevention and community engagement with vulnerable groups. MRC reported 120,000 expatriate workers and more than 35,000 undocumented migrants living in Maldives at the time. The MRC, together with the MoH, HPA, and regional hospitals, mobilized community-level volunteers to support vector control, identify mosquito breeding sites, and administer Bti to road drainages. Bti is an insecticide registered by the U.S. Environmental Protection Agency (EPA)

and produces toxins that specifically target and affect larvae of mosquito, blackfly, and fungus gnat, all of which can be the vector of Falariasis infection. Filariasis is caused by a chronic parasitic infection, which can lead to swelling of the extremities, hydroceles, and testicular masses. The disease is usually caused by a type of mosquito found in congested or dirty water.

July 2022 - Flood and Surges

In July 2022, severe weather, with increased rainfall, affected all the areas of the country. Heavy rainfall and sea surges occurred resulted in 277 houses damaged. Severe damage was also noted in 110 agricultural fields across four islands - GDh. Hoadedhdhoo, GDh. Fiyoari, GDh. Madaveli, and Th. Thimarafushi. 144

November 2022 - Malé City Fire Incident

On 10 November 2022, in the early morning, fire broke out in a garage; it affected three buildings and 74 people. Among those affected,

33 people were provided relief aid (shelter, food, and clothing). In this fire incident, eight households were affected by damage to infrastructure and loss of household items. Ten people were killed in the incident.¹⁴⁵

May 2021 - Tropical Cyclone Tauktae

Tropical Cyclone Tauktae was the strongest pre-monsoon cyclone to have formed in the Arabian Sea since tropical Cyclone Kandla in 1998. Tauktae turned into an extremely severe cyclonic storm that intensified rapidly under favorable conditions - i.e., very high sea surface temperature anomaly (+18.6-19.3°C; 33.4–34.8°F) and high tropical cyclone heat potential (120-140 kilojoules per square centimeter; [kj/cm²]). 146

The closest approach the storm made to Maldives was approximately 463 km (287 mi) north of the country's northern most atoll, on 14 May. 147 MMS advised the public of potential cyclonic impacts for at least 18 hours, while the storm tracked north-northwest before making landfall over Gujarat, India. MMS forecast southwest/westerly winds of 27-32 km (17-27 mi) per hour in the northern atolls and 24-40 km (15-25 mi) per hour in the central and southern regions, with gusts up to 88 km (55 mi) per hour during squalls. Seas were anticipated to be generally rough with 1.2-2.4-m (4-8-ft) waves. 148

2020 - Pandemic

Following the 30 January 2020 declaration by the World Health Organization (WHO) that the COVID-19 outbreak was a Public Health Emergency of International Concern, Maldives adopted all interventions recommended by the WHO to contain and prevent the spread of COVID-19. Almost immediately, Maldives began thermal screening of all people entering the country. Beginning in early February, entry of passengers was restricted, and only Maldivian citizens were allowed to enter. On 5 March 2020, the government established the National Emergency Operations Center (NEOC) for COVID-19 preparedness and placed NDMA in charge with the MoH as co-lead. On 7

March 2020, the country's first positive cases of COVID-19 were reported, and these were deemed "imported cases" from two foreign tourists staying at a resort.¹⁴⁹

On 12 March 2020, a State of Public Health Emergency was declared; it was slated to last for 30 days, under Section 33 of the 7/2012 Public Health Act. This was the first time the Public Health Act had been invoked after its enactment in 2012. In mid-March 2020, a nationwide shutdown of all guesthouses, city hotels, and tourist excursions was announced, along with the closure of government offices and schools. Entry to the country via sea -- yachts, safaris, and other passenger boats and vessels -- was suspended, and all passengers entering the country were subject to a 14-day mandatory quarantine. By the end of March, all points of entry to Maldives were officially closed. In mid-April, the government banned all domestic travel and all public gatherings. On 1 July, the NEOC was phased out, and tasks were handed over to the MoH to continue running the Health Emergency Operations Center (HEOC). The Greater Malé region (Malé City, Villingili, and Hulhumalé) was the most affected area. New cases were linked to known cases and clusters. and the majority of cases on inhabited islands were linked to people who had traveled from the Greater Malé Region. By July 2023, the total reported and confirmed cases were 186,687, with 316 cases resulting in death. The closure of Maldives borders slowed down economic activities. The government lost US\$770-940 million of revenue, related to the tourism sector, and disruptions in supply chains and shipping globally resulted in a decrease in fish exports. The overall decline in global financial markets and a decline in investments caused significant impact on businesses in Maldives. Many people, locals and migrants alike, suffered losses of income and employment. The Tourism Employees Association of Maldives estimated 11,000 workers were affected by no-pay arrangements or complete loss of incomes, as did casual and fixed-term contractual employments. Vulnerable populations experienced higher rates

of gender-based violence and limited available health care services; this gap was especially acute for those located on outer atolls and who depend on centralized tertiary health care services in Malé.¹⁵⁰

Maldives is credited with implementing one of the fastest COVID-19 vaccination campaigns in the world and developed strict health and safety protocols that allowed the country to reopen its borders to tourism quickly. Borders were reopened on 15 July 2020. As of July 2023, as the pandemic was waning globally, 399,362 people had been vaccinated with a first dose of vaccine, and 385,255 people had received a second dose. The government quickly activated the HEOP and stood up the NEOC, with support from multiple agencies, including MPS, MNDF, Malé City Council, State-Owned Enterprises, the President's Office, MRC, and many more, including volunteers. The HPA would typically activate the HEOC and provide a scaled response, including running the Public Health Warning System and coordinating emergency response operations. However, this role was played by the NEOC initially and then downscaled and transferred to HEOC. 151

Early in the crisis, the NEOC graded the COVID-19 emergency into four levels (color-coded based on transmission scenario). The country was then divided into six different geographic zones, with each zone to be graded individually for engagement, preparedness, and response. A technical advisory group was established to provide guidance, and it included WHO as a member. The digitization of government services was a key component of the government's strategy, with a focus on optimization and service efficiency through a one-stop approach. This led to the 2023 launch of the "OneGov" platform, which provided a number of government services.¹⁵²

The government also sought loan support and grants and received financing from regional and international banks. Other support included aid given by the United States, India, and PRC, and involved critical health materials, essential goods, and protective equipment. Many development agencies and humanitarian organizations stepped

up funding toward the COVID-19 response in Maldives; these agencies included the UN Children's Fund (UNICEF), WHO, UNDP, and members of the International Red Cross and Red Crescent Movement.¹⁵³

September 2019 - Fire

On 29 September, NDMA responded to a major fire, at H. Thilafushi House, in a residential area of Malé City, where the population density is one of the highest in the world at 17,500 people per km² (6,756.8 mi²). 154 The fire started in a three-story residential building which housed a chemical warehouse on the ground floor. 155 More than 700 people were affected, primarily Maldivians (636) as well as 104 Bangladeshis, 19 Indians, 16 Nepalis, six Filipinos, four Sri Lankans, and one Egyptian. Damages were sustained to surrounding buildings, totaling 24 buildings damaged and eight buildings uninhabitable. Maldives Airport Rescue and Firefighting Service worked jointly with MNDF FRS to control the fire and to rescue civilians. Civilians also aided in the support efforts, forming human chains to remove gas cylinders from nearby structures. MRC and MPS were also in support of the relief effort, providing first aid and transportation to nearby hospitals. MRC was requested by the government to take a lead role on psychosocial services. Following the incident, residents were relocated to Kalaafaanu School and two other schools, which served as rapid relief centers. The centers were led by MRC and NDMA together, for the purposes of providing support to displaced persons, including temporary accommodations and psychosocial support. A total of 803 individuals were impacted, with 786 receiving prompt relief aid, including accommodation, food, and clothing. One person was killed in the incident. Of the 93 households affected, 87 were evacuated. In total, seven chemical warehouses were damaged or destroyed due to the fire. In response to the emergency, the Malé City Council Fire Relief Account was established to extend assistance to those in need. Donations from both individuals and the community resulted in a deposit of over MVR1 million (US\$65,149) in the relief

account. A total of 443 people were registered and processed, and 53 families (302 people) were offered temporary housing.¹⁵⁶

December 2017 – Heavy Rainfall, Flooding, and Tornado

On 17 May 2017, Thinadhoo island (now Thinadhoo City), in the administrative atoll of Gaafu Dhaalu (G. Dh), in the southern region of Maldives, experienced heavy rainfall, and 19 houses were affected. There were 46 houses damaged in Hithadhoo, a ward in Addu City, in the southernmost Addu Atoll. On 1 June, a cyclone hit Nilandhoo in Faafu atoll, in central Maldives, affecting 18 houses on Nilandhoo Island. Torrential rain and strong winds caused damage to a total of 14 islands. The MNDF southern area command helped clear fallen trees that were blocking roads. The MMS issued a Yellow (Advisory) Alert for the northern and central atolls, advising against sea travel and warning of torrential rain, squally showers, and gusts of 88.5 km (55 mi) per hour. The government advised islanders to maintain food stores and to communicate shortages of staple food items. Flooding damaged farm fields on the northern islands of Uligamu in Haa Alif atoll and Vaikaradhoo in Haa Dhaal atoll. As a result, the prices of fruits and vegetables in Malé were significantly higher than usual. This coincided with the Ramadan period, when local produce such as watermelons is in high demand during the fasting period. The MPS and MNDF assisted with draining and pumping out floodwater on several islands.¹⁵⁷ The weather conditions experienced in Maldives was due to Tropical Cyclone Ockhi, which made a path through southern Sri Lanka and southern India before impacting Maldives, as shown in Figure 5.158

November 2015 - Flooding, Southern Addu City

In November 2015, Addu City, the southernmost atoll, experienced up to 12 hours of continuous rainfall that brought at least 288 mm (11.3 in) of rain. Two hundred households were flooded, and 33 houses suffered major damage. Addu City is Maldives' second most

populous city with approximately 200,000 residents. City officials reported being concerned about water contamination, as the sewers were full and overflowing, and the city had run out of chlorine. The MNDF set up water pumps in three of the city's wards, and sandbags were set up to try to control the flooding. The deputy mayor's office of Addu City said, "This kind of rain is not common, and it has damaged houses that are normally safe." 159

August 2015 - Strong Winds and Heavy Rains

Local media reported strong winds and heavy rains, in August 2015, which tore off 37 roofs in Addu City and caused flooding damage to 60 farms.¹⁶⁰

December 2014 - Fire and Water Sanitation

On 4 December 2014, Malé City's water supply was disrupted when a fire broke out inside the Malé Water and Sewerage Company's (MWSC) generator unit. The fire was extinguished, but water supply to the city's population was affected. MWSC was the sole provider of clean, desalinated water to the city. A state of emergency was declared by the government, a national task force was set up, and foreign assistance was requested. The MNDF and MPS were tasked to manage the distribution of safe drinking water. The National Emergency Response Team (NERT) was activated, and volunteers from the NERT and MRC assisted the MNDF.

On the same day, the Minister of Foreign Affairs, Duniya Maumoon, sent a request for assistance to India's External Affairs Minister, Sushma Swaraj. ¹⁶¹ The Indian disaster response mission included multiple sorties, with the first aircraft arriving in Malé within 12 hours of the request from GoM. In total, the Indian Air Force deployed three C-17 and three IL-76 flights; over two days, they delivered 374 tons of drinking water to Malé. ¹⁶² Two Indian naval ships, INS Deepak and INS Shukanya, arrived in Malé and delivered approximately 2,000 tons of water. ¹⁶³

Of note, this was the first crisis response in which the MRC responded after its official

Emergency Response Coordination Centre (ERCC) - DG ECHO Daily map | 04/12/2017 European Civil Protection India, Sri Lanka, Maldives | Tropical Cyclone OCKHI and Humanitarian Aid Operations TROPICAL CYCLONE STORM SURGE New Delhi * Faridabad (JRC Calculations) 0.1 - 1 m Observed position Ghaziabad 9 Forecast position ____ 1 - 1.1 m BHUTAN IRAN TROPICAL CYCLONE RAINFALL PAKISTAN • Agra Lucknow INTENSITY **ACCUMULATION** Jaipur • Alipur < 63 km/h **OVER THE LAST** Kanpur Duar 63 - 118 km/h 7-DAYS Varanasi > 118 km/h Allahabad 250 - 500 mm 100 - 250 mm 50 - 100 mm Area of track BANGLADESH uncertainty Asansol WIND BUFFER Gandhinagar Bhopal Floods > 118 km/h People dead Ahmedabad 93-118 km/h Jabalpur Indore Rajkot Medinipur People Missing 63-92 km/h Kolkata Vadodara Low Pressure Area 6 Dec, 06.00 UTC 1 Houses damaged Haldia Bhilai Surat **7 DAYS RAINFALL FORECAST** I As of 4 Dec. (Source: NOAA-GFS) 5 Dec, 18.00 UTC 65 km/h sust. winds Nasik Aurangabad Kalyan Arabian Sea Mumbai Pune Vishakhapatnam Hvderabad Sangli 4 Dec, 18.00 UTC 111 km/h sust. winds Arabian 4 Dec, 06.00 UTC MALDIVES LANKA Chennai Bangalore 250 - 500 mm > 96 100 - 250 mm OCKHI **?** > 1 000 Jawewardenepura 50 - 100 mm Jaffna SRI LANKA Thiruvananthapuram Trincomalee Anuradhapura Batticaloa 1 Dec, 18.00 UTC Sri Jawewardenepura Kotte INDIAN E 30 Nov., 18.00 UTC 111 km/h sust. winds colombo ? 2 Galle 77 MALDIVES 29 Nov, 18.00 UTC > 33 000 MALDIVES Malé Copyright, European Union, 2017. Map created by EC-JRC/DG ECHO. The boundaries and names shown on this map do not imply official endorsement or acceptance by the European Union

Figure 5: Map of Tropical Cyclone Ockhi

inception. The International Federation of Red Cross and Red Crescent Societies (IFRC) – South Asia Regional Delegation supported MRC through technical guidance, short-term deployment of a relief delegate, and by mobilizing a Disaster Relief Emergency Fund.¹⁶⁴

Country Risk

Risk calculation takes into account exposure to hazards, vulnerability, and coping capacity. Addressing all of these elements is important in reducing and mitigating disaster risk. Various indices emphasize structural or institutional risk while others emphasize hazards or losses (human and economic). Regardless of emphasis, disaster risk calculations use some form of the equation:

Disaster Risk = $(Hazard \times Vulnerability) / Capacity^{165}$

Taken from the UNDRR glossary, definitions will help clarify this formula:

- <u>Capacity</u> The combination of strengths, attributes, and resources available within an organization, community, or society to manage and reduce disaster risks and strengthen resilience.
- <u>Disaster risk</u> The potential loss of life, injury, or destroyed or damaged assets, which could occur to a system, society, or a community in a specific period of time, determined probabilistically as a function of hazard, exposure, vulnerability, and capacity.
- <u>Hazard</u> A process, phenomenon, or human activity that may cause loss of life, injury, or other health impacts, property damage, social and economic disruption, or environmental degradation.
- <u>Vulnerability</u> The conditions determined by physical, social, economic, and environmental factors or processes, which increase the susceptibility of an individual, a community, assets, or systems to the impacts of hazards.¹⁶⁶

In general, the goal of indexing risk is to inform decision makers and DRR and climate

change adaptation (CCA) practitioners of the level of risk to and underlying capacity of the target community. The various risk calculation models support proactive crisis management frameworks and are helpful for prioritizing allocation of resources and for coordinating actions focused on anticipating, mitigating, and preparing for humanitarian emergencies.

Maldives' disaster profile is complicated by its geography and its distinct characteristics as a SIDS. Maldives is located in the western Indian Ocean and associated with the South Asian Region of many disaster management and risk indices. The 2024 INFORM Risk Index gives Maldives a "Low Risk" score of 2.2 out of 10, ranking the country 154th of 191 countries assessed. Maldives is ranked 174th of 193 countries on the 2023 World Risk Report, placing the country in the "Very Low Risk" class. These indices, while standard references in disaster management risk assessment, do not provide a comprehensive picture of a country like Maldives.

Maldives is considered a SIDS, a designation first recognized by the UN General Assembly in 1995. Since then, various coalitions of the world's SIDS have challenged the international community to use a risk assessment matrix that would more accurately depict the unique challenges they face. SIDS are both more exposed to hazards and experience the impact of hazards differently than non-SIDS because of greater vulnerabilities and lesser coping capacity. For example, "SIDS make up two-thirds of the countries that suffer the highest relative losses – between 1% and 9% of their GDP each year," according to the Organisation for Economic Cooperation and Development (OECD).¹⁶⁷

The UN MVI considers the relative impact of, and the loss caused by disaster, coupled with the affected country's ability to achieve adaptation and resiliency goals to counter the effects of disaster. In this index, Maldives receives an overall score of 72.2, compared to a global mean of 52.8, placing Maldives in the quadrant of most risk, along with countries such as Yemen, Djibouti, Chad, Nauru, and Somalia. 168

INFORM Risk Profile

INFORM is a collaboration of the Inter-Agency Standing Committee (IASC) Reference Group on Risk, Early Warning, and Preparedness with the European Commission. It is a multistakeholder forum for developing shared, quantitative analysis relevant to humanitarian crises and disasters. The Joint Research Center of European Commission is the scientific lead. There are three operational dashboards – i.e., INFORM Risk, INFORM Severity, and INFORM Climate Change.

- INFORM Risk is an open-source risk assessment for humanitarian crises and disasters. It can support decisions about prevention, preparedness, and response.
- INFORM Severity is a way to measure and compare the severity of humanitarian crises and disasters globally. It can help develop a shared understanding of crisis severity and ensure all those affected get the help they need.
- INFORM Climate Change is an upgraded INFORM Risk Index that includes climate and socio-economic projections with results intended to inform policy choices across climate mitigation, climate adaptation, disaster risk reduction, sustainable development, and humanitarian assistance.¹⁶⁹

The INFORM Risk Index measures the risk of humanitarian crises and disasters in 191 countries. The INFORM model is based on the standard dimensions of risk: Hazards and Exposure, Vulnerability, and Lack of Coping Capacity. The first dimension measures the natural and human hazards that pose the risk. The second and third dimensions cover population factors that can mitigate against or exacerbate the risk. The Vulnerability dimension considers the strength of individuals and

households relative to a crisis while the Lack of Coping Capacity dimension considers factors of institutional strength.¹⁷⁰

The INFORM model is split into different levels to provide a quick overview of the underlying factors leading to humanitarian risk. INFORM gives each country a risk score of 1-10 (1 being the least risk and 10 the most) for each of the dimensions, categories, and components of risk, as well as an overall risk score.¹⁷¹

In the 2025 INFORM Risk Index, Maldives had an overall risk score of 2.2/10, which INFORM categorizes as the "Low" risk class and lands Maldives as the 154th most atrisk country in the Index. The Hazards and Exposure dimension score takes into account a combination of both natural and human hazards, and Maldives rated 1.5/10 or 154th of 191 countries assessed. The Vulnerability dimension score was 1.8/10 or 175th of 191, and the Lack of Coping Capacity dimension score was 3.8/10 or 117th of 191. Physical exposure to Tsunami at 9.0/10, was the greatest threat in the Hazards and Exposure dimension, with Aid Dependency measuring at a 3.4/10 for the Vulnerability dimension and DRR rated 5.8/10 in the Lack of Coping Capacity dimension. Figure 6 illustrates the INFORM Risk dashboard for Maldives for 2025,172

Country Profile Risk Score 2,5 2,2 Hazard & Exposure Vulnerability Lack of Coping Capacity 5 1,5 1,8 3,8 10 Figure 6: INFORM Risk Index, Maldives (2025)

Based on 2022 baseline assessments and projections of climate change influences on major hazards, the INFORM Climate Change tool suggests little change in the country's levels of exposure, vulnerability, and coping capacity. When the climate change index applies additional indicators to the various Hazards and Exposures categories, Maldives remains most exposed to tsunami and coastal flooding due to the low-lying character of the country and inexorable sea level rise in the Indian Ocean; exposure to diseases with epidemic potential rises under the influence of climate change as fresh water availability and the habitable zone for disease vectors shift.¹⁷³ The index examines the country's potential experience under two RCP -4.5 and 8.5 – and it projects out to the years 2050 and 2080. The RCPs are used to describe the amount of greenhouse gases in the atmosphere at a specific point and allow modelers to consider emissions scenarios and their impacts out to the year 2100. The most commonly used RCPs for international modelling are RCPs 2.6, 4.5, 6.0, and 8.5. RCP 4.5 is an intermediate pathway where emissions are limited but not stringently and result in a surface temperate rise of 1.1-2.6°C (1.98-4.68°F) by 2100. RCP 8.0 is one of the pathways that considers almost no limitations of greenhouse gas emissions, and most projections expect it to lead to a surface temperature rise of 2.6-4.8°C (4.68-8.64°F) by 2100.174

World Risk Report

WorldRiskReport (WRR) by Bündnis Entwicklung Hilft, strives to raise awareness of disaster risk among the global public and political decision-makers and to provide practitioners with data to promote faster orientation to complex situations – i.e., societies experiencing disasters. This effort stems from the perception that disaster risks are not solely determined by the occurrence, intensity, or duration of extreme events. Social factors, political conditions, and economic structures play an important role in turning these events into crises. Thus, this index is based on the assumption that every society can take

precautions – e.g., effective disaster preparedness and management – to reduce the impact of extreme events and lower the risk of disasters.

The WRR calculates the level of risk a country faces based on a formula of exposure to hazards and vulnerability. It provides an assessment of the risk that countries will confront disasters but does not indicate probabilities for the emergence of disasters, nor does it forecast the timing of future disasters. This index uses 100 indicators that include risk, hazard exposure, vulnerability, and coping capacity (as defined above), and adds two others:

- <u>Susceptibility</u> The disposition to suffer damage in the event of extreme natural events. Susceptibility relates to structural characteristics and frameworks of societies.
- Adaptation A long-term process that also includes structural changes and comprises measures and strategies that address and try to deal with future negative impacts of natural hazards and climate change. Analogous to "lack of coping capacity," the lack of adaptive capacities is included in the Index.

In the 2023 report, Maldives ranked 174th of 193 countries assessed wherein the lower the rank, the greater risk the country faces. Maldives' total Index score was 1.19 (on a scale of 0-100 wherein the lower the number the less risk a country faces), putting it in the "Very Low" risk class. Figure 7 illustrates the differing scales the WRR uses for each component score.

Maldives' component scores were:

- Exposure: 0.11 (Very Low)
- Vulnerability: 12.84 (Low)
- Susceptibility: 6.90 (Very Low)
- Lack of Coping Capacity: 9.96 (Low)
- Lack of Adaptive Capacity: 30.83 (Low)

For comparison, Maldives' total score puts it below the regional (Asia) median of 4.97 and below the sub-regional (South Asian) median of 5.92. In part, Maldives' lower risk scores reflect less frequent high impact natural disaster

Classification	World Risk Index	Exposure	Vulnerability	Susceptibility	Lack of Coping Capacities	Lack of Adaptive Capacities
very low	0.00 - 1.84	0.00 - 0.17	0.00 - 9.90	0.00 - 7.17	0.00 - 3.47	0.00 - 25.28
low	1.85 - 3.20	0.18 - 0.56	9.91 - 15.87	7.18 - 11.85	3.48 - 10.01	25.29 - 37.47
medium	3.21 - 5.87	0.57 - 1.76	15.88 - 24.43	11.86 - 19.31	10.02 - 12.64	37.48 - 48.04
high	5.88 - 12.88	1.77 - 7.78	24.44 - 33.01	19.32 - 34.16	12.65 - 39.05	48.05 - 59.00
very high	12.89 - 100.00	7.79 - 100.00	33.02 - 100.00	34.17 - 100.00	39.06 - 100.00	59.01 - 100.00

Figure 7: WorldRiskIndex 2023 Overview

events, a willingness to pursue the SDGs, and relative stability in matters of government, economy, education, and healthcare, compared to the country's regional cohort – Afghanistan, Bangladesh, India, and Nepal, among others.

In terms of Exposure, Maldives is below the median for Asia (1.6) and South Asia (1.6). While Maldives experiences frequent flooding and strong winds and is vulnerable in the future to SLR, it does not see frequent tsunami, cyclone, or earthquake activity like the other countries in Asia and the South Asia sub-region.

In the Vulnerability dimension, the country is below the median for Asia (21.88) and South Asia (31.12) in a reflection its low disposition to be negatively impacted by extreme natural events and climate change. This indicator reflects to what degree the country could be destabilized by an extreme event. Of note, the Vulnerability dimension is a calculated index of Susceptibility, Lack of Coping Capacity, and Lack of Adaptive Capacity. Under Susceptibility, Maldives is well below the median for Asia (14.75) and South Asia (27.73), likely due to relatively high development indicators, such as average life expectancy, expected years of schooling, and GNI per capita. In the Lack of Coping Capacity dimension, Maldives is also below the medians for Asia (12.6) and South Asia (55.86) due to a relatively low percentage of population affected by disaster and conflict in the last five years, coupled with relatively higher health care capacity, political stability and government effectiveness. Finally, on the Lack of Adaptive Capacity score, Maldives sits below the medians for Asia (44.39) and South Asia (45.75) due to positive characteristics of its education sector, national research and development capacity, and lower long term negative health indicators. 175

ND-Gain Matrix

The Notre Dame Global Adaptation Initiative's (ND-GAIN) Country Index is an open-source index that shows a country's current vulnerability to climate disruptions. The index also assesses a country's readiness to leverage private and public sector investment for adaptive actions. The ND-GAIN Country Index brings together more than 40 core indicators to measure vulnerability and readiness of 182 UN countries from 1995 to the present. ND-GAIN is part of the University of Notre Dame Global Adaptation Initiative. The country index is updated annually.¹⁷⁶

ND-GAIN's framework focuses on two major indicators – vulnerability and readiness:

- The vulnerability indicator includes exposure, sensitivity, and adaptive capacity in the context of six life-supporting sectors food, water, health, ecosystem service, human habitat, and infrastructure.
- The readiness indicator includes economic, governance, and social readiness.

Beginning in 2023, ND-GAIN made efforts to include small island countries in its list of rankings. Often, small island countries are most vulnerable to climate change but are underrepresented in studies and rankings due to lack of data. This can in turn affect the country's access to external investment and philanthropy, since these types of funding tend to be very data driven.¹⁷⁷

The construction of the ND-GAIN framework is based on published peer-reviewed material, the IPCC Review process, and feedback from corporate stakeholders, practitioners, and development users. Results of the ND-GAIN matrix are provided in a quad plot, delineated by the median vulnerability and readiness scores

across all countries and years. An example of the quad plot is below in Figure 8.¹⁷⁸ Generally, countries in the red, upper-left quadrant are at highest risk, demonstrating a high vulnerability to climate change and a low level of readiness. Countries falling within the limits of the bottomright quadrant in green, are at lowest risk with low vulnerability and a high level of readiness.¹⁷⁹

The ND-GAIN Matrix reports a general improvement over time, until 2018, when Maldives' Vulnerability score worsened, due to increased risks associated with "Sensitivity," specifically, food import dependency, urban concentration, and dependency on external resource for health services. However, Maldives' primary vulnerability risk factors continue to be in the "Exposure" category, which integrates the impact of projected change of cereal yields and the projected change of flood hazard.

Maldives' Readiness score on the ND-GAIN index shows marked improvement, from 0.38 in 1995 to 0.451 in 2022. The country exhibits improvements primarily in "Governance" and "Social Readiness" categories. Maldives' highest indicators are "Political Stability" and "Non-Violence," "Rule of Law," and "Information and Communication Technology (ICT) Infrastructure."

Within the "Readiness" score, Maldives'



Figure 8: Notre Dame Global Adaptation Initiative's Country Vulnerability Index

lowest score is in "Education" – relating to tertiary school enrollment – though the country exhibits consistent improvement in this category since 1995. Scores in "Regulatory Quality" and "Control of Corruption" are worsening and fluctuating respectively.¹⁸⁰

UN Multidimensional Vulnerability Index

SIDS was first recognized by the UN General Assembly in 1995. Since then, countries that form this grouping have argued for the creation of an index that would more accurately depict the unique challenges they face. For example, many SIDS fall within the UMIC category, yet their GNI per capita does not account for relatively higher costs of development and disaster response. Debt is more expensive for SIDS, and the debt-to-GDP ratio can range from 25% to 90%. SIDS are both more vulnerable to hazards and experience the impact of hazards differently than non-SIDS. SIDS

The UN MVI was officially launched in September 2023. Initial findings show that SIDS are, indeed, highly vulnerable - especially compared to other Official Development Assistance (ODA)-eligible country groupings, such as Least Developed Countries, Fragile Contexts, and Land-Locked Developing Countries. Interestingly, there is no correlation found between level of income (GNI per capita) and level of vulnerability (MVI score), among ODA-eligible SIDS and non-SIDS. In fact, the 2024 MVI findings indicate that a significant number of SIDS are highly vulnerable (with high MVI scores) and also have high GNI per capita scores. MVI scores reveal that SIDS are more vulnerable than other developing countries, despite their relatively high level of income, even compared to other countries most in need.¹⁸³

The UN MVI focuses on two main components: structural vulnerability and lack of structural resilience, as shown in Figure 9.¹⁸⁴

Structural vulnerability is the risk of a country's sustainable development being hindered by recurrent, adverse, exogenous shocks and stressors. Structural vulnerability is composed of four sub-components, placing

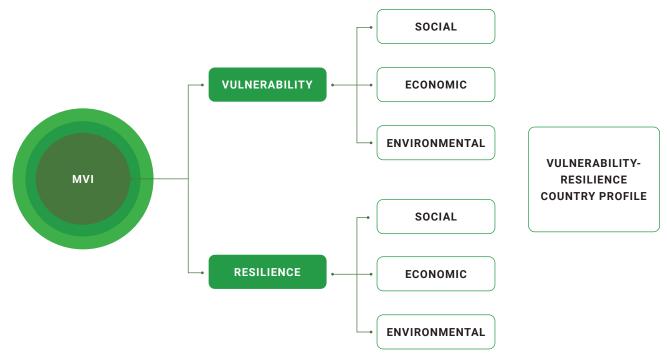


Figure 9: The Multidimensional Vulnerability Index Framework

more weight on Climate-related DRR/ Adaptation Issues and Lack of Economic Diversification, and less weight on Food and Fuel Dependency, and Social Vulnerability.¹⁸⁵

• Structural resilience is the inherent characteristics or inherited capacity of countries to withstand, absorb, recover from or minimize the adverse effects of shocks or stressors. Resilience plays a crucial role in determining the magnitude of the impact of external shocks or stressors on a country. The capacity of a country to respond effectively, or its "resilience," is affected by structural factors such as human capital, infrastructure, and natural capital. 186

The UN MVI reveals that Maldives currently experiences a gap between its financing needs and the amount of financing received each year

for DRR and CCA. Maldives needs an average US\$66.8 million annually, receives on average US\$21.7 million annually.

Maldives is classified by the IMF as experiencing high debt stress. Maldives' total public debt as a share of GNI is 62.9%. Thus, Maldives is recognized as a top priority for debt relief through debt swap mechanisms, especially debt-for-climate and debt-for-nature.¹⁸⁷

Within the UN MVI framework, the scale is 0-100, where higher scores indicate a combination of higher structural vulnerability and greater lack of structural resilience. Maldives received a score of 72.2, compared to a global mean of 52.8. Maldives scored 74.0 for the Lack of Structural Resilience component and 70.38 for the Structural Vulnerability component, compared to a global average of 55.90 and 48.90, respectively.¹⁸⁸

ORGANIZATIONAL STRUCTURE FOR DISASTER MANAGEMENT

Disaster management became a national concern after the 2004 Indian Ocean tsunami significantly impacted Maldives. A presidential decree at that time established the National Disaster Management Center, which later became NDMA, and the government has since developed its legal system and framework for disaster management. Although the NDMA, under the authority of the National Disaster Management Council (NDMC), is the main disaster management entity, the government strives to take a "Whole-of-Government" approach. Many laws and ordinances have been put in place to assign disaster management responsibilities across multiple sectors of government and geographically, from the national level down to the regional and local levels. The MNDF, MPS, and MRC are leading partners in disaster management, with critically important reach at the local level. 189

Lead Government Agencies in Disaster Response

The Disaster Management Act 28/2015 established the NDMC and the NDMA. By law the NDMA is the coordinating body for disaster management in Maldives. 190

The NDMC is a cabinet level group, chaired by the President, and is the main decision-making and policy formulation body in matters relating to DRR and disaster response and recovery. The Disaster Management Steering Committee (DMSC), reports to the NDMC and is the strategic and technical decision-making body that supports pre- and post-disaster management in Maldives. As of October 2024, the DMSC was not yet fully established.¹⁹¹

The NDMA reports to the DMSC and sits within the Ministry of Defense (MoD).¹⁹² The objective of the NDMA is to promote an

integrated and coordinated system of disaster management to minimize and mitigate the risk of disaster by building capacity within national, atoll, and island institutions of the government, statutory functionaries, communities, the private sector, NGOs, and other key sectors involved in disaster management.¹⁹³

The NDMA is organized in four sections: Corporate Affairs; Emergency Management; Program, Research and Advocacy; and Policy and Planning. The Chief Executive and Deputy Chief Executive of the NDMA are political appointees, and the Secretary General is considered the civilian head of NDMA. Figure 10 shows the organizational structure of the NDMA.¹⁹⁴

As per the Disaster Management Act 2015, Article 40(a), Disaster Management Committees (DMC) act as the coordinating body for disaster management at the city, atoll, and island levels. The NEOC is located within the NDMA. The NEOC is charged with assisting a DMC upon request or if the severity of the disaster exceeds their capacity. The NEOC maintains 24-hours-a-day-7-days-a-week operational status, and its further activation is based on the declaration of alert levels. The key functions of the NEOC include:

- Situation monitoring and the collection and analysis of incident information
- Maintaining communications with technical agencies mandated with passing early warning messages to the NEOC
- Maintaining a communications network with stakeholders, government agencies, local councils, police, and media, including MNDF, MPS, MMS, and the MoH's HEOC¹⁹⁵
- Locating and maintaining a database of local and national stores for providing emergency response equipment (i.e. councils, MNDF, MPS area command centers, and MRC)
- Receive and disseminate situation reports¹⁹⁶



9.05.2019

ORGANIZATIONAL STRUCTURE OF NATIONAL DISASTER MANAGEMENT AUTHORITY

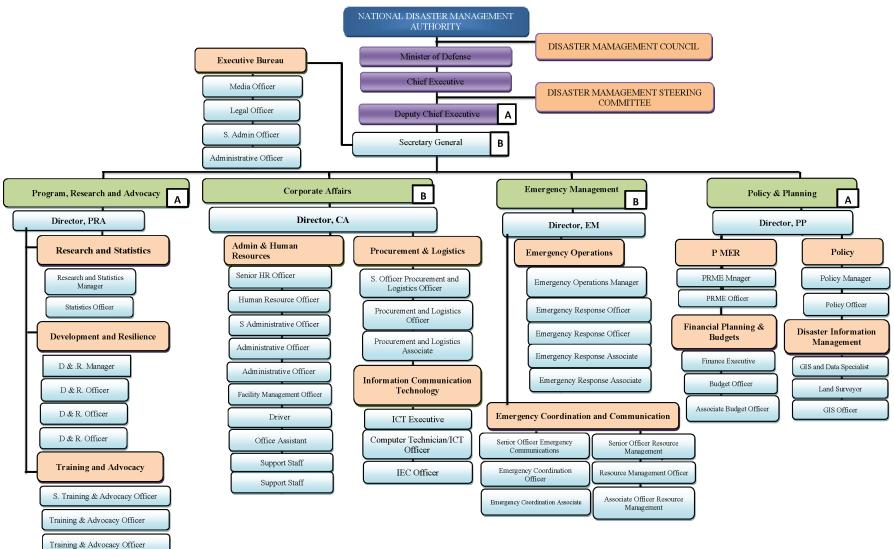


Figure 10: Organizational Structure of the National Disaster Management Authority

Center for Excellence in Disaster Management & Humanitarian Assistance

The NEOC Call Centre is assigned with an emergency telephone number, 115, which is toll free and manned 24-hours-a-day-7-days-a-week.¹⁹⁷

The National Emergency Response Force (NERF) is the national response force managed by the NEOC. The NEOC and the NERF together represent the national-level, operational arms of the NDMC.

The NERF consists of trained personnel from the following agencies:

- MNDF (i.e., Coast Guard, Fire, Operations, and Search and Rescue)
- NDMA
- HPA
- MPS
- MRC
- EPA
- Ministry of Housing and Infrastructure
- Communication Authority of Maldives
- · Other agencies as relevant

The NERF takes on various supporting and supported roles, across many of the Emergency Support Functions (ESF) outlined in the NEOP, Volume II. Personnel are trained in modular response, including Post Disaster Needs and Damage Assessments, Relief and Community Mobilization, Shelter and Water Sanitation, Emergency and Public Health, Fire and Rescue Support, and Maritime Response Support. 198

At the local level, Community Emergency Response Teams (CERT) act as the operational arms of disaster management. The CERT concept is part of the overarching Community Based Disaster Risk Management (CBDRM) program. CERTs report to Island or City/Atoll Councils and are led by the Head of Operations for the respective island, city, or atoll. CERTs consist of community members who are 18 years of age or older and complete basic induction training. Each CERT, depending on size, may be organized in teams and will be responsible for carrying out task groupings, such as: Early Warning and Information Management, Flood Management, Maritime Incidents, Assessment, First Aid, Fire Fighting and Safety, Search and Rescue, Relief

Distribution and Community Mobilization, and Evacuation Centers/Temporary Shelter and IDP Management. A CERT is the first responder team at the island, city, and atoll level. Their responsibilities include attending to the most affected and vulnerable, mitigating further loss and damage, carrying out initial field assessments, and coordinating relief efforts. 199

Disaster Relief and Emergency Response

The NDMA is the coordinating body for disaster management in Maldives. However, Maldives' emergency response framework is anchored on two important concepts – Whole-of-Government and decentralization. These two concepts are evident in how emergency responses are carried out and in the range of partners who may respond to an incident.

The "Whole-of-Government" framework, in which collaboration across "Elements of National Power" (i.e. MNDF, ministries, and other national-level agencies), is critical to Maldives' National Security Strategy. Additionally, the Decentralization Act of 2010 is an important piece of legislation, which seeks to drive decision-making power and bolster capacity at the most local levels. In general, emergency response is carried out at the lowest level possible, by responders from across the public sector. Figure 11 depicts the emergency response coordination mechanism in Maldives.²⁰⁰

As an incident is elevated beyond the scope of the most local level, coordination and communication happen both vertically within and across the primary response partners.

- At the national level, the National Disaster Management Council and the National Disaster Management Steering Committee oversee the NDMA and the National Emergency Response Force, which includes MNDF, MPS, MRC and Emergency Healthcare Services.
- At the city and atoll level, the City and Atoll Councils and their respective Disaster Management Committees oversee the

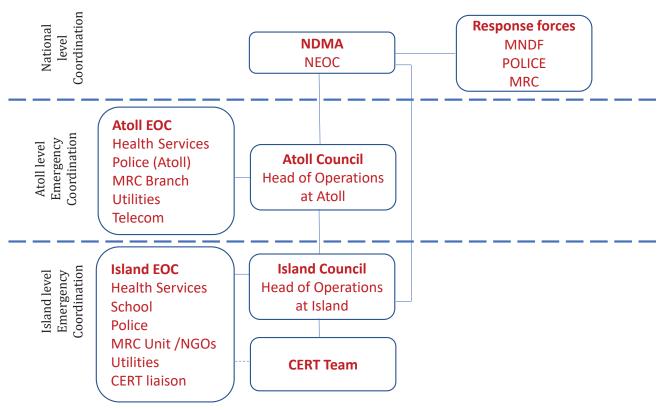


Figure 11: Emergency Response Coordination Mechanism in Maldives

coordination of the Local Response Force, which includes MNDF Area Commands, MPS Regional Commands and Atoll Police, MRC Branches, and Regional and Atoll Hospitals.

 At the island level, the Island Councils and the Island Disaster Management Committee oversee the coordination of the Community Emergency Response Team, which includes the MNDF Post, Island Police Station, MRC Units, Health Centers, Auxiliary Firemen, NGOs, and CBO Members.

Figure 12 depicts coordination and communication at each level: national, subnational, city/atoll level, and island level.²⁰¹ Figure 13 shows the emergency response coordination framework at the national level, as described in NEOP Volume I.²⁰²

Local councils at the city, atoll, and island levels are responsible for taking immediate action in the event of an emergency. The Decentralization Act 2010 established local governance, formalizing roles and responsibilities

of councils at the city, atoll, and island levels. A 2019 amendment granted greater fiscal and administrative powers to local councils. The Disaster Management Act 2015 further specified that local councils are responsible for immediate response in case of emergencies.

If a disaster occurs, the City Mayor, Council President or leader in charge of the island will play the lead role. If a CERT has been established in the affected area, the CERT will take immediate action in emergency response. The MNDF, MPS, and MRC are mandated to respond in the event of disaster and maintain a relatively decentralized local presence across the country. It is noted in NEOP Volume I, small emergencies or incidents may require a higher level of intervention, without declaration of emergency.

When necessary, the NDMC or the President's Office may make a declaration of a State of Disaster. Justification for a declaration may be a critical alert level - three or four on a four-level scale - declared by a Technical Agency, a request from a local, city, or atoll council, or a recommendation from the NERF, based on initial

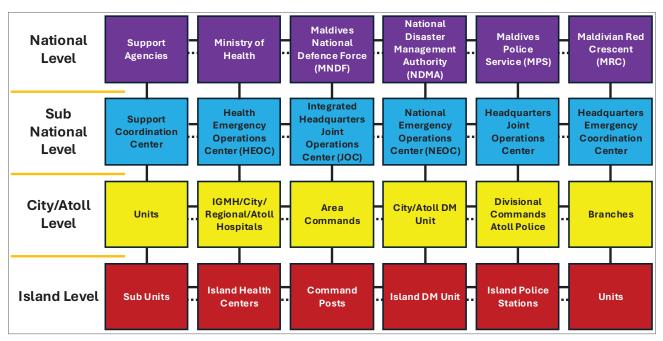


Figure 12: Disaster Management Coordination at National and Local Levels

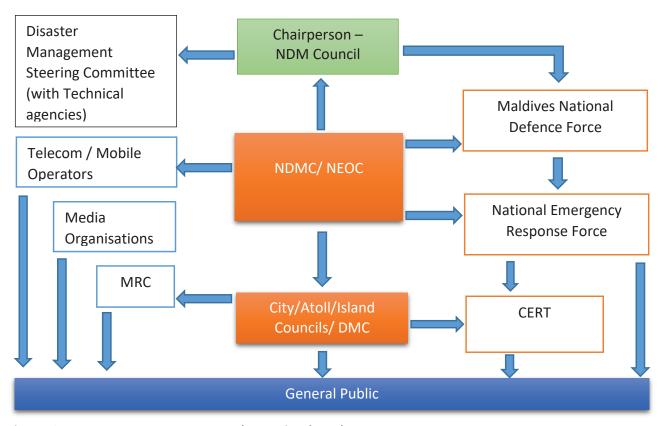


Figure 13: Emergency Response Framework at National Level

damage and need assessments. A Presidential declaration of a National Emergency or State of Disaster releases national resources and is valid for a maximum of 30 days, unless extended for additional periods, not to exceed more than 30 days at a time. High levels of intervention may be provided for smaller incidents, without a declaration.

Emergency levels are organized into four alert levels, ranging from low impact (Level 1/ White), serious impact (Level 2/ Yellow), multiple islands damaged (Level 3/ Orange), and catastrophic (Level 4/ Red). NEOP Volume I provide legal and institutional arrangements, and NEOP Volume II provides operating procedures for response.

The ESFs found in NEOP Volume II provide the structure for coordinating emergency interagency support for a national response to an emergency event. Each ESF is a grouping of governmental, NGOs, and private sector capabilities. A list of the 13 ESFs can be found in the NEOP Volume II section of Laws, Policies, and Plans.

Every ESF is assigned to a Lead Agency, which is responsible for the implementation of the operating procedures (OP) prescribed in the ESF. For pre-disaster, the Lead Agency is responsible for supporting capacity building to enhance the functions of the ESF and for conducting preparedness activities such as training and exercises. During disasters, the Lead Agency acts as a "cluster lead," and coordinates the delivery of activities, functions, and procedures. Responsibilities of the Lead Agency during disaster include:

- Manage tasks with support agencies and local government
- Establish priorities between incidents and or area commands in concert with the presidents of the city, atoll, or island councils or a unified command
- Work with appropriate private sector organizations
- Coordinate and resolve policy issues as arise from the incident
- Prepare and submit ESF-specific situation reports to the NDMC/NDMA²⁰³

Primary and Support Agencies are also identified for each ESF. Primary Agencies have a direct mandate to implement the objectives of the ESF and work closely with the Lead Agency. Support Agencies typically have a specific expertise or capability that is called upon by the Lead Agency on an as needed basis pre- and during a disaster.

While the NDMA, MNDF, MPS, MRC, MoH, and local governments are considered the primary players in emergency response. The whole-of-government framework extends the responsibilities of disaster management to other government institutions, such as Ministry of Environment and Energy (MoEE), Ministry of Fisheries and Agriculture, Ministry of Housing and Infrastructure, and Ministry of Finance and Treasury (MoFT). These entities each have a "Lead Agency" role for certain ESFs, as listed in the NEOP Volume II.

Humanitarian assistance is discussed in Chapter Six of the Disaster Management Act 2015 and states the following:

- Government may appeal for humanitarian assistance to ensure effective or resultoriented efforts in a state of disaster.
- DMC has the prerogative to reject assistance that does not conform with Islamic religion, culture, and social etiquettes.
- DMC shall decide whether to appeal for humanitarian assistance.
- The government may appeal for international humanitarian assistance to deal with a disaster effectively, with the recommendation of the NDMC through the Foreign Ministry.
- The required information and manner of appealing for assistance, and process and acceptable standards of receiving assistances from aid organizations shall be set by regulations or policies enforced by this Act
- Assistance shall not be accepted if an appeal had not been made for humanitarian assistance, even if a state of disaster had been declared.²⁰⁴

When national resources are overwhelmed or insufficient in the event of a disaster, foreign assistance and aid may be requested, following a Presidential Declaration of Disaster. Aid received without such declaration and request will be dealt with by the NEOC as per the Regulation on International Assistance and Aid in emergencies.

The decision to launch an appeal for humanitarian assistance is made by the Chairperson of the NDMC, based on information provided by the NDMA, which will also provide information on priority sectors requiring assistance at the time of relief operations or disaster response. Once issued the request for assistance will be facilitated and managed by the NEOC through the Ministry of Foreign Affairs. Foreign emergency assistance and aid can be financial or in-kind nature. Aid received will be coordinated by the DMSC and managed by the NDMC with support from Ministry of Foreign Affairs and Ministry of Finance and Treasury. Figure 14 provides a flow chart for external aid coordination.²⁰⁵

The National Disaster Management Fund established by the MoFT will be used during any threatening disaster situation. This fund will be regulated, monitored, and spent according to a regulation in pursuant to the Disaster Management Act, in a way that would not hinder the disaster mitigation and response. If the government is unable to handle the situation with existing resources, it may approach international assistance such as the World Bank

Disaster Risk Financing Tool called "Catastrophe Risk Deferred Drawdown Option" or the IFRC's Disaster Relief Emergency Fund after declaration of a state of emergency. The coordinating and cooperating agencies structured around the NEOC will act as a team to address emergency finance issues to ensure the flow of funds during and after disasters. The MoFT acts as the lead in coordination and collection of emergency finance information and documentation from activated response components during and after the response phase of an incident. NDMC and the MoFT shall establish a quicker mechanism for the transfer of funds to the local councils following a presidential emergency.²⁰⁶

Armed Forces Role in Disaster Relief

The Maldives Constitution 2008, Article 106(b), places the President as Commander-in-Chief of the Armed Forces. The Armed Forces Act, Article 7, states that the armed forces shall "lead and co-ordinate with the relevant government authorities in assisting in protecting the lives and property of persons in all natural disasters and at times of other grave dangers affecting the country." Additionally, the armed forces must provide firefighting services and carry out search for and rescue of persons stranded at sea and protect life and property in all instances of danger occurring on land or sea.²⁰⁷



Figure 14: External Aid Coordination in Maldives

The Range of Military Operations (ROMO) of MNDF is atypical and includes Combat, Security Operations, Emergency and Safety Operations, and Military Aid to Civil Authorities (MACA) or Military Aid to Civil Communities (MACC). Figure 15 depicts the ROMO of MNDF. Emergency and Safety Operations encompass all preventative and response operations to save lives and protect property in the event of dangerous incidents, accidents, and natural disasters, including oil spill incidents. MACA and MACC are activities undertaken by MNDF in support of civil agencies, institutions, and communities. Many civil agencies - e.g., MPS, Maldives Customs Service, and NDMA - have provisions enabling requests for assistance from MNDF.²⁰⁸

MNDF is postured across three primary operating domains: Land, Maritime and Air Space, and Informational and Cyber Domain. The force structure consists of combat and maneuver forces – Coast Guard, Marine Corps, and Fire and Rescue Service – and support services – Defence Intelligence Service (DIS), Service Corps, Adjutant General's Corps, and Medical Corps. Figure 16 depicts the operational structure of the MNDF.²⁰⁹

The MNDF Coast Guard performs the roles of a conventional navy, plus civil defense and response to maritime disaster and emergency. The Coast Guard also oversees all military air operations. The MNDF Marine Corps is responsible for protection and defense of the land area and critical infrastructure, as well as



Figure 15: Range of Military Operations of Maldives National Defence Force

internal security and civil defense operations. The MNDF FRS provides fire prevention and firefighting capabilities, urban technical rescue, and hazardous material incidents. The DIS is responsible for security and military intelligence, counterintelligence, and intelligence collaboration with inter-agency partners. The MNDF Special Forces is considered a Functional Command and is mandated to conduct full-spectrum operations by land, sea, and air, with support from other services and commands within the MNDF.²¹⁰

The MNDF is organized into four geographic combatant commands, all of which are joint operational commands. The Northern Area Command's Area of Responsibility (AOR) is the geographic area between Ha Atoll and Lhaviyani Atoll. The Malé Area Command is assigned to the area between Kaafu Atoll and Vaavu Atoll. The Central Area Command's AOR is the geographic area between Meemu Atoll and Laamu Atoll. The Southern Area Command is assigned to the area between GA Atoll and Seenu Atoll.²¹¹ The MNDF AORs are depicted in Figure 17.²¹²

Each area command is considered a joint operational command and consists of a Marine Deployment Unit (MDU), an FRS Component, a Coast Guard Squadron, and a Service Corps Component. In the event of HADR operations, the MNDF Integrated Headquarters (IHQ) provides guidance, direction, and support to the area command(s), via the Joint Operations Center (JOC). The area command activates the Area Command Operations Centre (ACOC), utilizing the Incident Command System (ICS) and the Multi-Agency Coordination System (MACS) when necessary. The JOC coordinates with friendly nations and international partners, and MNDF will join and support via the UN Cluster System when other agencies lead.²¹³

During an emergency response, at the national level, MNDF supports the NDMA through the NERF. At the city and atoll level, MNDF area commands are part of the local response force. At the island level, MNDF Posts are part of the CERTs.²¹⁴

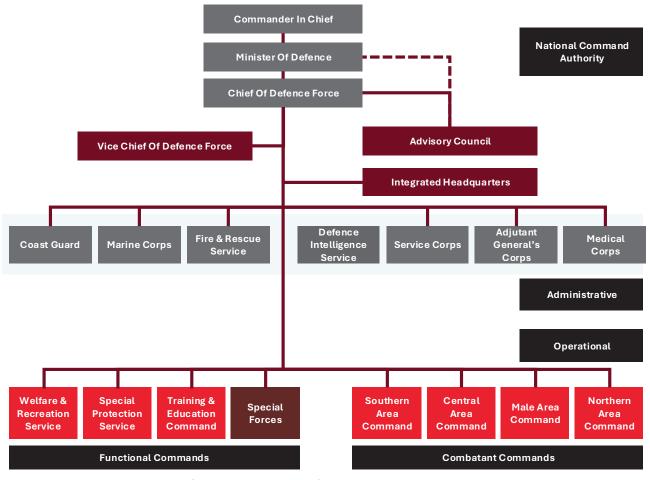


Figure 16: Operational Structure of Maldives National Defence Force

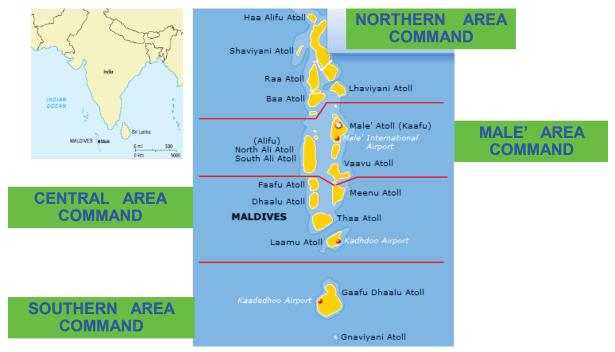


Figure 17: Geographic Area of Responsibilities of Maldives National Defence Force

The International Red Cross and Red Crescent Movement

International Committee of the Red Cross

The International Committee of the Red Cross (ICRC) is a private, independent humanitarian organization, headquartered in Geneva, Switzerland. The ICRC bases its activities on the provisions of International Humanitarian Law, and it is neutral in politics, religion, and ideology. The ICRC assists with the protection of civilian victims of armed conflict and internal strife and their direct results. Within these roles, it may take any humanitarian initiative as a neutral and independent intermediary.²¹⁵

International Federation of Red Cross and Red Crescent Societies

The IFRC is a humanitarian organization that provides assistance and promotes humanitarian activities carried out by the National Societies, with a view to preventing and alleviating human suffering. IFRC was founded in 1919 and includes 191 National Societies. The IFRC carries out relief operations to assist victims of disasters and combines this with development work to strengthen the capacities of its member National Societies.²¹⁶

Maldivian Red Crescent

The MRC was established as a legal entity under the Maldivian Red Crescent Law (Law No: 7/2009). The law emphasizes the MRC as an independent, voluntary aid organization, auxiliary to the public authorities in the humanitarian field. On 9 November 2011, the MRC was recognized as a full member of the International Red Cross and Red Crescent Movement.

By end of 2023, MRC had five active units across the country, 149 active members, and 250 volunteers. Staff presence and administrative bases are established in Kulhudhuffushi City, Malé City, and Addu City, and these bases provide support and interventions in three regions - North, Central, and South of Maldives. Figure 18 illustrates the organizational structure of MRC.²¹⁷

Each of the 10 MRC branches is made up of two units, which are the main service delivery points of the MRC. Units are local divisions formed with the objective of ensuring that the National Society's activities are extended throughout the entire country, especially through community mobilization and engagement. A unit must consist of at least 20 active members and a pool of local volunteers. Only one unit is

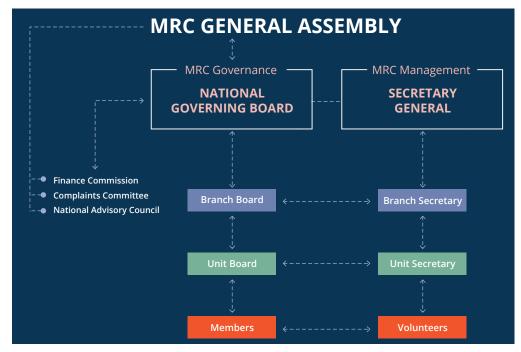


Figure 18: Organizational Structure of Maldivian Red Crescent

permitted per island, unless a physical island is divided into two or more administrative units, each with its own Island Council. Units are not constituted as separate legal entities.

MRC is currently implementing its Strategic Plan 2019-2030, which aligns with the SDGs, the Paris Agreement, and the Sendai Framework for DRR, and centers on the concept of resilience, recognizing a need for better coherence in the areas of disaster management, climate change, and development work. MRC's key programs and projects are the following: First Aid Program, Disaster Risk Reduction and Climate, Migrant Support, and Patient Transport Services.²¹⁸

In 2023, MRC outlined its first strategic priority in emergency response. As an auxiliary to the government, MRC collaborates with relevant stakeholders, primarily the NDMA, to address emergencies and disasters nationwide. This priority area builds on MRC's existing capacity, experiences, and strengths in providing emergency response services through the community-based emergency response teams (ERT). The ERTs continue to respond to a variety of emergencies and disasters by mobilizing communities, providing first aid and psychosocial support, and assisting IDPs. Figure 19 illustrates a map of MRC's presence in Maldives.²¹⁹

Disaster Management Partners

Private sector engagement is a priority for NDMA. On 11 July 2024, NDMA, MRC, and Asian Disaster Preparedness Center (ADPC) led a series of dialogues with the business community in Malé City. Challenges and opportunities where private sector involvement could enhance disaster management efforts were discussed. These included the facilitation of disaster incident reporting in the tourism sector, increasing the capacity of water and sewerage technologies, improving the communication infrastructure in the ports, and involving the media sector in the dissemination of alerts.²²⁰

Seeking a whole-of-government and community-based disaster management network, NDMA maintains a network of public and private, government and non-government

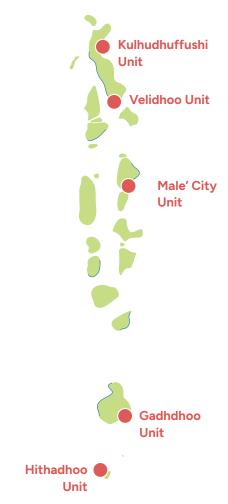


Figure 19: Map of Maldivian Red Crescent's Presence

partners to aid in all phases of disaster management. NDMA's primary partners include MNDF, MRC, and MPS. Historically, the MoH and the MoFT have also played significant roles in disaster management. As NDMA postures toward DRR, mitigation, and climate action, other government agencies, such as the MoE and Ministry of Climate Change, Environment and Energy (MCCEE), have developed or are developing complimentary disaster management strategies.

Maldives Police Service (MPS)

The MPS has a distinct role in preparedness, response, and recovery. MPS is the Lead Agency for ESF 9: Public Safety and Security. Predisaster, MPS disseminates information to the public and utilizes its local presence to provide information about impending disaster both up and down the chain of command. During a

disaster, MPS acts as Public Safety and Security Cluster Lead, charged with Law Enforcement, Early Warning and Evacuation, Protection, Coordination, Special Operations, and Disaster Victim Identification.

The local chief of police is responsible for law enforcement activities within their local jurisdiction (atoll, island, and city). When government law enforcement personnel and equipment are committed, a member of the MPS will be assigned to coordinate activities with the local law enforcement officer-in-charge.²²¹ As an example, Figure 20 illustrates how the Addu City police force coordinates response to an incident,²²² and Figure 21 depicts the composition of a city, atoll, and island MPS taskforce.²²³

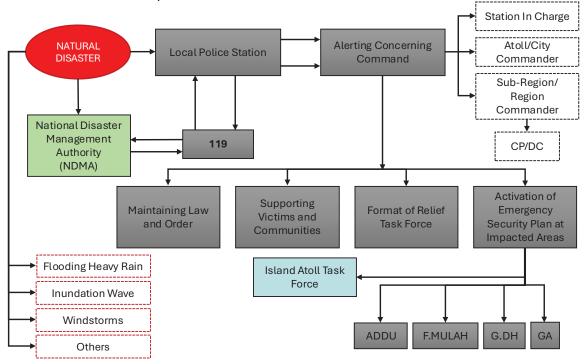


Figure 20: Addu City Police Force Incident Response Coordination

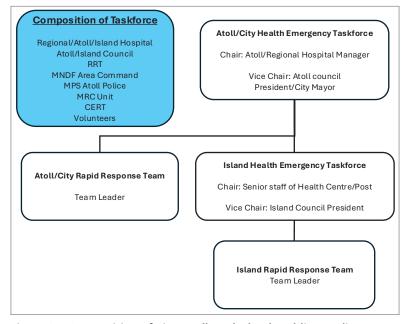


Figure 21: Composition of City, Atoll, and Island Maldives Police Service Taskforce

Maldives Meteorological Service

The MMS is the seismological and meteorological service in Maldives. There are five meteorological offices under MMS with the station in Hulhule' being the main office. Aviation and synoptic observations done in the other four stations are sent to the Hulhule' station via email or fax. Each of these stations works 24-hours-a-day-7-days-a-week. In addition to these stations, there are 20 automated weather stations and three tide gauges installed across the country which provides real-time data to MMS.²²⁴

MMS plays a key role in the early warning system. According to NEOP Volume II, MMS alongside the NEOC, is a Lead Agency for ESF 2: Communication. In the case of tsunami, cyclone, heavy rainfall, and flood, MMS is the responsible technical agency for issuing alert levels. In the event of tsunami, MMS issues a Tsunami Information Bulletin or No Threat Bulletin to the public via the media. MMS also coordinates with regional and international early warning agencies.

MMS provides a mobile app, Moosun, which can be accessed by the public at *https://www.meteorology.gov.mv/*. The app is available on Android and iOS platforms.²²⁵

MMS maintains relationships with the Regional Integrated Multi-Hazard Early Warning System (RIMES) for Africa and Asia, Indian National Centre for Ocean Information Services, Indonesia Tsunami Early Warning System, and the Joint Australian Tsunami Warning Centre for Indian Ocean Tsunami Warning and Mitigation System, and it is a member of the World Meteorological Organisation (WMO) and International Civil Aviation Organisation (ICAO-APEC).²²⁶

Ministry of Health

The MoH has the authority and primary responsibility to manage public health emergencies in the Maldives. The HPA under MoH is the lead administrative and planning agency for public health initiatives and activities including public health emergency management

in the Maldives. HPA functions at the national level and works with local governments, the health sector, NGOs, and private partners.²²⁷

The Health Emergency Coordination Committee (HECC) serves as the executive body for strategic decision making, providing direction and guidance to the HEOC and the Incident Management Team (IMT). In addition, the Technical Advisory Committee (TAC) could be formed based on the requirement to offer and provide technical advice and expertise to the HECC and HEOC. The public health emergency coordination framework, in the event national disaster management structures are not activated, is shown in Figure 22.²²⁸

The MoH maintains the HEOP, which is a multi-hazard plan that establishes a single, comprehensive framework for the management of public health emergencies and disaster-related health incidents within the Maldives. The plan is implemented during an emergency or disaster when it becomes necessary to mobilize the resources of the identified departments and agencies to save lives and protect health and well-being, property, and infrastructure. The plan assigns major roles and responsibilities to departments and agencies.²²⁹

The HEOC is always activated to monitor or support local emergency operations. The HEOC utilizes the principles of the IMS, when coordinating all levels of response to an incident. The HEOC functions as a multi-agency coordination center when activated to host the MACS.²³⁰

Local health officials involved in public health emergency management are expected to initiate actions that save lives and protect property and the environment based on procedures outlined in the island, atoll, and city Hospital Emergency Response Plan (HERP). A minimum of decentralized resources – human, material, and system – for response is established at island, atoll, and city levels. Limited logistics and transport are available for effective response operations. Interagency Emergency Health Kits are prepositioned in strategic locations.²³¹

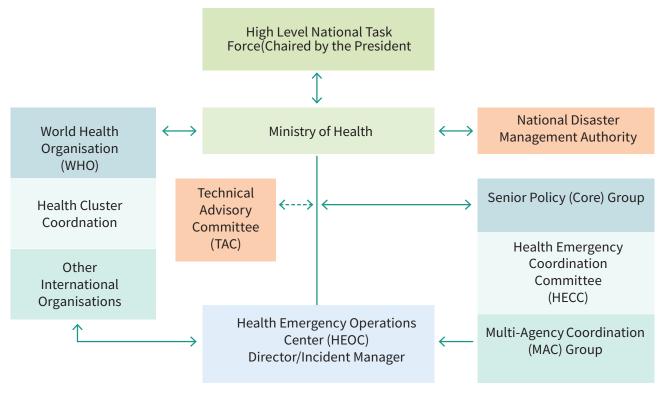


Figure 22: Public Health Emergency Coordination Framework

MoH is a Lead Agency for ESF 8: Public Health and Medical Services according to the NEOP Volume II; this ESF includes health and medical service resources, including transportation, temporarily realigned from established programs having coordination or direct service capability for medical care, public health and sanitation, crisis counseling, deceased identification, and mortuary services. MoH will act as cluster lead in the event of disaster and activates the Health Sector Emergency Operations Plan (HSEOP) as necessary. MoH is considered an autonomous entity, and thus has its own emergency operations plan and standard operating guidelines.²³²

United Nations Country Team

The UN Country Team (UNCT) in the Maldives comprises Food and Agriculture Organization (FAO), International Fund for Agricultural Development (IFAD), International Labour Organization (ILO), International Organization on Migration (IOM), UNDP, UN Environment Programme (UNEP), UNESCAP, UN Educational, Scientific, and Cultural Organization (UNESCO), UN Population Fund

(UNFPA), UN High Commissioner on Refugees (UNHCR), UNICEF, UN Office on Drugs and Crime (UNODC), UN Office for Project Services (UNOPS), the WHO, and the World Bank, based in Malé, Colombo, New Delhi, and Bangkok.

The UN in Maldives supports the achievement of the SDGs through policy advice and technical capacity aligned to national development priorities outlined in the United Nations Sustainable Development Cooperation Framework (UNSDCF). The current UNSDCF covers the period 2022 – 2026 and maps out the UN Development Systems' collective and integrated response to development opportunities and challenges faced by the Maldives.²³³

The UNCT is engaged in disaster management in Maldives, notably in the support of plans and policies, the establishment of Maldives' early warning system, and in bolstering the collection of data. Climate actions supported by the UN in Maldives include climatesmart agriculture and energy transition and adaptation. UN agencies also assist with the implement the UN Sustainability and Climate Action Plan and spearheaded the establishment

of the Emergency Preparedness for All Plan, focusing on DRR. In collaboration with the NDMA, the UN supported the revision of the CERT guidelines to incorporate principles of Accountability to Affected Populations (AAP). Under the joint SDG Funded program implemented by UNESCAP and UNDP Maldives on "Strengthening National and Subnational Capacity for Sustainable DRR, CCA, and Mitigation in the Maldives," various capacity building activities have been held, including two technical capacity building sessions by UNESCAP to enhance the technical capacity of stakeholders at all levels in using geospatial tools and techniques.²³⁴

In 2023, UN agencies Maldives launched Early Warnings for All (EW4All) and established a task force to oversee the formulation of the EW4All roadmap, leveraging the expertise of global UN leads – UNDRR, WMO, and the International Telecommunications Union (ITU) – alongside IFRC and local leads with support from UNDP, UNESCAP, UNEP and many other stakeholders. National partners include National Centre for Information Technology (NCIT), NDMA, MMS, and MRC. The Maldives is the first Asian country and the first SIDS to embark on the UN Secretary-General's EW4All program to ensure multi-hazard early warnings for all by 2027.²³⁵

The partnership between UNDP and UNESCAP within the SIDS Joint Programme has significantly bolstered the evidence base for policymaking and empowered local councils to make well-informed decisions regarding climate adaptation strategies and DRR. Utilizing localized climate risk and disaster-related data spanning from 2006 to 2021, the program has yielded tangible results by identifying the risk hotspots of multi-hazards and exposure of social and economic sectors to climate hazards in future. The introduction of participatory mapping facilitated by the Accelerator Lab has enabled the collection of citizen-generated geographic information system (GIS) data, enhancing DRR efforts and local planning. Notably, the collected data seamlessly integrates with UNESCAP's Risk and Resilience portal,

further amplifying its utility. Through hosting the full data in the national partner agencies (MMS, NDMA, and Maldives National University) for technical use as well as providing access to the data and the decision-making tools through the UNESCAP Risk and Resilience portal, Maldives page, all stakeholders can access the information in national and sub-national level, ensuring a more comprehensive approach in all levels to DRR and CCA.²³⁶

U.S. Government Agencies in Maldives

The U.S. has enjoyed longstanding, friendly ties with the Maldives, since 1965. The U.S. Mission to Maldives was based in Colombo, Sri Lanka, until 6 September 2023, when U.S. Embassy Malé was established within Maldives. U.S. foreign assistance resources aim to promote and enhance maritime security, counterterrorism, law enforcement, and counternarcotics cooperation with Maldivian government agencies and to help the country's adaptive capacity and resilience to the negative effects of global climate change.²³⁷

Montana National Guard State Partnership Program

Per Title 10 section 341 (T10 §341), the authorized mission of the U.S. National Guard State Partnership Program (SPP) is to support the security cooperation objectives of the United States, through engagements between members of the National Guard of a State or territory and any of the following: the military forces of a foreign country; the security forces of a foreign country; and governmental organizations of a foreign country whose primary functions include disaster response or emergency response. T10 §341 explicitly permits pairing this authority with other Security Cooperation authorities.

The Montana National Guard (MTNG) was selected in 2021 as the SPP partner to Maldives. This partnership is in addition to the MTNG SPP partnership with Sri Lanka, established formally in 2019. These are distinct partnerships, yet they are managed under a single umbrella

because the U.S. Embassy in Colombo, Sri Lanka, and its Security Cooperation Office serve both countries. During the first year of engagements, MTNG and the Maldives focused on non-commissioned officer development, medical exchanges, and explosive ordnance disposal (EOD). Moreover, MTNG serves as the lead planner and exercise manager the annual Exercise Black Marlin, which brings the MTNG and MNDF together.

The U.S. Country Security Cooperation Plan (pending publication) lays out the intention to assist Maldives in building an appropriately sized, modern, and professional armed force that is credible and effective in defending the nation, preserving territorial and environmental integrity and political independence, providing security to the people in support of democracy, and preserving their home for future generations. U.S. Government objectives will continue to focus on: bolstering Maldives' ability to protect its sovereignty to advance a free, open, and secure Indo-Pacific region; supporting Maldives democratic legislative and judiciary reforms; assisting with government and civil society capacity building; and supporting continued economic growth through initiatives that promote good governance, responsible and inclusive economic action and policy, accountability, and the rule of law. Montana's main focus will be in the DRR and counter terrorism portfolios.²³⁸

MTNG SPP maintains a program director, based in Montana, and a Bilateral Affairs Officer stationed forward with the U.S. Mission in Sri Lanka.

U.S. Agency for International Development

USAID has worked in Maldives since 2001 to deliver programs to respond to the needs of the Maldivian people. USAID's partnership with the government and people of Maldives supports self-reliance, strengthens stability, and promotes economic growth. In FY2023, USAID's Bureau for Humanitarian Assistance (USAID/BHA) funding through early recovery, risk reduction, and resilience (ER4) programming totaled

US\$600,000.²³⁹

USAID/BHA supports ER4 programming in the Maldives to increase communities' resilience to disasters and emergencies through capacity building and awareness raising. USAID/BHA aims to promote self-reliance, enabling the Maldives to reduce the impacts of natural hazards and respond more effectively to disasters.²⁴⁰

With USAID/BHA funding, ADPC and local partner MRC work closely with the GoM to develop and strengthen disaster management guidelines, strategies, and tools; develop and train community responders; and bolster coordination across key disaster management stakeholders, including private sector partners.²⁴¹

USAID/BHA also partners directly with MRC to engage with communities and government counterparts to increase community awareness and mobilization in the event of natural hazard-induced disasters. This work is closely coordinated with the GoM's NDMA and supports the development and implementation of national disaster management strategies, strengthening coordination across key stakeholders.²⁴²

USAID/BHA regionally supports ADPC in South Asia to conduct Sustainable National Anticipatory Actions through Preparedness (SNAP), which focuses on the Maldives as a priority country. ADPC uses SNAP to leverage existing disaster management technical expertise from around the region to bolster capacity in the Maldives, building off of the highly successful Program for the Enhancement of Emergency Response (PEER). Through the PEER program, ADPC has supported national and regional capacities in disaster risk reduction and management via preparedness training to emergency responders for more than 20 years in the South Asia region.²⁴³

USAID/BHA is the U.S. Government lead federal coordinator for international disaster response and humanitarian assistance. USAID/BHA requests U.S. DoD support to disaster response operations on an as-needed basis, and only in situations where the U.S. military

can provide a unique capability that other first responders, including those of the host nation and international humanitarian partners, have insufficient capacity to provide. USAID/BHA responds to humanitarian crises in approximately 80 countries every year—including natural disasters, conflicts, and severe food insecurity—and fulfills its mandate of saving lives, alleviating human suffering, and reducing the physical, social, and economic impact of disasters worldwide. USAID/BHA provides funding, supplies, and expertise for the rapid and effective provision of humanitarian aid throughout the world.

USAID/BHA's staff presence globally and at its Washington, D.C., headquarters includes experts in the food security, nutrition, WASH, health, shelter/settlements, logistics, agriculture, economic recovery/livelihoods, livestock, DRR, climate adaptation, and humanitarian protection sectors. USAID/BHA has humanitarian advisors at all of the DoD combatant commands, Special Operations Command, and key DoD fieldforward positions, as well as at the U.S. Mission to the UN in New York, the U.S. Mission to the UN and other International Organizations in Geneva, the U.S. Mission to the UN Agencies in Rome, the U.S. Mission to the European Union in Brussels, and the Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia, U.S. To support disaster response globally, USAID/ BHA maintains regional offices in six countries - Costa Rica, Hungary, Kenya, Senegal, South Africa, and Thailand - as well as 14 liaison offices, where regional advisors coordinate with relevant actors across their respective regions and countries. In addition to these offices, full-time USAID/BHA staff are present in 32 other countries. USAID/BHA's vast network of implementing partners includes affected communities, local and national governments, other U.S. Government entities, and international partners, including NGOs, international organizations, the international donor community, and the private sector. Relief supplies are pre-positioned primarily in implementing partners' warehouses, and in five USAID/BHA-

managed warehouses around the world to enable a rapid response to any location globally.

As the lead federal coordinator for Foreign Disaster Response (FDR), USAID/BHA's annual budget reflects the U.S. Government's interest in providing needs-based assistance, and it has been as high as US\$11.9 billion annually in recent years for humanitarian assistance activities. All of USAID/BHA's programs and activities are humanitarian assistance, targeting populations most vulnerable to the impacts of shocks from slow or sudden-onset emergencies. USAID/ BHA's humanitarian assistance consists of two major conceptual areas, which may frequently be interlinked programmatically and strategically. The first area is humanitarian response pursuant to a Declaration of Humanitarian Need (DHN) issued by the U.S. Ambassador or Chief of Mission in the affected country based on four criteria:

- 1. there is evidence of significant unmet humanitarian need;
- 2. U.S. Government humanitarian assistance will save lives, reduce human suffering, and mitigate the impact of humanitarian emergencies on the most vulnerable;
- 3. the host country requests or will accept international assistance; and
- 4. responding aligns with U.S. Government interests and humanitarian objectives.

This DHN permits USAID/BHA to begin emergency response activities. Humanitarian response is characterized by urgent action, including rapid assessment of needs and provision of funding to partners to meet those needs, logistical support to local and national actors, and frequently the deployment of USAID/BHA disaster response experts or teams. The second conceptual area of USAID/BHA assistance is known as ER4 activities, which aim to improve the well-being of vulnerable people by strengthening their capacities to manage risk, to anticipate, withstand, recover from, and adapt to shocks and stresses, and to support positive, transformative change. These ER4 activities may be integrated with humanitarian response

programming or may be stand-alone activities. ER4 programs and activities are cost-effective, reducing the need for future humanitarian assistance when shocks occur.

Core USAID/BHA Responsibilities During an Emergency Response include:

- Conducting assessments of humanitarian needs
- Developing U.S. Government response strategy
- Coordinating the operational on-ground response in support of the U.S. Ambassador
- Providing fast and effective funding to established partners (NGOs, international organizations, etc.)
- Leading official reporting on humanitarian issues and U.S. Government response activities
- Requesting support from other U.S. Government agencies as required.

When civilian and host nation military response capacity is overwhelmed and the U.S. military has a unique capability, USAID/BHA may request supplemental FDR support from DoD for a limited period. These requests occur in less than 5% of all official U.S. Government responses. Interagency requests for DoD support to FDR are transmitted to the Secretary of Defense (SecDef) in an official memorandum (Executive Secretariat Memo), which is required in order to leverage such DoD support. With SecDef approval, DoD components may provide non-reimbursable

foreign disaster relief support to USAID using available Overseas Humanitarian, Disaster, and Civic Aid (OHDACA) funds. Coordination between USAID and DoD personnel is facilitated at the tactical, operational, and strategic levels by Humanitarian Assistance Advisors to the Military (HAA/M), who are USAID/BHA personnel trained to liaise with DoD counterparts and bridge gaps between the U.S. military and international humanitarian community. The DoD capabilities most commonly requested by USAID/BHA during a disaster response are logistics and airlift support rather than direct assistance to beneficiaries. USAID uses the Mission Tasking Matrix form as the formal means of tasking for DoD resources at the tactical level. OHDACA steady-state projects are distinct from FDR activities, and their implementation requires coordination with the local or regional USAID mission as well as approval by the relevant U.S. Ambassador and DoD combatant command.

The U.S. Government prioritizes civilian leadership in humanitarian operations in accordance with internationally recognized humanitarian principles, including both the leadership of our responses and engagement with partner nations. The unique sociopolitical context of each partner nation is a key consideration for decision makers at all levels before, during, and after the use of DoD capabilities in a disaster response scenario. Photo 2 depicts USAID's support to the South Asia Clean Energy Forum from 21 to 24 October 2024, in Jaipur, India.²⁴⁴



Photo 2: South Asia Clean Energy Forum, 2024

U.S. Mission to Maldives Contact Information

210 Galle Road, Colombo 03, Sri Lanka

Phone: +94 (11) 249-8500 Fax: +94 (11) 243-7345

Montana National Guard State Partnership Program Contact Information

Montana SPP (Kyrgyz Republic, Sri Lanka, Turkmenistan, & Maldives)

Phone: 406-324-3475 Email: mtdes@mt.gov

USAID Contact Information

USAID/Sri Lanka 44 Galle Road Colombo 3, Sri Lanka Phone: +94-11-2498000

Fax: +94-11-2472850 Email: infosl@usaid.gov

USAID Headquarters

BHA/South and Central Asia U.S. Agency for International Development 1300 Pennsylvania Avenue NW. Washington, DC 20004 20523

Phone: 202-712-4487

Email: bha.infoasia@usaid.gov

Laws, Policies, and Plans on Disaster Management

The Disaster Management Act 28/2015 is the primary legal mechanism for all disaster management-related activities in Maldives. It covers DRR, response, and recovery, and outlines the roles and responsibilities of government agencies and stakeholders, vertically from national to local levels and laterally across the public sectors. The Decentralization Act 2010 is a key piece of legislation, which drives action and decision-making to the most local levels possible. The Community Based Risk Reduction and Disaster Management Framework (CBDRRF) describes the practical implementation of decentralization in disaster management. The Disaster Risk Reduction Strategy provides a framework for all DRR activities, including roles and responsibilities and a thorough assessment

of hazards in Maldives. The NEOP are provided in two volumes and outline procedures and protocols in the event of disaster. Sectoral response plans, such as the Health Emergency Operations Plan (HEOP) and the Education Sector Response Plan, are multi-hazard plans which assign roles and responsibilities for planning, training, and responding to incidents.

The following are the applicable laws and ordinances, which provide the legal basis to practice disaster management in Maldives:

- Armed Forces Act of 1/2008, article 7 (d), (e), and (f) assign disaster relief operations to the MNDF
- Police Act of August (5/2008), article 6
 (II) mandates the MPS to protect lives and property
- Maldivian Red Crescent Act 7/2009, Article 2(d) establishes as an independent, voluntary aid organization, which is auxiliary to the public authorities in the humanitarian field, and Article 3 (a) assigns MRC the primary task of providing humanitarian aid and preventing and alleviating human suffering in disasters
- Presidential Decree of December 2004 established the National Disaster Management Center (now the NDMA)
- Constitution of 2008, Article 253 of Chapter II, Article 22 of Chapter II, and Article 23 provide legal support to disaster management
- Decentralization Act of 7/2010, Article 24
 of Chapter 4 assigns the Island Councils the
 duty to establish a mechanism that provides
 assistance in times of an emergency
- Disaster Management Act of 2015 provides the full legal basis to practice disaster management in Maldives²⁴⁵

The following national laws provide the foundational legal framework for DRR:

- The Disaster Management Act 28/2015
 mandates the development of a National
 Disaster Management Plan, hazard mapping,
 early warning systems, and school safety
 programs.
- The Climate Emergency Act 9/2021 mandates the development of a National Plan

ORGANIZATIONAL STRUCTURE FOR DISASTER MANAGEMENT

- on Climate Action and National Adaptation Plan, establishes a Climate Change Directorate, and mandates annual Loss and Damage Calculations.
- The Decentralization Act 7/2010 mandates the collaboration of local councils with relevant government agencies for the purposes of DRR and empowers councils to take action against environmental degradation.
- Public Health Protection Act 7/2012 empowers the HPA to design and implement public health safety programs.
- The Disability Act 8/2010 promotes equal rights and opportunities for people living with disabilities, requires the incorporation of input from disability councils, and prioritizes the safety and protection of women and children with disabilities during disaster.
- The Construction Act 4/2017 prioritizes resident safety, through safe construction practices, fire safety measures, and sustainable building practices.
- Armed Forces Act Maldives 1/2008 authorizes regular joint training exercises with civilian DRR agencies.
- Maldives Police Service Act 34/2020
 highlight's the MPS' role in safeguarding
 lives and properties and includes the role
 of the MPS in evacuations and use of force
 if necessary to ensure compliance with
 evacuation orders.
- The Maldivian Red Crescent Act 7/2009
 mandates a strong collaboration with the
 GoM to strengthen DRR programming and
 empowers MRC to focus on at-risk groups by
 reducing the long-term impacts of disasters
 on these groups, especially the elderly,
 children living with disabilities, and those
 living in harder to reach atolls.

Disaster Management Act (DMA) 28/2015

The DMA 28/2015 provides the full legal basis for disaster management activities in Maldives. DMA 28/2015 defines a disaster, establishes the institutional mechanism for disaster management, provides procedures

should a disaster be declared, and defines the responsibilities of specific institutions in planning, mitigation, response, and recovery.

According to DMA 28/2015, "A disaster is defined as, when a situation arises in Maldivian territorial waters or in an inhabited island or islands, island with a resort or resorts, island or islands with industrial activities or in any region of Maldives inhabited by people that causes damage and losses to peoples' lives, belongings, property, agricultural lands, infrastructure and to economy and environment that exceeds the ability of the affected community or society to cope using its own resources." Furthermore, "A nation-wide disaster or regional or atoll level, or island level can be declared by considering the magnitude of disaster, the proportion of affected people and the size of the area of impact."

DMA 28/2015 establishes the roles of the NDMC, NDMA, NERF, DMC, and the MNDF.

DMA 28/2015 establishes the role of DMCs, which are formed at the city, atoll, and island levels, in accordance with Act on Decentralization of the Administrative Divisions of Maldives (No 7/2010). Committees must include members from the military, police, medical service, and the MRC.

Community-Based Disaster Risk Reduction Framework 2014

Following CBDRRF 2014, CBDRM 2.0 aims to foster community-based disaster risk management and integrates DRR strategies across all island-level sectors. This is especially important in Maldives because some communities and distant atolls are completely self-reliant. CBDRM 2.0 has two key components – i.e., the formulation of Island Disaster Management Plans (IDMP) and development of CERTs. IDMPs are developed with a special emphasis on schools, through the adoptions of School Emergency Operations Plans (SEOP). IDMPs also include cross-sector emergency Standard Operating Procedures (SOP). By late 2023, 72 islands had developed disaster management plans, and nine islands had established CERTs. The CBDRM program

in Maldives includes the support of USAID, UNICEF, and UNDP.²⁴⁶

Figure 23 is a chart depicting CBDRM 2.0 and a general workflow from community induction (i.e., formal partnership between NDMA and the community) to the development of IDMPs and emergency SOPs.²⁴⁷

Community Emergency Response Team Framework

The CERT Framework aims to establish in each island community-based, trained emergency humanitarian responders who will take up immediate emergency response roles. These teams will be managed at the island level by the Local Island Councils. The CBDRM Program is a key DRR initiative carried out by NDMC. Through the CBDRM program Disaster Management Plans are being prepared in island communities. These plans comprise an Emergency Response Plan and Disaster Mitigation, and select a taskforce assigned with specific roles and responsibilities and to act in time of emergency and disaster. Island-level emergency simulation exercises are carried out

in these islands to test, evaluate, and validate the plan. The CERT program will be incorporated into the CBDRM program, replacing the taskforces. Through the CBDRM Program, communities are empowered to work towards achieving resilience. Through active participation and community involvement, the CBDRM process enables communities to work together to raise awareness, build capacity, and to increase resilience.²⁴⁸

National Disaster Management Plan

The National Disaster Management Plan (NDMP) is the main document that outlines the development of the disaster management sector every five years. As of the publication of this handbook, the new NDMP was in draft, and with support of UNESCAP, is scheduled to be published by end of 2024. The NDMP mandates activities at the local and national level, encourages decentralization by integrating DRR into local development plans, and defines roles and responsibilities of ministries, institutions, and agencies at various stages of the disaster management cycle.²⁴⁹

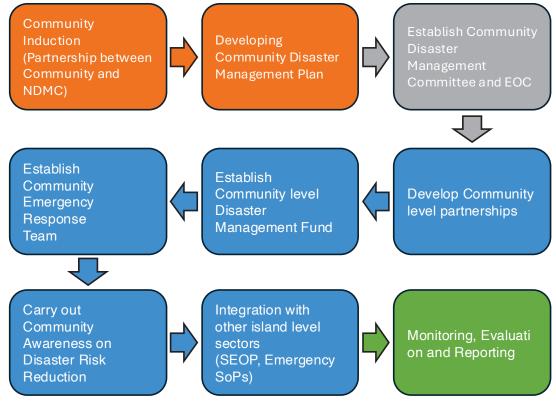


Figure 23: Community Workflow Diagram for Disaster Risk Management

Disaster Risk Reduction Strategy for Maldives: 2024-2030

The DRR Strategy outlines a comprehensive and collaborative approach to DRR, aligned with the UN-agreed Sendai Framework for DRR. The scope of the strategy focuses on priorities that NDMA can implement, either independently or collaboratively. The strategy includes a hazard assessment to provide an understanding of the local context. The strategy document also includes a summary of key thematic areas which were highlighted as concerns and gaps by DRR stakeholders.

National Emergency Operations Plan, Volume I

The NEOP Volume I provides a roadmap for response and responsibilities during disaster management in the Maldives. The NEOP is enabled by the 2015 DMA. The NEOP facilitates assigning emergency response support functions, lines of authority, organizational relationships, and coordination mechanisms between national and local councils, agencies, and other stakeholders. The NEOP provides legal operational guidance to emergency response operations. The plan supports only the response cluster of disaster management, which is run by the NEOC, located within the NDMA. The plan does not address long-term recovery or postdisaster recovery and reconstruction. Of note, the terms "disaster" and "emergency" are used interchangeably within the NEOP.²⁵⁰

National Emergency Operations Plan, Volume II

NEOP Volume II provides a set of operating procedures for 13 ESFs. Each operating procedure identifies the lead agencies; the mission, scope, objective of the ESF; and actions and corresponding responsibilities to be considered before, during, and after a disaster. The ESFs are groupings of governmental, NGO, and private sector capabilities into an organizational structure to provide support, resources, program implementation, and services. Each ESF is assigned a lead agency, a primary agency, and support agencies, who, collectively, are considered ESF cluster owners. The 13 ESFs and their corresponding lead agencies are depicted in Table 7.²⁵¹

Health Emergency Operations Plan

The HEOP is a roadmap for responding to public health emergencies in Maldives. It is a strategic framework of actions, policies, and regulations that contain a blueprint of how to elaborate, implement, and execute a response operation for public health emergencies and disasters with public health impacts. The Plan is enabled by the Public Health Protection Act 7/2012, Health Services Act 29/2015, Disaster Management Act 28/2015, and the Decentralization Act 7/2012. The HEOP sets forth response actions, directives, policies, and guidelines for all entities to follow before, during, and after a public health emergency and a

ESF CODE #	Emergency Support Functions	Leading Agency		
ESF #1	Logistics, Transportation	NDMC/MoFT		
ESF #2	Communications	CAM		
ESF #3	Public Works, Water & Sanitation	MoHI, MEE		
ESF #4	Firefighting, Search & Rescue	MNDF		
ESF #5	Emergency Management & Relief Operations	NDMC/NEOC		
ESF #6	Mass Care, Shelter, Public Assistance, Housing, and Relief Services	NDMC/NEOC		
ESF #7	Resource Support and Finance	MNDF/MOFT		
ESF #8	Public Health and Medical Services (PHMS)	МоН/НРА		
ESF #9	Public Safety and Security	MPS		
ESF #10	Haz-Mat and Environment	MEE/MDNS		
ESF #11	Agriculture and Natural Resources	MoFA		
ESF #12	Energy	MEE		
ESF #13	External Affairs	MFA		

Table 7: Emergency Support Functions and Corresponding Lead Agencies

disaster within the country.

The HEOP is intended to be used by authorities and agencies responsible for managing emergencies, incidents, or events where the health of populations is at risk. This document provides guidance for practitioners of public health, health policy makers, public and private healthcare organizations, and local government in designing, developing, implementing, and executing public health emergency operations at respective levels. Section 1 includes the Basic Plan. Sections 2 and 3 contain ESF Annexes and Support Annexes. Section 4 provides incident specific procedures, including SOPs for Public Health Emergencies - e.g., influenza, natural disasters (flooding, manmade, and industrial incidents), urban fire, mass casualty and fatality events, and school bus accident in highly urbanized islands. Section 5 refers to relevant regulations, policies, and procedural documents.²⁵²

Strategic Action Plan 2019-2023

The Strategic Action Plan (SAP), developed by the President's Office, of the GoM, is a central policy framework and planning document that guides the overall development direction of Maldives. The SAP is an ambitious medium term development tool comprising of presidential pledges, a joint coalition election manifesto, constitutional and legislative frameworks, sector plans and international commitments through various global conventions and agreements. The SAP includes policies, strategies and timebound actions across 33 subsectors grouped under five broader thematic areas or sectors. The five sectors of the SAP are Blue Economy, Caring State, Dignified Families, Jazeera Dhiriulhun (island life) and Good Governance. The SAP identifies 435 policy targets which will be used to measure progress and impact.²⁵³

Disaster Management Communications

The development of Maldives' EWS gained traction following the Indian Ocean tsunami in December 2004. Following the disaster, there

was both national and international recognition of the need for a robust early warning system to prepare for and respond to such disasters in the future. Since then, Maldives has collaborated with international organizations, such as the UNDP, WMO, UNDRR, and the World Bank, and regional organizations, such as the Indian Ocean Tsunami Warning System (IOTWS), the ADPC, the Regional Integrated Multi-Hazard Early Warning System (RIMES) and the IFRC. Maldives was the first SIDS country in Asia to embrace the UN Secretary-General's EW4All initiative. The initiative aims to ensure that everyone on Earth has access to early warning systems by 2027.

Early Warning Systems

The EWS Implementation Roadmap 2023-2027 provides the national and local governments with strategic guidance and a structured blueprint for the development and implementation of Maldives' EWS. The roadmap is developed through UNDRR's Early Warnings for All program, with inputs from NDMA, MMS, the Ministry of Homeland Security and Technology and the MRC.²⁵⁴ The NEOC is the central coordinating body for the EWS. Early warning is considered a main task of each technical agency, which is mandated by the NEOP to issue alert levels for various hazards. Responsible technical agencies and their assigned hazards or emergencies are shown in Table 8.²⁵⁵

NEOP Volume I establishes threshold levels for common disasters and provides guidance on when an alert decision should be made. When an alert level decision is made, it is communicated to the NEOC by the technical agency, as shown in Figure 24.²⁵⁶ The NEOC is responsible for disseminating alerts and ensuring last-mile dissemination. NEOP Volume I provides guidance on the role of the media, including television and FM radio channels. The Disaster Management Act 2015, Ch. 7, Articles 51 and 52 define the role of dissemination, and the NEOC may task the MNDF and MPS to disseminate early warning messages.

The technical agency assigned to a given hazard category is responsible for issuing the

Hazards /Emergencies	Responsible Technical Agency for issuing alert levels			
Tsunami, Cyclone, Heavy Rainfall, Flood	Maldives Meteorological Services			
Pandemics, Epidemics and other health emergencies	Maldives Health Protection Agency			
Fire	MNDF - Fire and Rescue Services			
Industrial Accidents	MNDF - Fire and Rescue Services			
Maritimes Incidents	MNDF - Coast Guards			
Water Shortage	Water Department - Ministry of Environment and Energy			
Food Shortage	Ministry of Economic Development / Ministry of Fisheries and Agriculture			
Other man-made disasters	Maldives National Defence Force Maldives Police Services			

Table 8: Agencies Responsible for Issuing Early Warnings

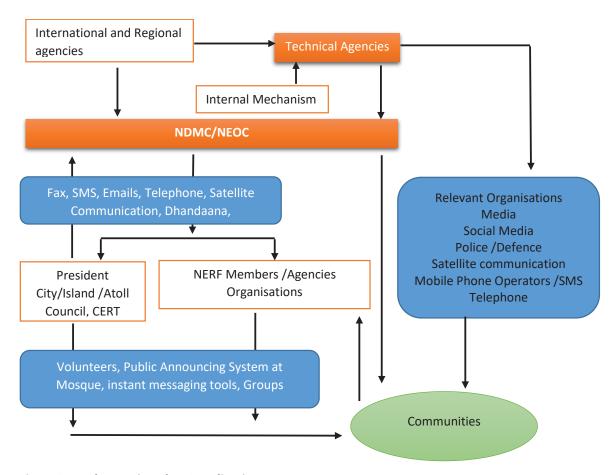


Figure 24: Early Warning Alert Coordination

alert level, based on their own technical criteria. However, NEOP Volume I provides guidance on when an alert should be issued and which alert level should be issued, as shown in Tables 9 and 10.²⁵⁷ Otherwise, the NDMC is responsible for declaring the alert level. There are four alert levels: (1) Low/White, (2) Serious/Yellow, (3) Significant/Orange, (4) Catastrophic/Red.²⁵⁸

Alert Level 1 - Alert Level 1 is a disaster event with low impact and that can be managed locally. The NDMA and NEOC are in normal duty status and no declaration of emergency exists in this stage.

Alert Level 2 - Alert Level 2 is declared for an event with serious impact to the community/ atoll/ city levels, such that 10-20% of households

are or will be affected. In Alert Level 2, usually one or more islands within an atoll are affected. Atoll/city level resources may be utilized and emergency systems activated. Overall strategic coordination is provided by the Atoll Disaster Management Committee, with little or no support from the national level. Protracted coordination or response by multiple functional disciplines may be required. The NDMA is prepared for response and the NEOC may be partially activated. The local CERT will be deployed, and the local council may request support from the NERF, through the NEOC.

Alert Level 3 – Alert Level 3 is declared when multiple islands within an atoll report damage, loss, and displacement. At least 20-50% of households are affected or will be affected. At Level 3, the incident exceeds the capacity of the local government authorities, and additional support is requested of the NDMA. Both the CERTs and NERFs are likely to be deployed. The NDMA may declare a national Alert Level 3 if an event threatens a wide territory (more than five atolls), or at least 20-50% of households are or will be affected nationally.

Alert Level 4 – An Alert Level 4 is issued when a major or catastrophic incident has or is expected to occur. At least 50% of the country's people may be affected, and the situation overwhelms the atoll/city and island levels. Immediate action from the central government is required. The NEOC is fully activated, and the CERTs and

NERF are deployed. Vulnerable communities may be required to evacuate. Also at this level, Operating Plans found in NEOP Volume II are activated. Preliminary damage assessments may lead to a Presidential declaration. If the incident exceeds the capability of the NDMA, the Ministries of Defence, Foreign Affairs, and Finance coordinate the acquisition of regional and international aid assistance.

Termination – This alert effectively cancels previous warnings, and recovery operations begin. The NEOC and local EOCs continue reporting, and supporting agencies shift from response to recovery.

Under the 2015 DMA, the MMS is mandated to maintain a multi-hazard EWS. By law, MMS must collaborate with relevant institutions, including NDMA, to ensure the dissemination of disaster warning information. In collaboration with Maldives Immigration, public communications must be made available in English and other major foreign languages spoken by foreigners.²⁵⁹

In November 2022, the UN Secretary-General launched an Executive Action Plan to implement EW4All, an initiative for "every person on Earth to be protected by early warning systems by 2027." The initiative takes a whole-of-society approach, involving public and private partners, as well as the entire UN system, to mobilize support and strengthen coordination at the global, regional, national, and local levels.

Disasters	Threshold levels
Tsunami	The lower boundary can be identified as the time at which the earthquake occurred.
Flood	Time at which the rainfall reaches the flood level.
Cyclone	Alert level of a cyclone can be defined well in advance by predicting the expected path of the cyclone. More often the boundary for alert is set 72 hours before the cyclone enters.
Water Shortage	Duration may vary depending on the terrain, environmental condition and geographical area, etc.
Industrial Hazard Earthquake Air Hazard Maritime hazard Fire Civil or internal strife Chemical accident Tornado / severe thunderstorm	Prediction is dependent on the event occurring and as such cannot be predicted in advance and practically it is not possible to set a definite time for activating the NEOP.

Table 9: Threshold Levels for Implementing Alert

Levels	Level 1	Level 2	Level 3	Level 4			
Criteria							
1. Population affected/ will be affected (casualties, injured, displaced, evacuated)							
1.1. Number of casualties	0 - 2	0 - 10	10 - 30	Above 30			
1.2. Number of people injured	0 - 2	0 - 30	30 - 60	Above 60			
1.3. Number of people displaced	0 - 50	0 - 500	500 - 1000	1000+			
1.4. Number of people evacuated	0 - 50	0 - 500	500 - 1000	1000+			
2. No of Household	0 - 10%	10% - 20%	20% - 50%	Above 50%			
3. Affected/anticipated geographical extend							
3.1 Number of Island affected/ predicated per Atoll		10% - 20%	20% - 50%	Above 50%			
3.4 Extend of Island predicted/affected	0 - 10%	10% - 20%	20% - 50%	Above 50%			
4. Resource availability and utilisations.							
4.1. Availability of response equipment	Adequate	Satisfactory	Inadequate	Not enough equipment			
4.2. Availability of Human resources	Adequate	Satisfactory	Inadequate	Not enough equipment			
4.3. Availability of Materials	Adequate	Satisfactory	Inadequate	Not enough equipment			
4.4. Response Support	Manageable	Slightly exceeding	Exceeding	Overwhelming			
5. Disturbance to the day to day activities of communities							
5.1. Difficulty to meet the basic needs							
5.2. Impact for livelihood activities	Good resilient capacity	Recoverable to - 3 days Impacted for 12 hrs	Significant damage impacted for 3 - 5 days	Irreversible damage Impacted for more than 5 days			
5.3. Disturbances to the essential service	Minimal	Normal disturbances Impacted for 12 hrs to - 3 days	Significant impacted for 3 - 5 days	Impacted for more than 5 days			

Table 10: Protocol for Defining Alert Level

The Executive Action Plan designates the WMO and the UNDRR as co-leads.²⁶¹ EW4All implementation is organized into four pillars:

- Pillar 1: Disaster risk knowledge, led by UNDRR in partnership with NDMA
- Pillar 2: Detection, observations, monitoring, analysis, and forecasting of hazards, led by WMO in partnership with MMS
- Pillar 3: Warning dissemination and communication, led by the ITU in partnership with the Ministry of Homeland Security and Technology
- Pillar 4: Preparedness to respond, led by the IFRC in partnership with MRC²⁶²

A World Bank Crises Preparedness Gap Analysis (CPGA) was developed in 2023; it guides the pillar leads in Maldives to define a roadmap for EW4All implementation by 2027. The CPGA is a cross-sectoral report, which provides a high-level assessment of crisis preparedness for different types of shocks, identify gaps and opportunities, and inform policy on crisis preparedness. ²⁶³ Key challenges to implementation are lack of staffing at institutions, limited local research, lack of data availability, and time. ²⁶⁴ Implementing partners for the EW4All project are RIMES, ADPC, UNESCO, WMO, UNEP, OCHA, UNDRR, and UNDP.

Information Sharing

Understanding how to overcome the information challenges that civilian and military agencies experience during a disaster response mission is important. Sharing information is critical since no single responding entity, NGO, international governmental organization, assisting country government, or the host government can be the source of all required information.²⁶⁵ Disseminating information not only to those in-country and threatened by disaster, but also to those responding to assist in the emergency has been crucial to timely, efficient, and effective disaster response. There are many resources, stakeholders, and components to consider before, during, and after a natural disaster. This section will discuss country-specific, humanitarian, regional, government, and U.S. DoD information sources.

Maldives Information Sources

National Disaster Management Authority

Ameenee Magu (20060), Male', Maldives

Tel: +960 333-3456 Email: *info@ndma.gov.mv*

Website: https://ndma.gov.mv/en

Maldivian Red Crescent

Headquarters, 2nd Floor,

Plot No. 11493, Hithigas Magu, Hulhumale'

Tel: +960 334 1009 Fax: +960 334 7009

Email: info@redcrescent.org.mv Website: https://redcrescent.org.mv/

Maldives Meteorological Service

Velana International Airport, Hulhule' Tel: (Incoming) +960 3323084, +960

3323302; (Incoming / Outgoing) +960 3310806,

+960 3323471, +960 3340907

Website: https://www.meteorology.gov.mv

OneMap, Maldives Land and Survey Authority

Ameenee Magu, Maale, Republic of Maldives,

Post Code: 20392 Tel: +960 738 4892

Email: secretariat@mlsa.gov.mv

OneMap Support -TelPhone: +960 734 5062

Email: mapping@mlsa.gov.mv Website: https://onemap.mv/

Humanitarian Information Sources

UN ESCAP Risk & Resilience Portal

The UNESCAP Risk and Resilience Portal is an online platform that provides data and tools to assess and manage risks for a given country, with a focus on natural disasters, climate change, and socio-economic vulnerabilities. The platform offers resources for building resilience, including risk mapping, policy guidance, and best practices, while facilitating collaboration among governments, stakeholders, and the private sector.

Website: https://rrp.unescap.org/regional-app Country profile: https://rrp.unescap.org/countryprofile/mdv

United Nations Office for the Coordination of Humanitarian Affairs (OCHA) Regional Office for Asia and the Pacific (ROAP)

UN OCHA's ROAP seeks to optimize the speed, volume, and quality of humanitarian assistance and coordinates emergency preparedness and response throughout the region in support of national governments. ROAP covers 41 countries with whom it partners for coordinated and effective international responses to emergency situations.

Website: https://www.unocha.org/roap For OCHA situation reports, click on "Subscribe" button on bottom of page.

X: OCHAAsiaPac

ReliefWeb

ReliefWeb is a service of UN OCHA that consolidates information and analysis from organizations, countries, and disasters for the humanitarian community.

A subsection of ReliefWeb is ReliefWeb Response (RW Response). It aggregates operational content from other humanitarian action platforms to provide an authoritative source of information. The goal is to ensure that humanitarians can share, find, and re-use critical information quickly and efficiently.

Website: https://reliefweb.int/

RW Response: https://response.reliefweb.int/

Prevention Web

PreventionWeb is provided by UNDRR to consolidate DRR information into an online, easy to understand platform.

Website: https://www.preventionweb.net/

International Federation of Red Cross and Red Crescent Societies (IFRC)

IFRC is the world's largest humanitarian organization, comprised of 191 National Societies, including the MRC, a secretariat in Geneva, Switzerland, and over 60 delegations around the world. The IFRC carries out relief operations to assist victims of disasters and combines this with development work to strengthen the capacities of the National Societies. IFRC's work focuses on four core areas: promoting humanitarian values, disaster response, disaster preparedness, and health and community care.

Website: https://media.ifrc.org/ifrc and https://go.ifrc.org/

International Committee of the Red Cross (ICRC)

ICRC is an impartial, neutral, and independent organization whose exclusively humanitarian mission is to protect the lives and dignity of victims of armed conflict and other situations of violence and to provide them with assistance. It also works to prevent suffering by promoting and strengthening humanitarian law and universal humanitarian principles.

Website: https://www.icrc.org/en

Facebook: @ICRC

X: @ICRC

Global Disaster Alert and Coordination System (GDACS)

GDACS is a cooperation framework among the UN, the European Commission, and disaster managers worldwide to improve alerts, information exchange, and coordination in the first phase after major sudden-onset disasters.

Website: https://www.gdacs.org/alerts/

Virtual OSOCC

The Virtual On-Site Operations Coordination Center (OSOCC) is a real-time online coordination tool for disaster response professionals from urban search and rescue teams, national authorities, and regional and international organizations.

Website: https://vosocc.unocha.org/

The latest alerts can be found here: https://www.

gdacs.org/Alerts/default.aspx

To subscribe: https://www.gdacs.org/About/

contactus.aspx

ThinkHazard!

ThinkHazard! is a website that provides detailed information on a country. Information is provided on Maldives regarding hazards, country assessments, projects, EWS, and other resources.

Website: https://thinkhazard.org

Humanitarian Country Teams (HCT)

HCT is a strategic and operational decision-making and oversight forum established and led by the Humanitarian Coordinator in each country. It is generally comprised of representatives from UN agencies including the IOM, international NGOs, and the IFRC and the National Red Cross/Crescent Society. During a disaster response, HCTs often produce a Situation Report (SitRep), usually in conjunction with OCHA.

Most HCT SitReps can be found through

ReliefWeb: https://reliefweb.int/

Humanitarian Data Exchange (HDX)

HDX is an open platform for sharing data across crises and organizations. Launched in 2014 with the goal of centralizing humanitarian data for easy access and analysis, HDX is managed by OCHA's Center for Humanitarian Data in The Hague.

Website: https://data.humdata.org/

Regional Information Sources

South Asian Association for Regional Cooperation (SAARC)

SAARC was established with the signing of the SAARC Charter in Dhaka on 8 December 1985. SAARC comprises eight member-states: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. The Secretariat of the Association was set up in Kathmandu, Nepal, on 17 January 1987. The objectives of SAARC are to promote the welfare of the peoples of South Asia and to improve their quality of life; to accelerate economic growth, social progress, and cultural development in the region and to provide all individuals the opportunity to live in dignity and to realize their full potential; to promote and strengthen collective self-reliance among the countries of South Asia; to contribute to mutual trust, understanding, and appreciation of one another's problems; to promote active collaboration and mutual assistance in the economic, social, cultural, technical, and scientific fields; to strengthen cooperation with other developing countries; to strengthen cooperation among the member-states in international fora on matters of common interests; and to cooperate with international and regional organizations with similar aims and purposes.

SAARC Secretariat

G.P.O Box 4222, Tridevi Sadak, Kathmandu, Nepal

Tel: (+977 1) 5321785, 5326350

Fax: (+977 1) 5327033 Email: saarc@saarc-sec.org Website: https://www.saarc-sec.org

Facebook: saarcsecretariat

X: @SaarcSec

SAARC Disaster Management Centre

The SAARC Disaster Management Centre (SDMC) Interim Unit (IU) was set up at Gujarat Institute of Disaster Management in November 2016.

SAARC Disaster Management Centre (IU)

Gujarat Institute of Disaster Management Campus

Village-Raysan, Gandhinagar, Gujarat, India

Tel: +91 79 23275833

Email: director@saarc-sdmc.org Website: https://saarc-sdmc.org

Indian Tsunami Early Warning System

The Indian Tsunami Early Warning Centre (ITEWC) established at Indian National Centre for Ocean Information Sciences (INCOIS), Hyderabad, under Ministry of Earth Sciences is the national authority to issue tsunami advisories for India. The ITEWC functions as an approved Tsunami Service Provider of the IOTWS that is an integral part of the Global Tsunami Warning and Mitigation System, established and coordinated by the Intergovernmental Oceanographic Commission (IOC) of UNESCO.²⁶⁶

Tsunami Programme of IOC-UNESCO

Regional tsunami warning systems operating within different ocean basins are the building blocks of the end-to-end tsunami warning and mitigation system, coordinated by IOC-UNESCO as a global "system of systems." The service framework within each regional tsunami warning system ideally is comprised of National Tsunami Warning Centres (NTWCs) / Tsunami Warning Focal Points (TWFPs) in each Member State receiving tsunami forecast information from one or more Tsunami Service Providers (TSPs). The TSPs operate 24x7 to rapidly detect large earthquakes using real-time seismic networks, assess tsunamigenic potential, monitor

tsunami waves using real-time sea-level networks and distribute agreed-upon products to NTWCs/TWFPs operating within the ocean basin or sea. The approved Tsunami Service Providers that are currently operating under the IOC-UNESCO framework for the IOTWS are given below:

Joint Australian Tsunami Warning Centre (JATWC)

Website: http://www.bom.gov.au/tsunami

Indian Tsunami Early Warning Centre (ITEWC)

Website: http://www.tsunami.incois.gov.in/TEWS/

Indonesian Tsunami Early Warning System (InaTEWS)

Website: http://rtsp.bmkg.go.id

Asian Disaster Reduction Center (ADRC)

ADRC was established in Kobe, Japan, in 1998 with the mission of enhancing the disaster resilience of its member countries, building safe communities, and creating a society where sustainable development is attainable. ADRC works to build disaster-resilient communities and to establish networks among countries through personnel exchanges and a variety of other programs. ADRC addresses the issue of DRR from a global perspective in cooperation with a variety of UN agencies and international organizations.

Asian Disaster Reduction Center

Higashikan 5F, 1-5-2 Wakinohamakaigan-dori

Chuo-ku, Kobe 651-0073, JAPAN

Tel: +078 262-5540 Fax: +078 262-5546 Email: rep@adrc.asia

Website: https://www.adrc.asia/

U.S. Government Sources

U.S. Agency for International Development (USAID)

USAID is committed to responding to crises around the world to help people and places most in need. They aim to:

• Promote Global Health

- Support Global Stability
- Provide Humanitarian Assistance
- Catalyze Innovation and Partnership
- Empower Women and Girls

USAID produces a monthly "USAID Newsletter," available digitally: https://www.usaid.gov/news-information/newsletter. More information and updates from USAID are available on Facebook (@USAID), Instagram (@uasid), Twitter (@usaid), and YouTube (USaidVideo). Website: https://www.usaid.gov/

USAID's Bureau for Humanitarian Assistance

USAID/BHA provides timely and extensive reporting on foreign disaster events and response efforts. Regular products for an internal U.S. Government audience, including the DoD, include alerts and situation reports, which are available via email mailing lists. Information products for public use, such as Fact Sheets and Program Maps, are available on USAID.gov (https://www.usaid.gov/humanitarian-assistance) and posted on social media. To learn more about USAID's work in different countries, visit https://www.usaid.gov/humanitarian-assistance/where-we-work.

Pacific Disaster Center

Pacific Disaster Center (PDC) has trademarked an early warning and decision support system called DisasterAWARE®. DisasterAWARE® is primarily for disaster management practitioners and senior decision makers. It supports DRR and best practices throughout all phases of disaster management from early warning to multi-hazard monitoring. It has a collection of scientifically verified, geospatial, data and modeling tools to assess hazard risks and impacts. A restricted version of DisasterAWARE is the EMOPS (Emergency Operations) system, which is specifically for the disaster management community, including government agencies and humanitarian assistance organizations serving at local, state, federal, and regional levels.²⁶⁷

PDC also provides a public version, Disaster Alert, which offers open access to a world

map documenting 18 hazard types.²⁶⁸ Disaster Alert also has a free, early-warning app to receive customizable, maps-based, visual alerts regarding active hazards. The app offers a global notification system covering natural and manmade hazards. It is available on both iPhone and Android.²⁶⁹

Website: https://www.pdc.org/ and https://www.pdc.org/disasteraware/

Emergency Operations (EMOPS) system (request account): https://disasteraware.pdc.org

All Partners Access Network (APAN)

APAN is the Unclassified Information Sharing Service for the U.S. DoD. APAN provides the DoD and mission partners community space and collaboration tools to leverage information to effectively plan, train, and respond to meet their business requirements and mission objectives. APAN's technology team has been supporting HADR operations for over 15 years.²⁷⁰ APAN has played an integral role in the success of disaster responses, such as the 2015 California Wildfire Response and the 2013 Typhoon Haiyan Response in which they provided organizations and militaries a centralized location to share information, increase situational awareness and decrease response time and duplicated efforts for best practices in HADR services.

Website: https://www.apan.org/

Joint Typhoon Warning Center (JTWC)

JTWC provides advanced warning for U.S. Government agencies and organizations.

Website: https://www.metoc.navy.mil/jtwc/jtwc.html

Daniel K. Inouye Asia-Pacific Center for Security Studies (DKI-APCSS)

DKI-APCSS is a U.S. DoD institute that addresses regional and global security issues by inviting military and civilian representatives of the U.S. and Asia-Pacific nations to its program of executive education and workshops.

Website: https://dkiapcss.edu/

The Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM)

The CFE-DM is a U.S. DoD organization established by the U.S. Congress in 1994 and is a direct reporting unit to USINDOPACOM. CFE-DM provides training and education to help U.S. and foreign military personnel navigate complex issues in disaster management and humanitarian assistance. They produce country focused disaster management reference handbooks, after action reports, best practices, and lessons learned for advancement in response coordination. CFE-DM also works to improve cross-coordination, reduce duplication of efforts, and promote U.S. involvement in civil-military consultations and dialogues with relevant humanitarian and disaster response parties such as UN OCHA and the Changi Regional HADR Coordination Centre (RHCC). CFE-DM provides resources and updates at its website, as well as via their Facebook (cfedmha) and Twitter/X (@cfedmha) accounts.

Website: https://www.cfe-dmha.org/

Disaster Management Reference Handbooks are available for download at: https://www.cfe-dmha.org/Publications/Disaster-Management-Reference-Handbooks

Civil-Military Coordination in Foreign Disaster Relief Missions: Best Practices for Information Sharing is available here: https://www.cfe-dmha. org/Publications/Best-Practices-Pamphlets

INFRASTRUCTURE

The geographical dispersion of the country, in conjunction with its widely distributed population, has historically posed challenges to the implementation of large-scale infrastructure projects. Development initiatives have predominantly focused on the island or atoll level, particularly transportation and public utilities. Notably, the government has made substantial investments in communication technology, ensuring that modern wireless telecommunications are accessible to all citizens. To further bolster its infrastructure. the government envisions the establishment of a comprehensive sea and air transport network to connect the islands, with a specific emphasis on facilitating the efficient transportation of passengers and cargo. Furthermore, the government aims to establish regional trade hubs by leveraging regional and international ports.²⁷¹

Despite ongoing investment and development, the impacts of climate change present a substantial long-term challenge to the nation's vital infrastructure, encompassing transportation, communication, healthcare, water and sanitation, and energy systems. The country's infrastructure is situated close to the coast and is constantly exposed to coastal hazards such as sea swells, storm surges, and associated coastal flooding. In the Maldives 2020 NDC, it is outlined that the country aims to enhance infrastructure resiliency through climate-proofing critical infrastructure, improving the National Building Code, integrating climate change considerations into development

planning, and preserving and restoring mangrove ecosystems, among other initiatives.²⁷²

Transport

The transportation sector is crucial in ensuring access to essential goods like food, fuel, and medicine and in facilitating the delivery of social services such as health care, higher education, and employment.

Established in 2018, the Ministry of Transport and Civil Aviation (MoTCA) serves as the primary government entity entrusted with the responsibility of formulating and enforcing policies and regulations pertaining to land, sea, and air transportation. With a core mission to establish a transportation system that is safe, sustainable, efficient, and cost-effective, MoTCA aims to contribute to the socioeconomic progress and overall well-being of the people of Maldives.²⁷³ The MoTCA oversees the Maldives Civil Aviation Authority (CAA), Air Accidents Investigation Bureau, and the Corporate, Land Transport, and Maritime Transport Departments.²⁷⁴

Under the government's Strategic Action Plan (2019-2023), the "island life" program, Jazeera Dhiriulhun, aimed to encourage sustainable living in coherence with the island environment, emphasizing connectivity and the effective management of natural resources. The Jazeera Dhiriulhun goals for transportation are detailed in Figure 25.²⁷⁵

The Maldives Transport and Contracting



Figure 25: Strategic Transport Goals under the Jazeera Dhiriulhun Concept

Company (MTCC) was established in December 1980 as Maldives' inaugural public company. As a prominent marine and land transport service provider, MTCC is primarily involved in civil and marine construction. The company's scope of services encompasses infrastructure development, construction, dredging, reclamation, public transport, logistics, and engineering and docking services.²⁷⁶ The MTCC offers inter-island ferry services but bears significant financial losses. Exorbitant operational expenses and inconsistent infrastructure contribute to deficiencies in public transportation systems. The absence of a dependable, secure, cost-effective, and efficient public transportation system constrains the movement of people, commodities, and services, impeding social and economic progress and undermining sustainable development.

Airports

The CAA's primary objective is to formulate and implement policies and regulations to promote the safe, secure, orderly, and economically viable development of aviation in Maldives.²⁷⁷

The country has 19 airports serving international and domestic flights.²⁷⁸
International airports include Gan International Airport, Hanimaadhoo International Airport, Maafaru International Airport, Maamigili Villa International Airport, and Velana International Airport (VIA). Domestic airports include Baa Dharavandhoo, Dhaalu Kudahuvadhoo, Fuvahmulah, Ifuru, Kaadedhdhoo, Kadhdhoo, Kooddoo, Kulhudhuffushi, Laamu, and Thimarafushi.²⁷⁹

Table 11 displays the names, codes, elevations, runway lengths, and surfaces of Maldives' main airports.²⁸⁰

VIA is the primary international airport, situated on Hulhulé Island in North Malé Atoll. It has the capability to accommodate over 3 million passengers annually. The airport is governmentowned and operated by Maldives Airports Company (MAC). In total, 28 airlines operate flights to and from 29 destinations at VIA.²⁸¹ In response to anticipated increase in passenger volume, reaching 7.5 million annually by 2030, VIA is currently undergoing a US\$1 billion expansion initiative. This expansion encompasses constructing a new passenger terminal building, a runway, a cargo terminal complex, a fuel farm, a seaplane terminal, a maintenance, repair, and overhaul facility, and a new terminal for very important persons/commercially important persons.²⁸²

In October 2022, the inauguration of the new runway situated 190 m (623 ft) from the original runway at VIA effectively doubled the airport's aircraft accommodation capacity. The new runway was designed to accommodate the world's largest wide-body aircraft, including the Airbus A380 of Boeing 747-8. The runway is equipped with instrument landing systems on both sides.²⁸³ The airport expansion project was executed by China's Beijing Urban Construction Group with a US\$373 million loan from Export-Import Bank of China as part of China's Belt and Road Initiative (BRI).²⁸⁴

The national flag carrier airline, Maldivian, holds a prominent position as the primary domestic airline in the country. It is under the ownership of Island Aviation Services Limited,

Airport	IATA/ICAO Code	Elevation	Runway Length	Runway Surface
Velana International Airport	MLE/VRMM	2 m (6 ft)	3,400 m (11,155 ft)	Asphalt on concrete
Gan International Airport	GAN/VRMG	2 m (6 ft)	3,657 m (12,000 ft)	Concrete
Kooddoo Airport	GKK/VRMO	9 m (29 ft)	1,800 m (5,905 ft)	Asphalt
Maamigili Villa International Airport	VAM/VRMV	2 m (6 ft)	1,800 m (5,905 ft)	Asphalt
Hanimaadhoo International Airport	HAQ/VRMH	1 m (4 ft)	1,220 m (4,003 ft)	Asphalt
Kadhdhoo Airport	KDO/VRMK	1 m (4 ft)	1,220 m (4,003 ft)	Asphalt
Kaadedhdhoo Airport	KDM/VRMT	1 m (2 ft)	1,220 m (4,003 ft)	Asphalt
Dharavandhoo Airport	DRV/VRMD	2 m (6 ft)	1,189 m (3,901 ft)	Asphalt

Table 11: Codes and Runway Lengths for Maldives' Main Airports

a parastatal company established in 2000 by the government. The airline's services encompass inter-island transportation through seaplane and wheelbase flights as well as international routes to India, Bangladesh, Thailand, and China. Maldivian offers multiple inter-island flights daily to 16 airports and further extends its operations to include charter flights, special medical evacuation flights, and cargo flights upon request. Moreover, the carrier can meet specific medical evacuation needs on scheduled flights.²⁸⁵ In addition to Maldivian, Villa Air, and Manta Air are domestic airlines offering air transport services to domestic and international airports. Companies like Maldivian, Manta Air, and Villa Air operate fixed-wing domestic services during night hours, mainly atolls with land runways.²⁸⁶

Trans Maldivian is recognized as the longeststanding air services operator in Maldives and has expanded to emerge as the largest seaplane operator globally, boasting a fleet of 65 De Havilland Twin Otters.²⁸⁷

Founded in November 2022, BeOnd, a Maldivian airline, is headquartered in Dubai and based at VIA. BeOnd is a joint venture formed by the Emirati investment firm Arabesque and the Maldivian hospitality company SIMDI Group.²⁸⁸ In November 2023, the airline began commercial operations. As of 2024, it runs direct flights to Maldives from cities in Australia, Austria, France, Germany, India, Italy, Japan, Kazakhstan, the PRC, Saudi Arabia, Singapore, South Korea, Switzerland, Taiwan, Thailand, the United Arab Emirates, and Vietnam.²⁸⁹

Seaports

Maldives' unique geographical characteristics and scattered population create transportation challenges, leading to a reliance on fuel-intensive and costly means of transporting people, goods, and services. Transport options between the international airport and Malé and between the airport and nearby resort islands primarily involve motorized water taxis, speedboats, and seaplanes. Boat transfers between the airport and resort islands are unavailable after sunset,

with charter seaplane services provided during daylight hours by companies such as Trans Maldivian and Maldivian Air Taxi. ²⁹⁰ Private operators dominate the service between Malé and the outer atolls. MTCC primarily facilitates public ferry services within the atolls. It is important to note that the ferry network is limited in its coverage, operates relatively slowly, is undependable, and connects only certain inhabited islands and atolls. ²⁹¹

The primary mode of inter-island transport in Maldives is through dhonis, traditional mechanized wooden boats widely utilized in the fishing, cargo transportation, and tourism industries. Resorts also frequently employ these boats to transport tourists to explore neighboring atolls.292 Additionally, bokkuras, small dingy types of dhonis, are used for loading and unloading goods and, in some cases, transporting individuals between vessels and shore or jetty areas. In many harbor areas on the islands, the shallow waters necessitate vessels anchoring away from the jetty. In such cases, bokkura are utilized for transport, with these boats also serving inter-island transportation and reef fishing.²⁹³ Dhonis and bokkura are shown in Photos 3 and 4, respectively.^{294, 295}

Malé Commercial Harbor (MCH) is the country's main international and national seaport; it is managed by Maldives Ports Limited (MPL). After Maldives Port Authority was incorporated into MPL in 2008, the capacity of MCH was expanded. As a state-owned entity, MPL is crucial in ensuring the efficient management and operation of government-owned ports and port facilities. Some of the services provided by MPL include container



Photo 3: Dhonis (Traditional Mechanized Wooden Boats)



Photo 4: A Bokkura (Inter-island Transport and Reef Fishing Boat)

unloading, cargo transfer from anchorage to boat, surveillance and physical security systems, facilitating safe passage for arriving vessels, and an online portal for tracking shipment progress. However, the dynamic and evolving nature of the environment presents ongoing challenges in meeting increasing demands and identifying opportunities for sustainable commercial development.²⁹⁶

Malé Commercial Harbor

Latitude: 4° 10' 35" N Longitude: 73° 30' 11" E

MCH encompasses a port area of 5.6 hectares (13.8 acres) with a 101 m (331 ft) berth, boasting an average draft of 10.8 m (35.4 ft). The container yard can accommodate 1,500 twenty-foot equivalent units (TEU) and has a clearing capacity of 220 TEUs. MCH plays a pivotal role in the shipping and logistics industry by providing transshipment services and facilitating cargo movement between regional ports and terminals. Situated at the northwest corner of Malé, the port currently features a quay length of 102 m (334 ft) with a depth alongside of 9.25 m (30.45 ft). Furthermore, the port is equipped

with barge quays on both the east and west ends, each approximately 75 m (246 ft) in length, with a depth alongside of 6.5 m (21.3 ft).

The storage area comprises open storage of 21,700 m² (233,576 ft²) and a covered warehouse spanning 2,900 m² (31,215 ft²). MCH serves as the focal point for all port activities, offering a comprehensive range of services, including docking, clearance, and storage requirements. The array of services and activities provided by MCH includes the management of port yards, harbor basins, wharves, and anchorages, ensuring the efficiency and effectiveness of all port operations. The harbor accommodates various types of cargo at the berth, excluding dry bulk cargo, liquefied petroleum, and gases. Table 12 lists the available berths at MCH.²⁹⁷

Hulhumalé International Terminal

Latitude: 4° 13' N Longitude: 73° 32' E

Hulhumalé International Terminal (HMT), established by MPL, represents a significant strategic initiative featuring terminal facilities that fully adhere to International Ship and Port Facility Security (ISPS) standards. The terminal is crucial in facilitating the unimpeded flow of cargo, thereby mitigating container congestion at MCH. Furthermore, it plays a pivotal role in supporting the country's economic activities and developments stemming from the ongoing urbanization and housing projects on Hulhumalé Island. The terminal boasts an open storage capacity of 500 TEUs, complemented by two warehouses measuring 278 m² (3,000 ft²), and equipped with five plug points for reefer containers. Notably, the port is a primary hub for handling and storing perishable cargo. With

Berths	Length (LOA)	Draft at Quay	Maximum Allowable Size of Vessel	Allowable Draft
Alongside berth (Magathu Faalan)	101 m (331 ft)	10.5 m (34 ft)	15,000 tons displacement 150 m (LOA) (492 ft)	9 m (29.5 ft)
Eastern Quay -1 (east)	92 m (301.8 ft)	3.5 m (11 ft)	60 m (LOA) (196.8 ft)	3.5 m (11 ft)
Eastern Quay -2 (south)	53 m (173.8 ft)	3.5 m (11 ft)	60 m (LOA) (196.8 ft)	3.5 m (11 ft)
Western Quay -1 (east)	121 m (396.9 ft)	3.5 m (11 ft)	60 m (LOA) (196.8 ft)	3.5 m (11 ft)
Western Quay -2 (south)	78 m (255.9 ft)	3.5 m (11 ft)	60 m (LOA) (196.8 ft)	3.5 m (11 ft)
Western Quay -3 (west)	79 m (259 ft)	3.5 m (11 ft)	60 m (LOA) (196.8 ft)	3.5 m (11 ft)

Table 12: List of Available Berths at Malé Commercial Harbor

a total berth length of 180 m (590.6 ft), HMT operates cutting-edge equipment regularly maintained to uphold the safety and integrity of cargo and personnel. Additionally, HMT offers customers access to port vehicles for rental purposes and express and re-shifting services.²⁹⁸

Kulhudhuffushi Regional Port

Latitude: 6° 62' N Longitude: 73° 06' E

Kulhudhufushi Regional Port (KRP) commenced operations on 5 December 2005. Situated on Kulhudhufushi Island, recognized as the economic center of the North, the port functions as a pivotal point for managing domestic and inter-island maritime trade as well as distribution activities within the northern region. KRP has a built-in area of 11,350 m² (122,170 ft²) and a berth length of 200 m (656.17 ft). It plays a crucial role in facilitating the transportation of goods and merchant trade from Malé to the northern region. The port offers equipment rental services for local businesses in anticipation of locally owned cargo handling equipment, in addition to providing benefits such as accessible warehousing facilities for up to 10 days and a 30% tariff concession on all imported goods for customers clearing goods through Kulhudhufushi Ports Limited (KPL). Furthermore, the port has recently inaugurated maintenance services for locally-operated speedboats and is developing related industrial services to the logistics value chain. There are plans to expand the port to accommodate cargo directly from India through the Cochin Ferry Link. This initiative will provide direct access to new Indian markets for perishables and other consumer goods and yield substantial benefits for the island communities and the commercial sector.299

Hithadhoo Ports Limited

Latitude: 0° 36' 29" S Longitude: 73° 05' 16" E

Hithadhoo Regional Port (HRP) is situated in Addu Atoll and commenced operations in July

2009. The facility offers a stacking area of 5,400 m² (58,125 ft²), a built-in area of 130 m (426.5 ft), and a warehouse area spanning 1,725 m² (18,567 ft²). As the second port developed by MPL and wholly owned by the state-owned company, Hithadhoo Ports Limited (HPL), HRP serves as a pivotal distribution hub in the southern region for containerized and general cargo. The port facilitates commercial cargo handling and storage-related services, catering to businesses and industries established in the area. HPL's primary objective is to streamline logistics and transportation for businesses, ultimately leading to reduced costs. To encourage cargo processing directly through HRP, a 30% tariff concession is provided on all import goods cleared from HPL. This reduction in the overall cost of goods cleared through HRP aims to incentivize businesses operating in the region to ship their goods more closely to the markets. Furthermore, the port offers accessible storage facilities for up to 10 working days as an added incentive to utilize HRP, thereby minimizing the cost of warehousing and double handling through MCH. The port is continuously developed in compliance with the ISPS code to ensure a sustainable port environment for merchants.³⁰⁰

Maamigili International Port

Latitude: 3° 48' N Longitude: 72° 84' E

Maamigili International Port (MIP), which commenced operations in 2018, is located in the South Ari Atoll, known for its thriving tourism industry. The port accommodates vessels of up to 7,000 deadweight tonnage and features a quay wall spanning 450 m (1,476.4 ft). MIP boasts extensive land for storing and handling dry break-bulk and general cargo. It houses essential facilities such as a bonded warehouse, cold storage, and facilities for managing cargo sourced from the numerous resorts in the Ari Atoll region. Moreover, MIP has undergone significant expansion, allowing for the berthing of liveaboard vessels exceeding 20 m (65.6 ft) in length. Notably, the port maintains ferry connections to Malé.301

Roads

The country has 93 km (57.78 miles) of paved roads. This figure comprises 60 km (37.28 miles) in Malé, 16 km (9.94 miles) in Addu Atolls, and 17 km (10.56 miles) in Laamu. It is worth noting that the roads on the islands predominantly consist of compacted coral.³⁰²

Limitations on motor vehicle use predominantly characterize transportation infrastructure in Maldives due to the small size of many islands. Only a select number of the islands are large enough to support automobiles. The roadways in Malé and those on the airport island are predominantly constructed from brick and are generally well-maintained. Likewise, the dirt roads found on resort islands are also well maintained. In Malé, roadways tend to be congested, thus the primary modes of transportation are by foot, utilizing the local bus system, or by availing the services of the abundant taxi network, which operates on a fixed-fee basis for individual journeys.³⁰³

In 2024, Malé has been seeing a surge in vehicle registrations, with over 118,000 vehicles registered, among which more than 1,000 are operating without proper registration. The government has initiated the 'Green City' program, encompassing reforms in vehicle registration, regulations for controlling the vehicle population, and improvements in public transportation. This program aims to render the streets of Malé safer and more conducive for travel and pedestrian movement.³⁰⁴

Railways

There is no rail network in the archipelago.³⁰⁵

Waterways

There are no streams or rivers in islands of Maldives.³⁰⁶ Maldives is characterized by expansive marine channels, referred to locally as kandu, which separate the various atolls within the archipelago. These channels exhibit considerable variability in depth and width, reflecting the dynamic geomorphological processes shaping the region's coral reef ecosystem. While Maldives has many channels

that pass through the ring-shaped coral reefs of its atolls, some of the main channels are Kardiva Channel (Kaashidhoo Kandu), Veimandu Channel, Huvadhoo Channel (Huvadhu Kandu), and Equitorial Channel (Addu Kandu). Figure 26 shows a map of these channels.³⁰⁷ The Eight-Degree Channel delineates the maritime boundary between Maldives and India. This

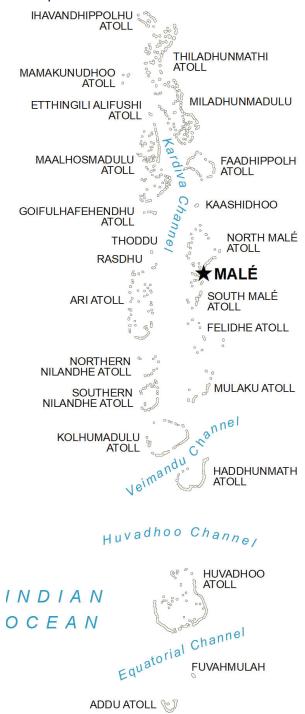


Figure 26: Map of Atolls and Channels of Maldives

channel separates the islands of Minicoy (India) and Maldives. It is traditionally referred to as Maliku Kandu and Māmalē Kandu. Its designation as the Eight-Degree Channel derives from its geographical position along the 8-degree line of latitude north of the equator.³⁰⁸

Schools

The GoM places importance on education. Free schooling is provided for every child through grade 12 (up to age 18), and, as of 2019, a free education policy provides funding for free undergraduate degrees within the country and student loans for studying abroad. 309, 310 In 2021, the youth literacy rate for males aged 15-24 years was 100%, and it stood at 99% for females of the same age cohort.311 The literacy rate in the Dhivehi language among adolescents is nearly universal, with over 90% being literate also in English. The National Assessment of Learning Outcomes (NALO) for 2017 found that results dropped for Dhivehi and Mathematics and improved slightly in English for Grade 4, while there was an improvement in Grade 7. Girls have shown higher performance than boys in Mathematics, English, and Dhivehi.³¹²

Maldives features two co-existing education systems: traditional Islamic schools, which use Dhivehi as the medium of instruction, and modern schools, which gradually integrate English into their curriculum. The country's educational landscape encompasses government, community, public-private partnerships, and private schools. These institutions cover primary, lower secondary, and higher secondary education, as well as bachelor's and master's levels of tertiary education. Primary education typically begins at the age of 5 years and spans five years, while middle education, which concludes the compulsory school program, takes an additional five years to complete. Secondary education mainly focuses on grades 11 and 12, after which students may progress to tertiary education.

Consistent quality of education is a primary concern. The geographic divide between atolls and urban centers also poses challenges in implementing and monitoring a national

school curriculum, leading to a noticeable disparity in school performance and educational quality. Consequently, students in certain atolls demonstrate lower academic performance than their counterparts in other areas, as reflected in the average pass rate at the lower-secondary level, which is nearly 20% lower in the atolls compared to Malé.³¹³

Many adolescents have limited access to higher secondary education, which is offered in only 59 out of 212 schools, presenting a significant obstacle for those unable to pursue further education without relocating to a different island. Some outer island schools do not offer a full range of courses. Schools in Malé offer more high-level courses, including classes on business and commerce. 314

Despite seeing a 62% increase in enrollments for bachelor's degrees and higher education levels, from 2019 to 2022, nearly one-third of youth aged 17 years are out of school, a figure that is higher in the outer atolls, where 33% of boys and 35% of girls are out of school.³¹⁵ Limited opportunities for skills development, quality education, and employment have resulted in many young people in neither education, employment, nor training. In 2019, 26.6% of 15-19-year-olds and 10.9% of 20-24-year-olds who fall within the labor force were unemployed. In 2016, 23.5% of youth were not in education, employment, or training, and the majority of these youth were females aged 20-24 years.³¹⁶ Technical and Vocational Education and Training (TVET) programs for at-risk secondary school students strive to address the challenges related to the school-to-work transition. However, the transition process remains challenging due to the absence of soft skills and comprehensive training in technical and academic programs, inadequate linkages between tertiary education institutions and private firms, substandard teaching in TVET, a lack of competency- and outcome-based curriculum, and limited career guidance and counseling services.317

The higher education sector in Maldives is experiencing growth with the presence of two public universities, two public colleges, ten private colleges, and two polytechnics. There are over 200 registered higher education institutions, with 35 offering diploma and higher qualifications programs; however, the absence of a governing mechanism or regulation poses a significant challenge to their effective governance. UNICEF supports the MoE and National Institute of Education (NIE) in developing educational materials, training educators, and ensuring all materials undergo a fact-checking process before implementation in classrooms. UNICEF also organizes teacher training sessions for NIE, enabling the institution to tackle capacity-related challenges and enhance the quality of teacher training programs.³¹⁸ In Maldives, all educators must possess a minimum of a bachelor's degree in education and are mandated to register within two years of finishing the program. The minimum requirement of a diploma has significantly improved the learning gaps between the outer islands and Malé.319

Disaster Risk Reduction in the Education Sector

The MoE plays an important role in DRR. In accordance with DMA 2015, the MoE "should include disaster information, DRR, and preparedness concepts into school curriculum and implement it," and "implement policies and

programs to ensure that schools are safe from disaster risks."³²⁰

The School Safety Advisory Committee (SSAC) serves as the national policy-making entity entrusted with formulating comprehensive policies on school safety. Chaired by the MoE, the committee comprises representatives from key governmental entities such as the Ministries of Health, Finance, Housing, and Home Affairs and the MNDF, MMS, and MPS. SSAC is pivotal in providing strategic guidance and directives to educational institutions to enhance their preparedness and response capabilities. The responsibility of executing school preparedness initiatives rests with the MoE's School Health and Safety Section. Figure 27 illustrates the MoE's national and school level planning, preparedness, and response framework.321

In collaboration with NDMA, the MoE incorporates DRR into primary and secondary school curricula. The underlying principle is that educating children on responding promptly during an emergency will encourage parents and adults to react more swiftly and appropriately. NDMA, in conjunction with its local and global partners, conducts School Awareness Programs and Mock Drills that engage hundreds of students annually.^{322, 323}

The CBDRM 2.0 Program aims to foster community-based disaster risk management

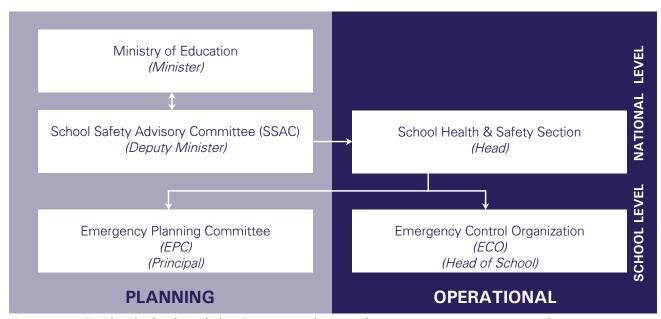


Figure 27: National and School Level Planning, Preparedness, and Emergency Response Framework

and integrates DRR strategies across all islandlevel sectors, with a special emphasis on schools through the adoption of Schools Emergency Operations Plans (SEOP). These plans lay down a systematic framework for emergency management in schools.

The MoE, in collaboration with the UNDP Maldives, has formulated the "School Emergency Preparedness & Response Guide" to serve as a standardized framework for every school within the country. Each SEOP must incorporate an Emergency Control Organization and devise comprehensive training programs for staff and students. The primary objective is to ensure effective communication, swift response, and utmost safety in an emergency. The SEOP is required to address a range of potential emergencies to include:

- Fire on school grounds
- Fire in surrounding vicinity
- Explosion / Risk of Explosion / Chemical Explosion
- Flooding
- Sea swell
- Loss or failure of utilities
- Ferry disaster
- Bus disaster
- Earthquake
- Tsunami³²⁴

At the school level, the Head of School serves as the focal point for the SEOP, and this person oversees various aspects such as planning, logistics, and finance. The Emergency Planning Committee (EPC) operates under the Head of School and is tasked with the responsibility of preparing the school for emergency situations. This involves the formulation of the SEOP and the implementation of the plan through the organization of regular drills and training exercises for designated teams. The EPC typically comprises members from parent-teacher associations, head teachers, senior administrators, parents, and student leaders.

The UNDP's "Reducing the Loss of Lives of School Children from Tsunamis in Asia-Pacific Region" program has reached a significant portion of island communities. In 2023, with backing from the Government of Japan, UNDP conducted tsunami evacuation drills in seven schools, involving 4,000 students, to improve preparedness, promote awareness, and mitigate the impacts of tsunamis. Photo 5 shows students and teachers from the Meemu Atoll School, Kolhufushi Atoll, participating 2018 tsunami drill and training.³²⁵



Photo 5: Teachers and Students Conducting Tsunami Drill and Training

Communications

Maldives has undergone significant growth in the telecommunications and information and communications technology (ICT) sector over the past two decades, attributable to widespread public acceptance and adaptability to technological advancements, as well as substantial investments in the sector. While the most significant advancements have been observed in mobile telephone services, overall connectivity has played a crucial role in reducing geographical disparities within the country. The increased adoption and utilization of ICT infrastructure and services have reshaped the social and economic landscape of the nation and offer opportunities to tackle developmental challenges. Furthermore, there is a concerted effort to digitize governance systems with the aim of enhancing public service delivery.326

There is a well-developed national communications network, and in recent years investments have allowed it to extend to outer islands, following a period when commercial considerations had focused investment in Malé and at tourist resorts. Home-grown and partly government-owned, Dhiraagu is the country's dominant multi-media, telecoms, and communications company with mobile, internet, data, fixed-line, financial, logistics, and television services throughout the Maldives. The country's second-largest communications company is Ooredoo Maldives, which provides voice, data, broadband, content, and enterprise services; it accounts for about half of the country's mobile subscribers. 328

While the mass media is somewhat lively and debates some political and economic policies quite freely, there are strictures on criticism of Islam and government policies on religion that lead to self-censorship and legal troubles for some media outlets. The Communications Authority of Maldives (CAM) is the government agency responsible for both corporate oversight and regulatory action for licensing, standards, and international coordination.³²⁹

Telephones

As of May 2024, Maldives counted as many as 12,543 fixed-line telephone subscriptions, with 9,478 in the Malé region and 3,065 in the outer islands. Furthermore, there are 769,319 mobile-cellular subscriptions, with approximately 555,160 pre-paid subscriptions.³³⁰ In recent years, the country has seen modern, digital communications infrastructure extend to the outer islands, and at least two mobile providers have extended Long-Term Evolution (LTE) service to major parts of the country.

Maldives integrated 5G with the expansion of Ooredoo Maldives' 5G mobile service available to 60% of the country's population; the telco company's 5G delivers download speeds of up to 1 Gigabit per second.³³¹ This launch is a partnership between Qatar-based Ooredoo Group and Huawei – a Chinese multinational conglomerate technology corporation in the ICT field – to upgrade mobile networks to 5G in countries where Ooredoo operates, including Maldives. Ooredoo is deploying Huawei's 5G

SingleRAN radio system with Massive Multiple-Input Multiple-Output technology and its 5G Cloud Core solution.³³²

For international connectivity, Maldives is a landing point for the Dhiraagu Cable Network, NaSCOM, Dhiraagu-SLT Submarine Cable Networks, and WARF submarine cables providing connection to Sri Lanka and another to India. Additional cables link the main atolls, and a 1,200 km (745.65 miles) nationwide system connects the islands.³³³ There are three satellite earth stations, all Intelsat (Indian Ocean).³³⁴

Internet Access

As of May 2024, Maldives recorded 96,497 fixed broadband users and 359,646 mobile broadband users.335 Mobile networks' median internet connection speed was reported at 72.98 megabits per second (Mbps), while the median speed for fixed broadband connections was 11.44 Mbps. In 2024, Maldives exhibited an internet penetration rate of 83.9%. Wi-Fi accessibility is predominantly found in hotels, resorts, and cafes, reflecting the increasing integration of digital connectivity in tourism infrastructure. The quality and speed of Wi-Fi services can exhibit considerable variability based on geographic location; however, it is generally observed that most tourist areas offer reliable Wi-Fi access. In contrast, accommodations situated on local islands may present limitations in terms of Wi-Fi availability, highlighting a potential disparity in digital connectivity across different communities.336

In 2022, backed with debt financing from the ADB, Dhiraagu inaugurated the Sea-Me-We 6 (SMW6) submarine cable system in Maldives, marking a significant milestone in the country's telecommunications landscape. This initiative represents the first instance in the nation's history where a Maldivian digital service provider has assumed the role of co-owner within SMW6, a global submarine cable consortium. The SMW6 system is a global digital superhighway, utilizing advanced undersea cable technology, linking Southeast Asia, the Middle East, and Western Europe across 11 countries, from Singapore to

France. The project is anticipated to significantly improve the quality and resilience of digital services in Maldives. The completion of the SMW6 submarine cable system is anticipated in early 2026.³³⁷

A 2018 U.S. State Department report noted that the government generally does not restrict or disrupt access to the internet or censor online content; nonetheless, there have been reports of government or police monitoring private online communications without appropriate legal authority. The CAM is the regulatory body mandated to enforce internet content restrictions on sites hosted within the country and to block domestic access. CAM reportedly maintains an unpublished blacklist of offending websites and is said to have accepted requests from ministries and other government agencies to block websites that allegedly violated domestic laws on anti-Islamism, pornography, child abuse, sexual and domestic violence, and other prohibitions.³³⁸

Mass Media

The media landscape comprises both government and private entities, with the former being regulated by the state-body known as Public Service Media. While non-state media outlets have reported instances of political pressure, evidence suggests that journalists often navigate a precarious environment characterized by threats and violence, mainly emanating from political factions. This atmosphere poses significant challenges to journalistic integrity and freedom, highlighting the complexities associated with media operations in a politically charged context.³³⁹

Print

- Mihaaru Dhivehi-language newspaper; website in English and Dhivehi (https:// mihaaru.com/)
- On-line
- Maldives Independent English-language news website (https://maldivesindependent. com/)
- Sun Online English- and Dhivehi-language news website (*https://en.sun.mv/*)

 Miadhu – Dhivehi- and English-language news website (https://www.miadhu.mv/home)

Broadcast

- Public Service Media state-run, multimedia agency (http://www.psm.mv/)
- Television Maldives (TVM), Dhivehi
 Raajjeyge Adu (Radio), Dhivehi FM, YES
 TV, maldeeb (print), Dheenuge Adu (radio),
 Majlis TV, Munnaaru (TV), Sun FM (radio),
 and Maldives TV
- Raajje TV private, general entertainment, sports, and news station (https://raajje.mv/ en)
- Sangu TV private, news-focused, digital TV (satellite/cable)
- VTV private, general entertainment TV (satellite/cable)³⁴⁰

Social media platforms are widely used, including Facebook, Instagram, LinkedIn, and X. These platforms serve as significant tools for communication, networking, and information sharing among the Maldivian population.³⁴¹

In Reporters Without Borders' 2024 World Press Freedom Index, Maldives received a score of 52.36, positioning the country at 106th out of 180 nations evaluated.342 The constitutional freedom of the press in Maldives, as stipulated in Article 28, guarantees journalists the right to withhold the identity of their sources. However, this safeguard is undermined by the Evidence Act, which took effect in January 2023. This act empowers the courts to compel journalists to disclose their confidential sources, and failure to comply can lead to imprisonment for up to three months. Consequently, journalists in Maldives face significant challenges in upholding transparency, as they often resort to selfcensorship to avoid retribution from extremists and corrupt entities. Additionally, there are ongoing concerns regarding the potential for retribution from extremist groups when tackling topics that touch on religious sensitivities.³⁴³

Journalists in contemporary contexts report encountering threats of violence as a direct consequence of their investigative work, with a notable prevalence of these threats originating from Islamist militant groups. In November 2018, a significant development in examining journalist safety was through the establishment of the Presidential Commission on the Investigation of Murders and Enforced Disappearances. In September 2019, through its findings, the commission confirmed that journalist Ahmed Rilwan, who was reported missing in 2014, had been abducted and subsequently murdered by a local affiliate of Al-Qaeda. Furthermore, the commission's report indicated that there was interference in the police investigation by officials from the preceding administration, highlighting systemic issues in the protection of journalists and the integrity of investigative processes. The Maldives Media Council and the Maldives Journalist Association are pivotal in addressing these issues and safeguarding the autonomy and safety of journalists.344

Post

Maldives Post is a government-owned entity that operates under the Universal Postal Service Obligation, aiming to deliver comprehensive postal services both domestically and internationally. As the national postal operator, Maldives Post maintains a network comprising 14 Atoll Post Offices and 172 agency offices, ensuring accessibility to postal services on all inhabited islands. In addition to traditional letter and parcel delivery, Maldives Post also offers an array of financial and agency services encompassing utility payments, money orders, passport applications, insurance, and stock exchange services.³⁴⁵

In addition to the services provided by Maldives Post, various private parcel delivery companies and couriers, such as FedEx and DHL, also operate within the region.

Utilities

The geographic and demographic dispersal of Maldives has historically posed significant challenges to implementing large-scale utilities infrastructure projects. Consequently, the nation has relied on resorts and industries to develop facilities on islands outside of Malé and Addu City. The MCCEE is responsible for overseeing national energy policy and water and sanitation policy, including planning and execution. Over the past four decades, energy demand has exponentially increased, driven largely by the rapid economic expansion in sectors such as tourism, fisheries, maritime transport, and construction. The country lacks domestic fossil fuel reserves and is heavily dependent on imported liquid fossil fuels for electricity generation, industrial applications, transportation, and cooking. The GoM is committed to mitigation of greenhouse gas (GHG) emissions and to addressing climate change. The adoption of renewable energy sources — including solar, wind, and ocean energy — is gaining momentum within the country.

Separately, three decades of advancements in water and sewage services have transitioned the nation from an exclusive reliance on rainfall catchment to a hybrid system that combines rainfall catchment and desalination for water supply. Despite these developments, approximately 30% of the population still lacks piped water, and about 13% do not have access to safe wastewater disposal. Additionally, the steady degradation of groundwater quality has heightened reliance on costly desalination processes, while coastal waters are increasingly jeopardized by pollution resulting from inadequate wastewater management.

The GoM has developed a framework centered on the "One Island-One Resort" concept. This paradigm emphasizes the design of resort islands to be wholly self-sufficient, ensuring that each island operates independently regarding its power generation, sewage management, water resources, and ancillary support systems. Such a model raises concerns about vulnerability, as any disruption to these fundamental infrastructures could result in the complete isolation of the resort islands from necessary resources and services.³⁴⁶

Power

Maldives has had universal access to electricity since 2008.³⁴⁷ However, the cost of electric power continues to be elevated due to various structural challenges. These challenges are primarily attributed to the nation's heavy reliance on imported diesel and the operation of isolated, island-based electrical grids. The overarching vision for the energy sector is framed around ensuring "sufficient, reliable, sustainable, secure, and affordable energy for a prosperous Maldives." This vision is structured upon three foundational pillars: energy efficiency, the proliferation of renewable energy, and technological innovation.

The framework for advancing Maldives' vision within its energy sector is primarily anchored in two significant policy instruments: the Energy Policy and Strategy of 2016 and the SAP 2019-2023. These documents delineate comprehensive strategies to promote sustainable energy practices, enhance energy security, and facilitate the transition towards renewable energy sources in alignment with national development goals.³⁴⁸ In its 2020 updated NDC under the Paris Climate Agreement, Maldives established an ambitious objective to reduce GHG emissions by 26% by 2030. The country also pledged to make substantial efforts towards achieving net zero emissions by the same target year, reflecting its commitment to addressing climate change and promoting sustainability.³⁴⁹

The Energy Department, operating under the MCCEE, is responsible for formulating and implementing policies pertaining to the energy sector. This department is pivotal in enhancing international cooperation to stimulate investment and increase awareness regarding energy resources and consumption. The Energy Department is structured into two primary sections: the Policy and Sector Development section and the Energy Technology Development section.

The Policy and Sector Development section has a multifaceted mandate that includes implementing laws and regulations, formulating sector strategies, identifying optimal energy sources to meet domestic demand, and managing carbon-neutral policies, including the facilitation of the Clean Development Mechanism (CDM). The CDM permits emission-reduction projects in developing nations to earn Certified Emission Reduction (CER) credits, where each credit corresponds to one ton of carbon dioxide (CO₂). These credits can be traded, providing a mechanism for industrialized nations to achieve a portion of their emission reduction obligations under the Kyoto Protocol (1997) of the United Nations Framework Convention on Climate Change (UNFCCC).

The Energy Technology Development section minimizes energy misuse and waste. It provides advisory support to government entities and legal sectors concerning efficient energy utilization, low-carbon development strategies, and adopting renewable energy technologies.³⁵⁰

Established in 2020, the Utility Regulatory Authority succeeds the Maldives Energy Authority (MEA) and functions as a semiautonomous entity within the framework of the MCCEE, while operating under the guidance of a Governing Board appointed by the Civil Service Commission. Its core mandate includes the establishment of tariffs, as well as the formulation and implementation of guidelines and regulations designed to ensure the reliability and security of energy grids. Furthermore, the Authority is tasked with safeguarding consumers' and service providers' rights and obligations, thereby promoting a balanced and equitable energy sector in the Maldives.³⁵¹

Electricity generation in Maldives relies on a combination of fossil fuels, solar energy, wind power, and ocean tidal energy. There is significant potential for producing green hydrogen fuel and leveraging surplus renewable energy generated across the islands. Maldives is considering replacing some of its diesel consumption with liquefied natural gas (LNG), which is anticipated to be more cost-effective and efficient. As of 2022, the installed generating capacity for electricity stood at 566,000 kilowatts (kW), with total consumption reaching 821.397 million kilowatt-hours (kWh). Notably, the transmission and distribution losses

are recorded at 25.867 million kWh. Also in 2022, coal imports reached metric ton, while the consumption of refined petroleum was approximately 14,000 barrels per day.³⁵³

Fuel imports constitute approximately 10% of Maldives' GDP, with an estimated 50% of imports allocated toward electricity generation.³⁵⁴ In 2022, Maldives imported approximately US\$79 million of petroleum gas. The primary sources of petroleum gas imports were Oman, the United States, Saudi Arabia, Iraq, and the United Arab Emirates.355 Electricity generation within the Greater Malé Region constitutes approximately 63% of the total electricity consumption across all inhabited islands. Notably, all inhabited, commercial, and tourist resort islands benefit from a continuous 24-hour electricity service. Projections indicate that the annual electricity demand is expected to grow at a rate exceeding 8.5% annually. The escalating electricity requirements of the Greater Malé Region predominantly influences this growth.³⁵⁶

Electricity in Maldives is mainly provided by State Electric Company Ltd. (STELCO) for inhabited islands in the Malé region, while FENAKA Corporation Ltd. provides services to the outer islands. STELCO and FENAKA are under the auspices of the MoF but operate by regulations established by the former MEA. FENAKA operates 151 powerhouses throughout the islands, and STELCO oversees 35 powerhouses situated within the Greater Malé Region. The MWSC is also responsible for one powerhouse located on Dhuvaafaru in Raa Atoll. Various island councils operate the remaining powerhouses.

Island resorts can generate and supply their electricity, exempting them from the standard utility tariff structure. The resort islands typically feature a diesel power generation capacity of approximately 144 megawatts (MW). The total installed diesel generation capacity across all inhabited islands is approximately 290 MW. These powerhouses function intermittently, aligning their operations with the requirements of island tourism, specifically for guest accommodation.³⁵⁷ These electricity service

providers design, install, and commission electricity power systems, thereby contributing to the region's overall energy infrastructure.

Maldives is transitioning to a greener power supply, and some resorts are using hybrid power solutions to reduce their reliance on diesel. In 2019, the Greater Malé Region's installed power generation capacity reached 149.6 MW, primarily reliant on diesel generators operated by STELCO. These facilities generated 488 gigawatt hours (gWh) of electricity during that period. Concurrently, the adoption of rooftop solar photovoltaic (PV) panels in the Greater Malé Region saw significant growth, surpassing an installation capacity of 3,000 kilowatt-peak (kWp) by early 2020. The proliferation of rooftop solar PV is primarily attributed to private citizens benefiting from a net-metering tariff scheme and initiatives undertaken by the private sector through power purchase agreements with STELCO. Similar trends in the expansion of PV technology have been observed across various islands within the nation. Figure 28 illustrates the growth trajectory of renewable energy in the Maldives since 2008, highlighting the transition towards more sustainable energy sources.³⁵⁸

The Accelerating Sustainable Private Investments in Renewable Energy (ASPIRE) project, financed by the World Bank, prominently supports solar infrastructure developments. A subsequent initiative was tendered in 2019, wherein a fixed price of US\$0.109 per kWh was established for 15 years, supplemented by a capital cost buydown component offered by the selected project winner. In total, 21,000 kWp units are undergoing pre-qualification, including 10,000 kWp allocated for floating PV systems. The Accelerating Renewable Energy Integration and Sustainable Energy (ARISE) project collaborates with critical stakeholders, including the MoE, STELCO, and FENAKA. ARISE's objective is to enhance solar power generation capabilities and fortify the infrastructure necessary for the effective integration of electricity derived from solar energy. The solar installations implemented under the ASPIRE and ARISE projects generate

Evolution of Renewable Energy Installations in Maldives(kilowatt)



Figure 28: Evolution of Renewable Energy Installations in Maldives (by kilowatt)

42.5 MW, contributing meaningfully to the nation's 2020 target of achieving 51 MW solar power capacity.³⁵⁹

In 2014, the Maldives launched the Preparing Outer Islands for Sustainable Energy Development (POISED) project, aimed at transitioning the diesel-based energy systems of at least 160 islands to hybrid solar PV-diesel systems. This initiative, undertaken by the GoM in collaboration with the ADB, represents a strategic move towards replacing inefficient diesel power generation with hybrid renewable energy solutions. The project is designed to significantly reduce CO, emissions and alleviate the fiscal burden associated with ongoing government subsidies for diesel fuel. POISED's primary objective is to facilitate the installation of at least 21 megawatts-peak (MWp) PV capacity across the outer islands, promoting sustainability and reducing reliance on fossil fuels. The effectiveness of the POISED project can be evaluated through the deployment of solar-PV-battery diesel hybrid systems, which have shown fuel savings of up to 28% compared to traditional diesel-only generator sets. These findings highlight the economic viability of renewable energy investments, emphasizing their potential to mitigate financial risks associated with energy production in Maldives.³⁶⁰ Photo 6 depicts 90% of solar PV installations completed at Addu City as part of the POISED project as of 16 August 2016.361

On 6 August 2024, the South Asia Regional Energy Partnership (SAREP) was formally

inaugurated as a collaborative initiative between MCCEE and USAID. This partnership aims to enhance energy security, expand energy access, and promote regional cooperation throughout South Asia. The partnership reflects a strategic approach to addressing the region's energy challenges, fostering collaboration, and facilitating the transition towards sustainable energy systems. Photo 7 depicts the launch of the SAREP Maldives.³⁶²



Photo 6: Solar Photovoltaic Installations at Addu City



Photo 7: Inauguration of the South Asia Regional Energy Partnership Maldives

Water and Sanitation

The Water and Sewerage Act (8/2020), implemented in 2020, aims to ensure the delivery of safe and clean water to all residents. This legislative framework establishes comprehensive guidelines and procedures for protecting water resources and developing a water-sewerage infrastructure across all inhabited islands. The financial and structural aspects of water and sewerage fall under individual island councils' jurisdiction, allowing for localized decision-making. Notably, the Act emphasizes incorporating advanced technology to identify environmentally sustainable methods of service provision. It mandates the utilization of renewable energy sources in the water production process, promoting a commitment to sustainability within the sector.³⁶³

The Water and Sanitation Department is a critical entity within the MoE and works in conjunction with the Waste Management and Pollution Control Department. These departments are integral to the formulation, planning, and execution of policies and projects related to water and sanitation, highlighting their essential role in promoting sustainable environmental management and public health initiatives.³⁶⁴

Established in 1995, the MWSC was tasked with providing water and sewerage services in the Maldives. Subsequently, in 1996, the inaugural municipal water supply project commenced in Malé, marking a significant step in the country's water management efforts. Despite these advancements in the capital,

residents of the outer islands continued to depend on rainwater harvesting and groundwater resources for their domestic water needs.

Island councils are mandated to effectively regulate the utilization of water from public rainwater harvesting systems in a manner that is both sustainable and economically viable. The effective management of water resources, coupled with equitable prioritization and pricing of the

drinking water supply, is expected to mitigate significant health risks associated with periods of low rainfall. These strategies facilitate the ability of island councils to adequately finance the maintenance, repair, and replacement of essential equipment and infrastructure.³⁶⁵

Maldives experiences a significant scarcity of freshwater resources, primarily attributed to the lack of rivers or streams across its island geography. Although a few of the larger islands contain small freshwater lakes, most are characterized by swampy depressions and, in some instances, brackish water ponds bordered by mangrove ecosystems. Groundwater aquifers serve as the principal source of freshwater throughout the archipelago, highlighting the critical reliance on subterranean water resources amidst limited surface water options.

This hydrological context poses challenges for sustainable water management in the region. 366 Climate change-induced SLR and saltwater intrusion are projected to reduce the availability of safe groundwater by a minimum of 3% by the year 2030. Current data indicates that approximately 76% of households in Malé rely on bottled water as their primary source of drinking water, whereas this figure stands at 10% for households in the outer atolls. This reliance on bottled water has significant secondary implications, notably the increase in plastic waste, which is often not disposed of or recycled in an environmentally responsible manner. 367

Maldives receives an annual rainfall ranging

from 1,700-2,300 mm (67-91 inches), with a pronounced dry period from December to April. The hydrological dynamics of the region are characterized by the formation of shallow groundwater aquifers, which exist as thin lenses above saline water. The islands' permeable sandy soils contribute to the vulnerability of these freshwater lenses, rendering them susceptible to increased salinity from saltwater intrusion. Additionally, the infiltration of pesticides utilized in agricultural practices poses a further risk to the aquifer's integrity. Furthermore, the unsustainable disposal of waste and inadequate sanitation practices exacerbates the contamination of groundwater resources, resulting in limitations on the suitability of water for human consumption across many islands.³⁶⁸

Water desalination was first introduced in Malé during the 1980s and expanded to other densely populated islands, primarily in response to the significant damage inflicted on groundwater aquifers and storage facilities by the 2004 Indian Ocean Tsunami. According to the 2014 Maldives census, desalination contributes to approximately 30% of the drinking water supply in Malé and 7% in smaller inhabited islands. These desalination plants typically rely on diesel generators for their operational needs. The government is responsible for constructing these facilities, after which they are transferred to FENAKA for management and water service provision. However, the regulated water tariffs currently in place are insufficient to cover the escalating costs of diesel, resulting in considerable financial losses.³⁶⁹ The increasing demand for water supply is predominantly satisfied through the procurement of desalinated seawater, distributed directly to households, via communal tap-bays, or in bottled form.³⁷⁰

In response to the challenges posed by climate variability and the consequent depletion of rainwater storage capacities, the government initiated projects in 2015 to expand access to piped water through metered household connections beyond the capital. The increasing frequency with which rainwater storage tanks have run dry has necessitated a shift towards costly emergency water supplies obtained from

desalination facilities. Between 2017 and 2020, it was reported that, on average, 59 islands received potable water via sea transport during the dry season. The volume of water supplied during this period averaged 2,518 cubic meters (665,190 gallons) annually, incurring an average annual expenditure of Rf6.9 million (approximately US\$500,000).³⁷¹

FENAKA operates across 43 islands, where it has established a network of water supply systems. Specifically, 37 of these islands are equipped with 60 Reverse Osmosis (RO) plants, which collectively produce 5,880 metric tons of potable water per day. Additionally, 16 islands are supported by 16 rainwater purification systems, yielding a combined output of 2,808 metric tons of water per day.³⁷² Furthermore, STELCO operates seven water desalination plants as well as five sewerage networks on different islands.

Many island communities face significant challenges due to the lack of centralized or island-wide sewerage network systems. Historically, defecation practices involved athirimathi, or the utilization of natural settings, such as bushes or beaches, or shallow burial of feces within designated areas in residential backyards. Following the 1980s, various human excreta disposal systems were implemented, including waterless ash latrines, sealed pit toilets, and publicly accessible toilet blocks. However, these initiatives proved largely ineffective in addressing the critical issues of groundwater and soil contamination, highlighting the need for more sustainable sanitation solutions.³⁷³

The installation of centralized sewerage systems in Maldives commenced in 1992, utilizing simplified sewerage solutions known as small-bore sewerage systems. These systems function by collecting effluent from on-site household sewage collection tanks and directing it to nearshore marine outfalls for disposal without prior treatment.³⁷⁴ Since then, the sector has experienced substantial transformation by implementing advanced sewerage systems, including conventional gravity and vacuum sewer systems. These developments are increasingly supported by external funding, reflecting a growing recognition of the need for

improved infrastructure in the islands.

FENAKA's sewer services encompass a comprehensive operational framework across 56 islands, delivering essential administrative and maintenance support. The organization manages 23 sewage treatment plants, which are critical for sustainable waste management and community environmental protection. Additionally, FENAKA is involved in two ongoing projects overseen by the Ministry of National Planning, Housing and Infrastructure, highlighting the collaborative efforts in enhancing sewage management infrastructure within the region. This integrated approach underscores the significance of effective sewer services in promoting public health and environmental sustainability.³⁷⁵

Waste Management

The issue of solid waste management in the Maldives has become increasingly pressing, mainly due to population growth, evolving consumption patterns, transportation challenges, and the burgeoning tourism sector. Current estimates indicate that per capita waste generation varies significantly, with figures of 1.7 kilograms (kg) (3.7 pounds; lb), 0.8 kg (1.7 lb), and 3.5 kg (7.7 lb) recorded in Malé, the atolls, and resorts, respectively. The waste generated in the Malé region and from numerous resorts is typically transported to Thilafushi Island, where substantial amounts are stockpiled. Waste disposal is mostly conducted through open burning, which contributes to environmental pollution and poses severe risks to public health. Recognizing these challenges, the GoM acknowledges the critical need to enhance existing waste management methodologies to safeguard environmental integrity and public well-being.376

The GoM's establishment of the Waste Management Corporation (WAMCO) marks a significant advancement in managing wasterelated facilities and services within the nation. Officially commencing operations on 1 January 2016, WAMCO assumed responsibility for the waste management functions of the Greater

Malé Region, subsequently extending its reach. WAMCO provides comprehensive waste collection, disposal, and management services in Malé, Villimalé, Hulhumalé, Fuvamulah City, S. Hulhumeedhoo, and S. Hithadhoo. Furthermore, WAMCO oversees the Regional Waste Management Facility in the Northern Region, which serves as critical infrastructure for waste processing. In addition, the organization is tasked with the transport and management of waste generated from administrative islands and resorts situated within the Noonu, Raa, Baa, and Lhaviyani Atolls, ensuring a coordinated and efficient approach to waste management across these regions.³⁷⁷

Maldives is transitioning from a linear waste management model characterized by a "use and dispose" paradigm to a more sustainable circular economy framework called the waste-towealth approach. This transformative strategy is integrated into the national SAP. It is supported by two World Bank-financed initiatives: the Maldives Clean Environment Project (MCEP) and the Maldives Enhancing Employability and Resilience of Youth (MEERY) Project. These projects aim to assist the government in developing a sustainable waste management system, enhancing institutional capacity, and educating the youth to establish a cleaner and safer environment for the Maldives. While investments in waste management infrastructure and the prohibition of single-use plastics are critical components of this strategy, the segregation of waste at the source has been identified as the foremost priority in waste management solutions, and it is mandated by law. Implementing adequate waste segregation and pre-processing distinct waste streams at the source are pivotal in minimizing the volume of residual waste that necessitates expensive transportation. Moreover, these practices significantly augment the quantity of materials eligible for recycling and reuse, thereby contributing to the overarching goals of sustainability and circularity within the nation's waste management framework.³⁷⁸

HEALTH

Maldives' healthcare landscape and health outcomes have demonstrated notable improvements over recent decades. Comprehensive essential health services are accessible across all inhabited islands, reflecting a commitment to universal health coverage (UHC). Maldives operates a universal health insurance program, Husnuvaa Aasandha, managed by the state-owned entity Aasandha Company Ltd. (Aasandha). As of 2023, the country boasts a life expectancy of 80.14 years, surpassing the global average of 73.3 years. This data underscores the effectiveness of the Maldivian healthcare system and its impact on public health.³⁷⁹ The mortality rate for children under 5 years of age has significantly declined from 86.2 deaths per 1,000 live births in 1990 to 5.6 deaths per 1,000 live births by 2022.³⁸⁰ Maternal mortality rates have significantly improved over the past two decades. The rate decreased from 114 maternal deaths per 100,000 live births in 2000 to 57 deaths per 100,000 live births by 2020.381

Malnutrition was cited as a critical health concern in the 2015 UNICEF Situation Analysis, where malnutrition is the classification for both under- and over-nutrition. Approximately 51% of children under 2 years of age receive the minimal accepted diet, meaning that nearly half of all children do not receive an adequate diet for optimal growth.382 Despite dramatic improvements in health care, including an increase in exclusive breastfeeding rates, malnutrition rates for children under 5 years of age are still high for a middle-income country. UNICEF reports that one in five children are stunted, with rates rising to one in four on more remote islands and atolls. Approximately 17% of children are underweight and more than 10% are "wasted." On the other end of the spectrum, the MoH reports 22% of first grade students are obese or overweight. Obesity in Maldives is largely due to increased consumption of packaged unhealthy foods, especially as

accessing fresh fruits, vegetables, and legumes becomes difficult due to weather patterns and seasons. Throughout the country, less than 6.5% of Maldivians eat enough healthy produce, according to the MoH.³⁸³

The notable advancement in health outcomes in the Maldives can be attributed to the implementation of vaccination campaigns targeting polio, malaria, filariasis, measles, and maternal and neonatal tetanus. The national immunization program provides vaccinations against 12 distinct diseases and specialized vaccination offerings pertinent to Hajj-related travel.³⁸⁴ In 2019, the Human Papilloma Virus (HPV) vaccine was introduced through a schoolbased campaign and has been integrated into the routine immunization schedule for girls aged 10 years and older since 2020. The Pneumococcal Conjugate Vaccine (PCV) and the Rotavirus vaccine are set to be incorporated into the immunization schedule in 2024.

To extend vaccination benefits to adults across the life course, Maldives plans to incorporate the Tetanus-Diphtheria (Td) vaccine for women of childbearing age, administering it every 10 years as part of the routine immunization framework. The Maldives Technical Advisory Committee has also recommended the annual influenza vaccine for high-risk groups and healthcare providers, with plans for implementation underway.

Maldives achieved vaccination coverage exceeding 85% among the eligible population aged 12 years and older for the first dose of the COVID-19 vaccine, while more than 66% of this population received both doses.³⁸⁵ Furthermore, Maldives has maintained high routine immunization coverage for children, even during the COVID-19 pandemic.³⁸⁶ These efforts have been complemented by high vaccination coverage and rigorous quality surveillance, which collectively underpin the region's success across public health initiatives.

The GoM is committed to achieving the SDGs by 2030. The country ranked 67th of

167 countries in the 2024 Global Sustainable Development Report, with a score of 70.9, just above the East and South Asia regional average of 66.5. 387 Scores may be interpreted as a percentage of achievement; thus, a 100 indicates the SDGs have been achieved. Figure 29 depicts Maldives' achievements and remaining challenges related to SDG health targets, where green represents success exceeding the set target; the columns from left to right are "value," "year," "rating," and "trend," where "value" represents the metric per indicator. 388

Maldives is particularly susceptible to the projected adverse effects of climate change, which encompasses various health-related ramifications. Climate change significantly influences the social and environmental determinants of health, including the availability of clean air, safe drinking water, adequate nutrition, and secure shelter. Within the Maldivian context, critical health risks associated with climate change include heat stress and the proliferation of vector-borne diseases.

In recent years, diseases such as dengue fever, scrub typhus, and toxoplasmosis have re-emerged; this development can be directly linked to climate change dynamics. Additionally, flooding poses substantial threats to health outcomes, exerting extensive indirect effects through disruptions in food production, water supply, and contamination and hindering healthcare logistics and the overall ecosystem integrity.³⁸⁹ The country is addressing a number of remaining health challenges, including:

- Increased incidence of non-communicable diseases (NCD) (i.e., cardiovascular disease, cancer, diabetes, and chronic respiratory diseases)
- Malnutrition
- Incidence of tuberculosis (TB) detection
- Ageing population
- Emerging infectious diseases
- Healthcare workforce development and retainment
- Household and ambient air pollution

Health Care System Structure

The healthcare system in Maldives is structured into a three-tier system, encompassing 1) primary health centers located on individual islands; 2) secondary care facilities, which include specialty hospitals situated at the atoll level; and 3) tertiary care services concentrated in urban or central regions. There are four tertiary-level hospitals in the country. Two

institutions are privately operated - ADK Hospital and Treetop Hospital - while the remaining are public facilities - Indira Gandhi Memorial Hospital (IGMH) and Addu Equatorial Hospital (AEH).

Located in the capital city of Malé, IGMH functions as the principal tertiary referral hospital within the nation with approximately 300 beds and 21 departments, and it is usually at 100% occupancy. Located in Addu City, the AEH commenced operations in January 2020

SDG3 – Good Health and Well-Being			
Maternal mortality ratio (per 100,000 live births)	56.7 2020	•	1
Neonatal mortality rate (per 1,000 live births)	3.7 2022	•	1
Mortality rate, under-5 (per 1,000 live births)	5.6 2022	•	1
Incidence of tuberculosis (per 100,000 population)	39.0 2022		→
New HIV infections (per 1,000 uninfected population)	0.0 2022	•	1
Age-standardized death rate due to cardiovascular disease, cancer, diabetes, or chronic respiratory disease in adults aged 30–70 years (%)	11.6 2019	•	1
Age-standardized death rate attributable to household air pollution and ambient air pollution (per 100,000 population)	32 2019	•	•
Traffic deaths (per 100,000 population)	1.3 2021	•	1
Life expectancy at birth (years)	79.9 2021	•	1
Adolescent fertility rate (births per 1,000 females aged 15 to 19)	5.1 2019	•	
Births attended by skilled health personnel (%)	99.5 2017	•	
Surviving infants who received 2 WHO-recommended vaccines (%)	98 2022	•	>
Universal health coverage (UHC) index of service coverage (worst 0–100 best)	61 2021	•	+
Subjective well-being (average ladder score, worst 0–10 best)	5.2 2018	•	

Figure 29: Maldives' Sustainable Development Goals Health Targets Status (2024)

as a 100-bed tertiary healthcare facility following its transformation from the Addu Equatorial Center. This institution serves an essential role in providing medical care to the residents of the four southern atolls of the Maldives: Addu, Fuvahmulah, Gaafu Dhaal, and Gaafu Alif.³⁹⁰

The two privately-owned tertiary hospitals exhibit constraints in their surgical capabilities, offering only a limited range of general and orthopedic procedures. Furthermore, these institutions do not possess dedicated trauma units. They are equipped with minimal intensive care unit (ICU) beds, which may impact their capacity to manage critically ill patients effectively.

Maldives' healthcare system has six regional hospitals, and 14 atoll hospitals, which serve as the initial referral points for healthcare services. Additionally, there are 23 public hospitals, and 164 health centers.³⁹¹ A fully operational health center supports each inhabited island. However, the regional hospitals and health centers do not uniformly provide the same services, leading to disparities in healthcare accessibility and quality across different regions.³⁹² The geographic dispersion of the islands presents significant challenges in accessing essential healthcare services, as well as the necessary supplies, medications, and medical equipment for the population.

In 2021, Maldives recorded 10,824 medical personnel, comprising 7,906 local professionals and 2,918 expatriates, according to MBS. This workforce includes 2,132 allied health professionals, 1,187 doctors (including specialists), 3,078 nurses, 4,228 non-medical staff, and 199 other personnel.³⁹³ The country's healthcare system grapples with significant challenges, notably a high turnover rate and the necessity of ensuring the quality of the health workforce. These issues are critical to maintaining an effective and responsive healthcare system.³⁹⁴

The MoH aims to ensure comprehensive health services for all Maldivians. The MoH is primarily responsible for formulating national health policies and strategies, facilitating the delivery of health services, ensuring public health protection, and governing health regulations to provide high-quality healthcare services.³⁹⁵ The MoH is also responsible for managing public health emergencies and is critical in coordinating response and recovery efforts alongside various agencies and partners.

The HPA operates under the MoH in accordance with the Public Health Protection Act 7/12. The HPA's primary mission is to ensure health security and safety across the nation. As the leading national agency responsible for public health administration and planning, the HPA plays a critical role in managing public health initiatives and emergencies. The agency collaborates with local governments, health sector entities, NGOs, and the private sector to enhance the nation's capacity to respond effectively to disasters and public health crises. Its responsibilities encompass developing and maintaining an emergency preparedness and response plan specific to the health sector. The HPA fosters relationships with international health organizations, provides pertinent information and recommendations to governmental bodies, and engages with response organizations to facilitate coordinated health interventions.396

The HEOC was established in April 2018 by the MoH, with the support of the WHO, to facilitate the coordination and management of public health emergency responses and relief operations. Functioning within the MoH, the **HEOC** operates the Public Health Warning System and oversees the management of data and information during public health emergencies. It serves as a central command and control facility tasked with the comprehensive preparedness and management of health emergencies. WHO's support for the HEOC encompasses essential resources, including satellite communication equipment, video conferencing capabilities, a mobile generator, laptops, and specialized training programs. Notably, the system is designed to integrate with global satellite networks, enhancing its operational effectiveness and enabling seamless communication during crises.397

Figure 30 depicts an overview of the emergency management system within the Maldives' health sector.³⁹⁸

Aasandha, a state-owned entity tasked with managing the government's healthcare financing services, also plays a crucial role in the emergency evacuation of patients.³⁹⁹ The emergency evacuation process involves the coordination of local health centers to facilitate the transfer of patients needing urgent medical services to the nearest facility equipped to provide the necessary treatment. This operation requires rapid communication and efficient decision-making, as it must integrate the activities of referring centers, receiving facilities, sea ambulances, speedboat operators, and aviation services. The primary objective is to ensure that patients receive the required medical attention with minimal delay, thereby optimizing outcomes in emergencies.400

On 1 March 2024, Maldives achieved a significant advancement in its Emergency Medical Transport Services by introducing air ambulance operations facilitated by two aircraft provided by Island Aviation. The current fleet designated for this service consists of a Dash 8 domestic airplane and a seaplane, both of which have been retrofitted for air ambulance roles. The Dash 8 is configured to accommodate two emergency patients, whereas the seaplane is limited to transporting a single patient. The air ambulances are equipped with essential medical equipment necessary for emergency care. The operational team is comprised of 15 trained medical professionals, including five doctors and five nurses, ensuring a high standard of medical assistance during transit.

Plans are also being developed to expand the reach of Maldivian air ambulance services to international destinations, enhancing access to medical treatment abroad. In collaboration with the Sri Lankan government, Maldivian authorities are engaged in discussions aimed at streamlining the approval process for transporting critical patients to Sri Lanka. The discussions have culminated in new arrangements that enable Maldivian seaplanes

to secure the required approvals to transport patients to Sri Lanka within a two-hour timeframe, a substantial improvement over the previous waiting period of 6-24 hours. This initiative marks a pivotal enhancement in the efficiency of medical transport for urgent cases within the region.⁴⁰¹

Health Strategies and Surveillance

The GoM has established a comprehensive long-term objective to enhance the health and well-being of its population, which aligns with the SDGs. This commitment is articulated in the National Health Master Plan (2016–2025). The government seeks to achieve this overarching goal through close collaboration with various health partners, concentrating on three specific outcomes:

- Fostering trust in the national healthcare system
- Mitigating disease and disability prevalence among the population
- Addressing inequities in access to healthcare services and pharmaceuticals⁴⁰²

The WHO plays a pivotal role in the enhancement of Maldives' health system by providing comprehensive technical assistance and collaborating with the MoH through the framework of the Country Cooperation Strategy (CCS). The WHO CCS serves as a guiding document that complements the government's ongoing health system development initiatives, offering both technical and policy support. The CCS aligns with the National Health Master Plan 2016-2025, WHO's Thirteenth General Programme of Work 2019-2023, the Regional Flagship Priorities, and the 2030 Agenda for Sustainable Development while also addressing the nation's Development Agenda Goals.⁴⁰³

On 17 October 2024, the WHO CCS for 2024-2029 was launched in collaboration with the MoH. The development of the CCS is underpinned by five strategic priorities: 1) addressing prevalent health issues within various

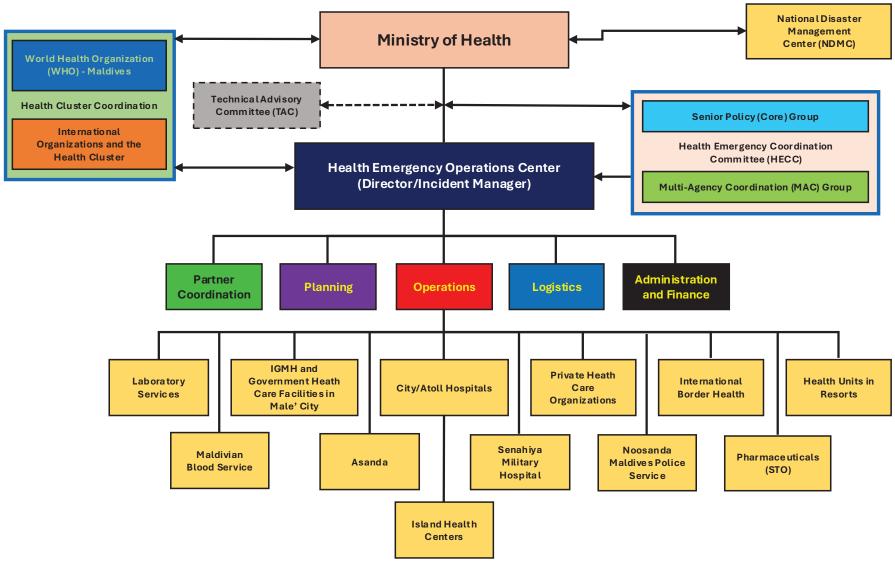


Figure 30: Health Sector Emergency Management System

sectors, including community, business, and trade; 2) investing in foundational healthcare services; 3) ensuring accessibility for individuals facing barriers to healthcare access; 4) strengthening the national healthcare system; and 5) enhancing the resilience of the healthcare system in response to health emergencies and unforeseen challenges.⁴⁰⁴ This strategic orientation seeks to promote a more robust and responsive health infrastructure in the Maldives.

According to the 2021 Global health Security Index, Maldives scored 32 out of 100, in which 100 represented the most favorable health security conditions and 0 represents the least favorable conditions. This score earned Maldives a rank of 118th of 195 countries assessed. The country's score for 'Detect' and 'Respond' are 20.8 and 35.3, respectively, where 'Detect' is higher than the global average of 32.3, and 'Respond' is lower than the global average of 37.6.405

In September 2024, Maldives concluded its second Joint External Evaluation (JEE) of the International Health Regulations (IHR) core capabilities in partnership with WHO.⁴⁰⁶ The outcomes of the evaluation are poised to inform the development of a new National Action Plan for Health Security (NAPHS), which seeks to expedite the implementation of interventions necessary for sustaining and reinforcing IHR core capacities. The NAPHS adopts One Health, all-hazards, whole-of-government, and societal approaches. A salient issue identified during the evaluation was the challenge of addressing misinformation and disinformation. This finding underscores the critical need for regular risk communication strategies from the MoH in collaboration with designated media focal points across the country. To address this challenge, the MoH implemented the District Health Information System 2 (DHIS2) to enhance public health information management. 407

Communicable Diseases

Maldives is burdened with the following communicable diseases:

Coronavirus Disease (COVID-19)

On 7 March 2020, Maldives reported its initial COVID-19 cases, two foreign workers at the Kuredu Island Resort & Spa who tested positive for the virus. The outbreak is believed to be linked to the first imported case within Maldives, which was identified at the same resort. In response to the outbreak, a temporary lockdown was instituted on Kuredu Island, enabling the GoM to initiate contact tracing and mass testing efforts. Subsequently, a State of Public Health Emergency (SPHE) was declared on 12 March 2020 under the Public Health Act. 408 Due to extensive vaccination coverage within the population and a corresponding decline in disease severity, the SPHE was officially rescinded in March 2022.

The country recorded its first fatality on 29 April 2020, marking a significant escalation in the pandemic. By the end of that month, Maldives had documented 396 confirmed COVID-19 cases. To curb the spread of the virus, the GoM extended the closure of all government offices from 30 April until 14 May, in conjunction with a 14-day extension of the lockdown in the Greater Malé Region. These measures were implemented as part of a broader strategy to contain the COVID-19 outbreak in the nation. The country had closed its border from 01 April to 14 July. However, the country opened to international visitors on 15 July 2020, with visitors subject to undergo a nucleic PCR test result 96-hours prior to their scheduled departure from their origin of embarkment. 409

The U.S. significantly contributed to the COVID-19 response in Maldives by donating more than 128,700 doses of the Pfizer-BioNTech vaccine. Additionally, the U.S. committed US\$4.6 million to support the country's recovery efforts related to the pandemic. The donation included an in-kind contribution of 60 portable ventilators, essential for treating severe cases of COVID-19.⁴¹⁰

In response to the COVID-19 pandemic, Maldives initiated its vaccination program on 1 February 2021, following extensive training sessions for healthcare workers and receiving vaccine donations from the COVAX Facility. Maldives' program was applauded for its inclusive approach, as it provides free vaccinations to all residents, including migrant workers, regardless of their legal status, aged 18 years and over. As of 6 October 2024, Maldives had documented a cumulative total of 186,694 confirmed cases of COVID-19. As of 10 March 2023, 951,511 doses of COVID-19 vaccines had been administered in the country, with 399,225 individuals receiving at least one dose. This represents approximately 73.85% of the population having initiated vaccination.

Dengue

In mid-2024, the HPA reported a significant rise in the incidence of dengue fever in Maldives. A comparative analysis of April and May data indicates that dengue cases rose from 244 in April to 610 in May 2024. 414 The HPA emphasized that similar seasonal trends were observed during the previous year, suggesting a recurring pattern in dengue transmission during this period. The surge in cases predominantly affected the Greater Malé Region and Kaafu, Haa Alif, and Baa atolls. In 2019, HPA took proactive measures to address increases in both dengue and chikungunya cases, including efforts to eliminate mosquito breeding sites by deploying insecticides and fogging techniques. It is noteworthy that dengue outbreaks typically coincide with the rainy season (May to November), exacerbating the public health challenges faced by the region.⁴¹⁵ This pattern underscores the need for continuous monitoring and intervention strategies to mitigate the impact of vector-borne diseases. Preventive measures for dengue fever are crucial in mitigating the transmission of the disease. Recommended strategies include applying mosquito repellent, ensuring that doors and windows remain closed during dawn and dusk — the peak activity periods for mosquitoes — and disposing of containers, such as cans and bottles, that can accumulate stagnant water. These water-filled containers create optimal breeding grounds for mosquito populations.

HIV/AIDS

The first case of AIDS in Maldives was documented in 1991. The HIV prevalence rate is low; between 1991 and 2018, the country reported 25 cases of HIV among Maldivians. 416 As of 31 December 2022, there have been a total of 40 reported cases of HIV/AIDS, comprising six women and 34 men. Among these cases, 15 individuals have succumbed to the disease, while 22 are currently receiving medical treatment. Antiretroviral therapy (ART) for HIV/AIDS has been implemented in Maldives since 2004, with the treatment provided at no cost to patients as part of the national healthcare initiative aimed at preventing the progression of HIV. Additionally, preventive measures, specifically pre-exposure prophylaxis (PrEP), are also accessible within the nation to mitigate the risk of HIV transmission.417

In July 2019, the WHO confirmed that Maldives has successfully eliminated mother-to-child transmission (MTCT) of both HIV and syphilis. This achievement marks Maldives as the second country within the WHO South-East Asia Region to attain this status, following Thailand. Worldwide, MTCT of HIV is responsible for approximately 9% of new infections. The prevention of mother-to-child transmission has been a pivotal component of the National Strategic Plan for the Prevention and Control of HIV/AIDS 2014-2018, underscoring the country's commitment to reducing transmission rates and improving maternal and child health outcomes.⁴¹⁸

Tuberculosis

TB is an infectious disease caused by Mycobacterium tuberculosis, a bacterium that primarily affects the lungs. TB is categorized as a relatively low-burden disease within the country; however, there is a notable rise in cases of multidrug-resistant TB (MDR-TB). As reported in SDG 3, "Good Health and Well-Being," the incidence of TB stands at 39 cases per 100,000 population.⁴¹⁹ The prevalence of TB cases is primarily linked to risk factors such as smoking, alcohol consumption, and diabetes. In 2021, the

treatment success rate for newly diagnosed and relapse cases was 77%, based on a cohort of 87 individuals. The persistent incidence of TB cases in the country can be attributed to several interrelated factors:

- Overcrowding and substandard housing conditions prevalent in Malé contribute significantly to the transmission of the disease, particularly among most inhabitants.
- Existing case-detection initiatives have proven inadequate, leading to delayed diagnosis and treatment.
- The screening protocols for the migrant population, especially those hailing from countries with a high prevalence of TB, lack rigor.
- The persistent stigma associated with TB within the local community hinders individuals from seeking timely medical attention.

The ramifications of ineffective case management have resulted in a notably low treatment success rate, which has facilitated the emergence of MDR-TB within the nation. Furthermore, the lack of an effective TB surveillance system and robust data management processes has compounded these challenges. The issues of underreporting and missed cases stem from insufficient data management capabilities, alongside a lack of coordination between private and government healthcare facilities. These systemic deficiencies underscore the need for comprehensive strategies to improve TB management and control.

Measles

The WHO declared the successful eradication of measles in Maldives in 2017; however, the country experienced a resurgence of measles cases in July 2023. The HPA reported that an individual was diagnosed with measles on 26 July 2023. The agency's case investigation highlighted that the patient contracted the virus despite receiving two doses of the measles vaccine during international travel. The HPA implemented a comprehensive strategy to prevent further

disease transmission in response to this case. This response included rigorous contact tracing and notifying potentially exposed individuals to receive vaccination against measles, thereby mitigating the associated health risks. Measles, a highly contagious viral disease, primarily spreads through respiratory droplets produced when an infected individual coughs, sneezes, or speaks. Measles can be transmitted via contaminated surfaces by infected individuals. Common symptoms of measles include a high fever, cough, runny nose, red eyes, and a characteristic red rash that initially appears on the face and then spreads downward. 422 While measles can impact individuals of all ages, children are particularly susceptible to the disease.

Non-Communicable Diseases

NCDs, including hypertension, diabetes, and cervical cancer, represent a predominant source of mortality and morbidity, accounting for approximately 70% of total deaths in 2020.423 Effective control and management of NCDs require the establishment of comprehensive screening protocols, early diagnostic measures, appropriate treatment strategies, and robust follow-up procedures. Figure 31 illustrates the top 10 causes of death, mostly attributable to NCDs, which are denoted by the color blue. 424 According to the Institute for Health Metrics and Evaluation, the top 10 risk factors contributing to death and disability in Maldives combined are high blood pressure, malnutrition, tobacco, high fasting plasma glucose, dietary risks, kidney dysfunction, high body-mass index, occupational risks, high cholesterol, and air pollution. 425

Maldives operates under Sharia law, which includes a prohibition on alcohol consumption. Regulations prohibit visitors from bringing alcohol into Maldives and are strictly forbidden for Maldivian citizens on non-resort islands and in the cities. ⁴²⁶ In 2020, the World Bank Group reported the annual per capita alcohol consumption is 2.3 liters of pure alcohol for males aged 15 years and above. ⁴²⁷

Communicable, maternal, neonatal, and nutritional diseases Non-communicable diseases				
Cause	2011 rank	2021 rank (Change in deaths per 100k, 2011-2021	
Ischemic heart disease	2	1	↓ -1.2	
Stroke	1	2	↓ -6.2	
COVID-19	•	3	↑ +42.1	
COPD	3	4	↓ -2.8	
Chronic kidney disease	5	5	↑ +1.4	
Diabetes	7	6	+0.1	
Alzheimer's disease	9	7	+ +2.0	
Lower respiratory infect	6	8	↓ -3.4	
Neonatal disorders	4	9	↓ -11.0	
Cirrhosis liver	10	10	↓ -0.3	

Figure 31: Top 10 Causes of Death (2011-2021)

Tobacco consumption is a significant public health challenge. According to data from 2019, the prevalence of smokers was 31% of the adult population (individuals aged 15 years and older), with 46.5% of males and 7.3% of females smoking. Among the youth (ages 10-14 years), the smoking prevalence was observed to be 9%, with 8.5% of males and 10.5% of females smoking. Maldives signed the WHO Framework Convention on Tobacco Control on 17 May 2004 and ratified the Convention on 20 May 2004. 428 The Tobacco Control Act (Act No. 15/2010) serves as the principal legislative framework for tobacco control efforts. This Act regulates various aspects of the tobacco trade, encompassing the importation, exportation, wholesale distribution, and retail sale of tobacco products. Additionally, it establishes stringent requirements for the packaging and labeling of these products.429

Training for Health Professionals

Retention and turnover of health professionals places a financial strain on Maldives' health care system. After gaining experience, local medical professionals often leave to work in regions with higher pay, leading to a brain

drain. Consequently, foreign medical professionals must be recruited, which often comes with higher costs. In 2018, the MoH, with assistance from the Pakistani government, offered its first medical degree through the School of Medicine at Maldives National University (MNU). The School of Medicine is the country's first medical school to provide the necessary education and training in the field of medicine. The School of Medicine offers a comprehensive undergraduate medical degree, the Doctor of Medicine (MD), which spans five vears of instruction. The curriculum is modeled after the national framework of Universiti Kebangsaan Malaysia

(UKM) and is executed with technical oversight from UKM.430

Prior to the development of the medical college, the Faculty of Health Sciences (FHS) at the MNU was the only facility that provided in-country health training. FHS continues to offer various educational programs across diverse disciplines, including public health, primary health care, occupational health and safety, health service management, medical laboratory science, counseling, psychology, social work, physiotherapy, and pharmacy. 431 Through the MNU's School of Medicine and other health training programs the MoH aims to encourage local medical professionals to join and remain in the workforce.

In collaboration with the WHO, the HPA developed a comprehensive National Action Plan for Field Epidemiology. This strategic fiveyear plan consists of three primary objectives: establishing a Field Epidemiology Training Program (FETP), advocating for enhancing the significance of field epidemiology, and recruiting and training skilled personnel within this domain. These objectives are designed to institutionalize ongoing training in field epidemiology, thereby integrating it into national health systems and creating defined career trajectories for health professionals.⁴³²

WOMEN, PEACE, AND SECURITY

The 2023 Women, Peace and Security (WPS) Index report released by the Georgetown Institute for Women, Peace and Security ranked Maldives 72nd of 177 countries assessed, with an index score of 0.720 on a scale of 0 to 1, with 0 being low and 1 being high.⁴³³ The WPS Index measures the country's inclusion, justice, and security variables.

In 2023, the labor force participation rate among females in Maldives was 42.6%, versus 78.6% for males within the age demographic of 15 years and above. ⁴³⁴ In 2024, women held only three seats in the People's Majlis, and three of 22 cabinet ministers were women. A positive step forward was the amendment of the Decentralization Act (2019), introducing a quota of 33% for the representation of women in local councils. ⁴³⁵

Maldives ratified the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) in July 1993. 436 The country is obligated to report to the CEDAW Committee every four years. The CEDAW is a landmark international agreement that affirms the principles of fundamental human rights and equality for women worldwide. As of April 2022, 189 countries were parties to the CEDAW Convention. 437

In 2000, UN Security Council Resolution (UNSCR) 1325 on WPS was adopted, marking the first formal acknowledgment by the Council of the distinct impact of armed conflict on women and the crucial significance of integrating gender perspectives into all UN initiatives concerning conflict prevention, conflict resolution, peacebuilding, peacekeeping, rehabilitation, and reconstruction. The emphasis on women's security and gender equity has been bolstered by the passing of UNSCRs 1820 (2008), 1888 (2008), 1889 (2009), 1960 (2010), 2106 (2013), 2122 (2013), 2242 (2015), 2467 (2019), and 2493 (2019).

subsequent UNSCRs also highlight the important role women can play in preventing, managing, and resolving conflict. In 2015, the UN Entity for Gender Equality and the Empowerment of Women, also known as UN Women, carried out a comprehensive global review of UNSCR 1325. The recommendations from the global study underscored the necessity to facilitate the meaningful involvement of women in peace processes, with a focus on safeguarding the well-being of women and girls during humanitarian crises and augmenting women's leadership and decision-making roles in endeavors aimed at the prevention and mitigation of violent extremism. 440

As of October 2024, Maldives is not included among the 108 nations that have developed and implemented a National Action Plan to realize UNSCR 1325 on WPS.⁴⁴¹ In a 2021 report titled "Women as Peace Builders and Agents of Change in the Maldives," the government emphasized the integral role of enhancing women's rights and fostering their active participation in peacebuilding initiatives. The report posits that applying a gender perspective in political processes is essential for cultivating improved security outcomes and advancing societal welfare.⁴⁴²

On 8 March 2022, during the UNSC Open Debate titled "Advancing the WPS: Women's Economic Inclusion and Participation as a Key to Building Peace," Ahmed Khaleel, Maldives' Minister of State for Foreign Affairs, underscored the critical significance of UNSCR 1325. He articulated that women's inclusion and active participation are essential components of Maldives' strategic approach to fostering a sustainable and peaceful society. Furthermore, he highlighted that in the face of conflict, disasters, or other crises, it is imperative for Maldives to tailor its responses—both in the immediate aftermath and in long-term recovery efforts—

toward addressing women's unique situations and needs.443

The Maldives Constitution guarantees the principle of equality between genders, explicitly asserting in Article 17 that the rights and freedoms of individuals shall not be subject to discrimination based on gender. This constitutional provision is a legal framework for gender equality in Maldives. Complementing this constitutional mandate is the Gender Equality Act (18/2016), which further delineates the mechanisms required to promote and safeguard gender equality.444

The Ministry of Gender, Family and Social Services oversees the implementation of the National Gender Equality Action Plan (GEAP) 2022-2026. The GEAP serves as a comprehensive framework designed to facilitate the implementation of the Gender Equality Act and Policy among state actors, private sector organizations, and gender advocates. The framework aims to harmonize efforts across multiple sectors to effectively translate policy into meaningful outcomes, ensuring that gender considerations are systematically integrated into development practices and organizational policies.445

Since December 2011, the UN Women program has been an integral component of the UNCT, actively promoting gender equality and women's empowerment. This organization collaborates with Maldives' national government to compile a comprehensive report on the milestones achieved concerning the CEDAW. In partnership with other UN agencies, UN Women supports the implementation of CEDAW recommendations, and the concluding observations

provided by the CEDAW Committee. The focus of UN Women Maldives is to enhance the capacities of both governmental and nongovernmental entities to advocate for and effectively implement CEDAW and other national and international frameworks to advance women's status.446 UN Women organized a workshop to discuss women's participation and leadership in peace and security as shown in Photo 8.447

On 31 January 2024, in alignment with the GoM's efforts to promote WPS, the U.S. Department of State's Bureau of Democracy, Human Rights, and Labor announced a funding opportunity for a project to enhance women's leadership and participation within Maldives' civic life and political institutions. This initiative is designed to cultivate women's leadership skills and foster empowerment, thereby contributing to establishing and maintaining effective governance and enduring democratic processes in Maldives. The program seeks to ensure that women are better informed, adequately resourced, and effectively prepared to proactively engage in civic and political activities, thereby facilitating meaningful involvement.448



Photo 8: UN Women Organized Women's Participation and Leadership Workshop in Maldives, 2016

CONCLUSION

Maldives comprises a diverse array of lowlying islands and is among the most vulnerable countries to the effects of climate change. The nation confronts SLR, coastal erosion, recurrent flooding during monsoon seasons, and severe storm surges. The repercussions of these hazards include substantial land loss, inundation of low-lying coastal regions, displacement of communities, diminished agricultural productivity, salinization of freshwater resources, adverse effects on coastal aquaculture, and the erosion of sandy shorelines. According to the World Bank's Country Climate and Development Report, projections suggest that the rate of SLR may accelerate under severe warming scenarios. This potential rise poses considerable risks for populations inhabiting low-lying islands, to include children, people living with disabilities, migrant workers, and people living in poverty. Considering these pressing challenges, the GoM has undertaken a proactive approach to climate change mitigation, as articulated in the Maldives 2020 NDC.449

The nation has undergone substantial economic development in recent decades, primarily propelled by the tourism and tourism-related sectors, which are extremely vulnerable to external shocks, both man-made and natural. SLR represents a critical threat to the nation's ongoing social and economic progression, which includes densely populated residential areas, educational institutions, healthcare facilities, and transport and communications networks. In response to these challenges, the government has implemented various coastal protection strategies to mitigate the impacts of rising sea levels, preserve the nation's coastal environments, and sustain economic growth.

The establishment of the National Disaster Management Centre, currently known as the NDMA, was a significant step toward improving the nation's disaster management and response capabilities following the 2004 Indian Ocean Tsunami. Since then, Maldives

has worked to refine its disaster management policies and frameworks. Notable initiatives include formulating the 2024-2030 DRR Strategy, the NEOP Volumes I and II, and the CBDRM program, which aim to strengthen the nation's resilience against future disasters. 450 The nation's disaster management system operates at the island, atoll, and national levels. At the national level, the NDMA is the primary agency responsible for disaster management, and it is supported by the MNDF, the MPS, and the MRC, as well as various local and international climate change, disaster management, and humanitarian organizations. 451 Moreover, the NERF, overseen by the NEOC, assumes multiple supporting and supported functions across the various ESFs during disaster response efforts. The island and atoll levels are the primary frontline in disaster response efforts, ensuring that immediate and localized interventions are coordinated and responded to in a timely manner. The CERT reports to the Island or City/Atoll Councils and is the first responder at the island, city, and atoll levels. Despite various initiatives aimed at empowering local disaster management entities, including the Decentralization Act of 2010, a lack of resources at the local level continues to impede progress.

As Maldives advances in developing its legal and policy frameworks for crisis preparedness and response, the nation is working toward transitioning from a reactive approach to a more proactive and comprehensive strategy that effectively addresses the multifaceted challenges of climate and disaster risks. 452 The evolution of crisis management highlights the critical importance of incorporating anticipatory measures into national policies. This integration aims to mitigate the impacts of unprecedented emergencies and enhance overall disaster response resilience. It further emphasizes the necessity of collaboration with both national and international organizations to strengthen these efforts.

APPENDICES

DoD DMHA Engagements in the Past Five Years (FY 2019-2024)

The list below describes the DMHA Engagements the U.S. DoD has had with Maldives in the last five years.

Building Climate Resilience in SIDS - September 2024

The "Building Climate Resilience in SIDS: Partnerships for Adaptation in the Indian Ocean Region" conference convened from 9 to 12 September 2024 in Kurumba, Maldives. The DKI-APCSS conference brought together participants from regional ministries of defense and national security agencies, specifically those tasked with climate security issues. Representatives from Comoros, India, Madagascar, Maldives, Mauritius, Seychelles, Sri Lanka, and the U.S. contributed to the discussions. The agenda comprised a series of thematic presentations delivered by SMEs on critical topics such as the intersection of climate change and national security, policy and governance frameworks for climate resilience, the development of resilient infrastructure and sustainable energy systems, the implications of climate change on asymmetric security issues, and strategies for financing climate resilience in SIDS. CFE-DM's Adaptation and Resilience Office collaborated with DKI-APCSS to provide specialized support and subject matter expertise for climate adaptation and resilience initiatives. The conference underscored the significance of cooperation among various stakeholders in addressing the challenges posed by climate change in vulnerable island nations.

48th Annual Indo-Pacific Armies Management Seminar - August 2024

The 48th annual Indo-Pacific Armies Management Seminar (IPAMS) and the 10th annual Senior Enlisted Leaders Forum was

co-hosted by the Fijian Army and United States Army Pacific (USARPAC). The theme for the conference was "Joint & Combined Operations in the Indo-Pacific Region." The event brought together senior army leaders from various countries, including Australia, Cambodia, Canada, Chile, Fiji, France, Indonesia, Japan, Korea, Malaysia, Maldives, Mongolia, Nepal, New Zealand, Papua New Guinea, Philippines, Singapore, Thailand, Tonga, the UK, and Vietnam. The leaders engaged in plenary sessions and breakout groups, participating in discussions related to peacekeeping operations, HADR, leadership development, and climate change. IPAMS is the region's longest and largest-running multinational military seminar promoting security, peace, and cooperation in the Indo-Pacific.453

Atlas Angel Exercise - August 2024

The Montana Air National Guard (MTANG), Sri Lanka Air Force (SLAF), and MNDF shared an Urban Search and Rescue (USAR) exchange in Trincomalee, Sri Lanka, from 4 to 9 August 2024. Attendees included Emergency Management and Fire Rescue personnel from Maldives, Sri Lanka, and the U.S. The MTANG and SLAF provided exchanges on High/Low angle rope rescue, patient care, patient packaging, confined space rescue, structural collapse and structural shoring. Major topics included the equipment used for each exchange, how to operate in each type of scenario, and techniques for a safe scene to get the best outcome. 454 The exercise followed the MTNG Disaster Response Senior Leader Visit, 22-26 April 2024, in which senior representatives were hosted in Montana from all four of MTNG's partner nations to participate in a senior leader visit focused on policy and operational level disaster response and DRR. Major topics included incident management team concepts, interagency coordination, civil-military interoperability, local level disaster preparation and training, local to

national policy management, and U.S. access for disaster exercises. Photo 9 shows the ICS Subject Matter Expert Exchange in Sri Lanka.

Montana National Guard Adjutant General visits Malé, Maldives - May 2024

Montana National Guard Adjutant General, Major General Peter Hronek, visited Malé, Maldives, from 4-6 May 2024, as part of a key leader visit in support of the BLACK MARLIN exercise. The visit significantly strengthened bilateral relations between the U.S. and the Maldives. The U.S. delegation, in Malé as part of the State Partnership Program's BLACK MARLIN military exercise, highlighted the U.S.' collaborative and transparent approach to its bilateral engagements in the defense sector with Maldives and expressed the intent to continue this approach in existing and new areas of engagement. 455

Strengthening City-level Emergency Management in the Maldives Workshop - May 2023

In partnership with the MTNG SPP, the CFE-DM organized the "Strengthening Citylevel Emergency Management in the Maldives Workshop," 21-25 May 2023 in Addu City, Maldives. At the request of the Maldives NDMA, the U.S. delegation provided valuable insights to local officials and first responders on disaster management tools such as the Incident Command System, EOC, and Emergency Operations Plan (EOP) through informative

presentations, facilitated discussions, and group exercises. A diverse group of 25 representatives participated in the workshop; they included City Council members, hospital, airport, and seaport authorities, police, MNDF, MRC, Family and Children Service Center, and MMS. The workshop offered a platform for participants to share their perspectives on civil-military coordination and gain insights into various disaster management approaches. The engaging discussions from all stakeholders provided crucial feedback to the City Council, supporting the development of an EOP for Addu City, which is instrumental in fostering resilient communities. 456

Joint Exercise with Maldives Coast Guard -September 2022

The U.S. Coast Guard Cutter Midgett (WMSL 757) and its crew arrived in Maldives on 23 September 2022, marking the first visit of a Coast Guard ship to the country since the U.S. Coast Guard Cutter Boutwell in 2009. During the visit, Midgett's crew engaged in professional in-port and at-sea exchanges with Maldives' Minister of Defence and the MNDF Coast Guard, further strengthening the bilateral partnership. The U.S. Coast Guard's involvement includes search and rescue, combating illegal, unreported, and unregulated fishing (IUUF), maritime environmental response, maritime security, maritime domain awareness, aviation operations, interoperability, and HADR. This interaction underscores commitment to cooperation and



Photo 9: Exercise Atlas Angel Participants

collaboration in addressing maritime challenges and enhancing regional security.⁴⁵⁷

Humanitarian Assistance and Disaster Response Training - June 2022

CFE-DM organized a three-day HADR training in Maldives from 13 to 15 June 2022. This exercise was a collaborative effort with Maldives' NDMA. The training targeted civilian-military disaster responders and drew a total of 31 participants from 18 organizations. The Maldives' Minister of Defence, Marya Didi, and the U.S. Mission to the Maldives Chargé d'Affaires, Andrea Appell, attended the event's opening. The primary objectives of the training were to enhance HADR interoperability, disseminate best practices for civil-military coordination during disasters, and expand the network of the USINDOPACOM Climate Change Impact Program.⁴⁵⁸

14th Annual Indo-Pacific Intelligence Chiefs Conference - September 2021

The Indo-Pacific Intelligence Chiefs Conference (IPICC) was co-hosted by USINDOPACOM and the MNDF on 5 September 2021. The theme for the conference was "Overcoming Global Intelligence Challenges through Partnership." The topics discussed at the conference included the impact of climate change on regional stability and military capabilities, terrorism and the threat of returning foreign fighters, maritime security challenges, grey zone challenges, and strategic competition. Representatives from Canada, France, India, Indonesia, Japan, Maldives, Mongolia, Nepal, New Zealand, the Republic of Korea, Singapore, Sri Lanka, the UK, the United States, and Vietnam participated in the conference. IPICC serves as an annual executive-level forum for the Directors of Military Intelligence from across the Indo-Pacific region. This forum is co-hosted by the USINDOPACOM Director for Intelligence and a rotating partner nation with the goal of promoting a shared understanding of regional issues and advancing multilateral and regional security cooperation on areas of interest to each

state's respective Chief of Defense. 459

Inaugural Defense and Security Dialogue -January 2021

On 5 January 2021, the U.S. DoD and the Maldives' MoD conducted their initial Defense and Security Dialogue in Malé, Maldives. Both parties agreed on effective measures to operationalize the Security and Defense Relationship Framework signed in September 2020. The U.S. and Maldives will focus on four areas: 1) exercises, 2) logistics, 3) information sharing, and 4) professional military education. Both sides agreed on activities to advance shared priorities, such as maritime security, counterterrorism, and HADR. Anthony Tata, performing the duties of U.S. Undersecretary of Defense for Policy, co-chaired the meeting alongside Maldives' Minster of Defence, Mariya Didi. The DoD commended the Maldives' success in rapidly responding to the COVID-19 pandemic, and both sides agreed to evaluate further cooperation opportunities in COVID-19 vaccine distribution. The U.S. and Maldives professed their shared commitment to a free and open Indo-Pacific region, affirmed the importance of the dialogue, and planned for the 2022 Defense and Security Dialogue. 460

Bilateral Training - December 2020-January 2021

U.S. Special Operations Forces deployed to U.S. Special Operations Command Pacific (SOCPAC) completed a three-week military-tomilitary contact with members of the MNDF on 5 January 2021. The exchange centered on communications and tactical combat casualty care. All participants had to quarantine and present as healthy during daily medical checks, which allowed hands-on medical training and a higher level of partnership and exchange. The medical training focused on tactical combat casualty care procedures, covering essential on-scene emergency response actions and culminating in a compressive medical evacuation mission profile. The communications training included sharing best practices and

participating in high-frequency and line-ofsight relay practical exercises. The exchange culminated with MNDF and U.S. service members conducting a simulated joint, combined personnel recovery operation, which featured them seizing a captured vessel and nearby port facility, recovering personnel, and demonstrating tactical combat casualty care and communications procedures. MNDF participants included members of their Special Forces, Marine Corps, Signals Battalion, and Medical Corps. Maldivian Minister of Defence Mariya Ahmed Didi, Maldivian Chief of Defence Maj. Gen. Abdullah Shamaal, U.S. Ambassador to the Maldives Alaina Teplitz, U.S. Undersecretary of Defense for Policy Anthony Tata, U.S. Deputy Assistant Secretary of Defense for South and Southeast Asia Reed Werner, U.S. Defense Security Cooperation Agency Director Heidi Grant, and SOCPAC Commander Brig. Gen. Josh Rudd observed the conclusion of the exercise. The bilateral training followed the Maldives and U.S. signing a defense agreement three months prior.⁴⁶¹

Maldives and U.S. Sign Defense Agreement - September 2020

On 10 September 2020, the U.S. Deputy Assistant Secretary of Defense (DASD) for South and Southeast Asia, Reed Werner, and the Maldives Minister of Defence, Mariya Didi, signed the "Framework for U.S. Department of Defense-Maldives Ministry of Defence Defense and Security Relationship" in Philadelphia, Pennsylvania, U.S. Marking a significant step forward in the defense partnership, the framework puts forward the intent of both countries to deepen engagement and cooperation to maintain peace and security in the Indian Ocean. DASD Werner and Minister Didi discussed U.S. support for the Maldives' response to COVID-19 and other areas of future cooperation. They agreed to work on scheduling the first Defense and Security Dialogue, and both affirmed their commitment to a free and open Indo-Pacific that promotes the security and prosperity of all nations in the region.⁴⁶²

The following month, on 28 October 2020, U.S. Secretary of State Mike Pompeo said the U.S. will establish an embassy in the Maldives for the first time since the countries started diplomatic relations in 1966.⁴⁶³

International/Foreign Relations

Since it obtained independence from Britain in 1965, Maldives' foreign policy has been based on the principles of sovereign equality of states in accordance with international law, a rule-based and inclusive international system, non-interference in the international affairs of other countries, the supremacy of diplomacy in managing and resolving global problems, and friendship with all countries based on mutual respect. Maldives retains diplomatic relations with 186 countries and maintains 16 missions abroad, in Bangladesh, Belgium, Germany, India, Japan, Malaysia, Pakistan, PRC, Saudi Arabia, Singapore, Sri Lanka, Thailand, Türkiye, United Arab Emirates, the UK, and the United States.

India

India has been a close ally of Maldives since they established their diplomatic relationship on 1 November 1965.467 There are strong cultural and social ties between the two nations, including historical links and significant Indian expatriate communities living and working in Maldives, and vice versa. India was among the first to recognize Maldives at independence in 1965. Maldives holds a significant position within India's "Neighbourhood First" Foreign Policy, which endeavors to foster stability and economic development in the Indian Ocean region. 468 India has emerged as one of the key contributors to the development of Maldives, offering substantial economic assistance for infrastructure projects, health care, and education. The prompt response extended by India during a 1988 coup attempt in Maldives established a foundation of trust and bolstered bilateral relations. Notably, India was at the forefront of assistance efforts following the 2004 Indian Ocean Tsunami and the December

2014 water crisis in Malé. In January 2020, India rapidly dispatched 30,000 doses of measles vaccine to prevent an outbreak in Maldives and provided comprehensive assistance in support of the government's response to the COVID-19 pandemic.⁴⁶⁹

India-Maldives relations were close during the leadership of Maldives' first democratically elected president, Mohamed Nashid (2008-2012); however, ties to India were set back with the 2013 election of pro-PRC President Abdulla Yameen. Under Yameen, Maldives experienced a construction boom funded by Chinese loans. The loans were a part of the PRC's BRI, Beijing's global infrastructure development strategy to invest in dozens of countries, ostensibly for mutual long-term economic gain, though skeptics are concerned with the debt risk for countries accepting Beijing's loans.

In 2018, following the election of President Solih, India-Maldives ties warmed again. During a visit to India in August 2022, Solih met with India's Prime Minister, Narendra Modi, to sign several agreements in the areas of cybersecurity; cooperation in disaster management; potential fishing zone forecast capacity building, data sharing, and marine scientific research; capacity building and training of members of local councils and the Women's Development Committee of Maldives. An Agreement for Credit Financing of Police Infrastructure in Maldives and Letter of Intent on Buyer's Credit for an additional 2,000 social housing units was also signed.470 Financial aid from India supported Maldives' mega-infrastructure development agenda, aided in Chinese debt recovery, and included a US\$1.4 billion financial assistance package. 471 India-Maldives Defence Cooperation provides training opportunities for the MNDF, meeting approximately 70% of their training requirements. The Defence Cooperation also extends to participation in joint exercises, maritime domain awareness, gifting of hardware, infrastructure development, anti-narcotics operations, search and rescue operations, and HADR exercises, among others.⁴⁷² The MNDF frequently engages in HADR, search and rescue

operations, pollution control, and various exercises facilitated by India. Additionally, India provides tailored training for the MNDF Fire and Rescue Service.

In 2023, Dr. Mohamed Muizzu was nominated as the presidential candidate, following the imprisonment of former President Abdulla Yameen on corruption charges. 473 President Muizzu's campaign, branded as "The Nation of the Maldivians (Dhiveheenge Raajje)," emphasized national sovereignty, anticorruption, and economic reform.⁴⁷⁴ Immediately after taking office, Dr. Muizzu called on Indian troops to leave Maldives, thus emphasizing a more independent foreign policy, with the aim of safeguarding national sovereignty. 475 Muizzu stated his desire for all countries to support Maldives' economic and defense requirements; these countries include India, Japan, and the United States.

PRC

Maldives' diplomatic relationship with the PRC was established on 14 October 1972 and has since grown significantly. 476 On 10 January 2024, the PRC extended an invitation to President Muizzu for an official state visit during the early stages of his presidential term. Subsequently, 20 new agreements were formalized between Maldives and the PRC, specifically pertaining to cooperation on infrastructure, trade, economy, military assistance, green development, grants, and other development projects. 477 The agreements included plans for the expansion of Maldives' primary airport and the establishment of a commercial port.

The bilateral relationship was strengthened when Moosa Zameer, Maldives' Minister of Foreign Affairs, visited Beijing and met with Wang Yi, the PRC's Minister for Foreign Affairs, on 22 July 2024. During the visit, Minister Zameer thanked the PRC for its support through the BRI, specifically for transformative projects such as the US\$200 million China-Maldives Friendship Bridge – linking the islands of Malé, Hulhulé, and Hulhumalé – and various infrastructure development projects such as the

expansion of VIA and social housing projects.

The bilateral FTA that had stalled out during the Solih administration was signed on 13 September 2024, by the GoM and the PRC. The agreement is set to go into effect by January 2025, and Maldives anticipates bilateral trade to increase from an annual US\$700 million to a maximum of US\$1 billion.⁴⁷⁹ The administration said the FTA would allow the use of local currencies, reduce bilateral trade dependence on the dollar, decrease overall retail prices, and bolster Maldives' exports, especially of fish product, to the PRC.⁴⁸⁰

The tourism industry in Maldives has experienced a significant influx of Chinese tourists, contributing to enhanced cultural and people-to-people ties between the two nations. Official data from Maldives' Ministry of Tourism indicates the number of Chinese tourist arrivals in Maldives exceeded 90,000 in 2024, establishing the PRC as the largest market for Maldivian tourism. As of 13 May 2024, annual tourist arrivals in Maldives reached 830,665, reflecting an 11.8% increase compared to the previous year, in which arrivals totaled 742,912.⁴⁸¹

Maldives is strategically situated along one of the most heavily trafficked maritime trade routes in the Indian Ocean, through which approximately 80% of PRC's oil imports transit. Analysts suggest that Beijing aims to maintain a cooperative relationship with Malé to ensure a stable regional military presence that can safeguard its oil access from the Persian Gulf. 482 Maldives is an integral component of the Maritime Silk Road Initiative (MSRI), mainly through the Ihavandhippolhu Integrated Development Project, commonly referred to as IHavan. This project is located on the northernmost island and traverses the Seven-Degree Channel. This key geostrategic area connects vital shipping lanes from Southeast Asia and the PRC to western Asia and Europe. The PRC's involvement in this region is strategically significant, as it seeks to capitalize on the US\$18 trillion worth of goods transported annually across the Seven-Degree Channel.483

U.S.

The U.S. and Maldives have maintained a friendly diplomatic relationship since 10 November 1965. The bilateral relationship has been robust and enduring, spanning tourism, people-to-people ties, environment, climate change, culture, trade, investment, and more. The two nations have consistently sought ways to strengthen bilateral trade and investment, as evidenced by the Trade and Investment Framework Agreement of 2009.

The partnership between the U.S. and Maldives extends to defense and security, as demonstrated by the "Framework for U.S. DoD - Maldives MoD Defense and Security Relationship," signed in September 2020; this agreement emphasized the importance of maintaining regional stability and protecting shared interests.⁴⁸⁵ Regular consultations and exchanges on defense and security cooperation, including exercises, logistics, and maritime security capacity building, are conducted to strengthen this cooperative relationship. 486 India has historically been wary of foreign military presence near its borders. However, India now supports the U.S.-Maldives defense agreement. Indian officials have indicated that most of the points in the defense agreement align with their interests, such as countering violent extremism, support for rules-based order in the region, and HADR. 487

The U.S.-Maldives relationship was strengthened when Samantha Power, the Administrator of USAID, led the U.S. delegation to the Presidential Inauguration of Dr. Muizzu on 17 November 2023. 488 Furthermore, in 2023, the U.S. established an embassy in Malé, highlighting its commitment to supporting the independence, sovereignty, and democratic processes of Maldives. 489 Bilateral foreign assistance from the U.S. to Maldives since September 2018 totaled US\$36 million. Additionally, nearly US\$3 million was allocated to aid the GoM's response to the COVID-19 crisis. This assistance supported the expansion of social protection services led by local civil society organizations and enabled effective advocacy for COVID-19 recovery policies.

Since 2018, the U.S. has also contributed more than US\$10.8 million in Foreign Military Financing under the Bay of Bengal Initiative to bolster Maldives' maritime security capacity. 490 U.S. foreign assistance resources aim to promote and enhance maritime security, counterterrorism, law enforcement, and counternarcotics cooperation with Maldivian forces. Furthermore, these resources aim to bolster the country's adaptive capacity and resilience to the adverse effects of global climate change.

Japan

Since establishing diplomatic relations with Maldives on 15 November 1967, Japan has been one of the biggest bilateral development partners focusing on human resources development, environmental protection, sustainable fisheries, communication, humanitarian aid, and reconstruction assistance. 491 Following the 2004 Indian Ocean Tsunami, Japan extended the first ODA loan to Maldives for the Maldives Tsunami Reconstruction Project, totaling ¥2.733 billion (US\$17.9 million).492

The bilateral relationship was strengthened by the establishment of Japan's resident mission in Malé on 1 January 2016 and the inaugural state visit to Japan by then President Solih and his wife in October 2019. 493 The two nations have been cooperating on several key global issues, including peace and security, climate change, human security, and the promotion and protection of human rights on a global scale.

Japan International Cooperation Agency (JICA) is the Japanese government agency providing financial and technical assistance to developing countries. JICA coordinates ODA, which includes bilateral aid (direct assistance to developing countries) and multilateral aid (assistance through international organizations). In FY2022, JICA aid to Maldives totaled ¥2.119 million (US\$13,954), and JICA programs for the South Asia region totaled ¥987.3 billion (US\$65 million). Recent programming includes the Digital Terrestrial Television Broadcasting Operational Capacity Improvement Project

(2019), the Project for Promotion of Blue Economy in Fishery Sector (2022), the Project for Building Climate Resilient Safer Islands in the Maldives (2021), the Project for the Digital Terrestrial Television Broadcasting Network Development (2017), and the Project for Human Resource Development Scholarship (2020-2023).494

Participation in International **Organizations**

Maldives is a member of, participates in, or cooperates with the following international organizations and agreement frameworks either as a government or via a national NGO or other entity:

Alliance of Small Island States (AOSIS), Asian Development Bank (ADB), Colombo Plan (CP), Commonwealth (C), Food and Agriculture Organization of the United Nations (FAO), Group of 77 (G-77), Inter-Parliamentary Union (IPU), International Bank for Reconstruction and Development (IBRD), International Chamber of Conference (ICC-NGOs), International Civil Aviation Organization (ICAO), International Criminal Court (ICC), International Criminal Police Organisation (INTERPOL), International Development Association (IDA), International Federation of Red Cross and Red Crescent Societies (IFRC), International Finance Corporation (IFC), International Fund for Agricultural Development (IFAD), International Labour Organization (ILO), International Maritime Organization (IMO), International Monetary Fund (IMF), International Olympic Committee (IOC), International Organization for Migration (IOM of the UN), International Telecommunications Union (ITU), Islamic Development Bank (IDB), Multilateral Investment Guarantee Agency (MIGA), Non-Aligned Movement (NAM), Organisation of Islamic Cooperation (OIC), Organisation for the Prohibition of Chemical Weapons (OPCW), South Asia Cooperative Environment Programme (SACEP), South Asian Association

for Regional Cooperation (SAARC), United Nations (UN), United Nations Conference on Trade and Development (UNCTAD), United Nations Educational, Scientific, and Cultural Organization (UNESCO), United Nations Industrial Development Organization (UNIDO), Universal Postal Union (UPU), World Customs Organization (WCO), World Health Organization (WHO), World Intellectual Property Organization (WIPO), World Meteorological Organization (WMO), World Tourism Organization (UNWTO), World Trade Organization (WTO).

Force Protection/Pre-Deployment Information

The following information, from the U.S. State Department,⁴⁹⁵ is provided for pre-deployment planning and preparations. Visit www.travel. state.gov prior to deployments for further upto-date information. DoD personnel must review the Foreign Clearance Guide (FCG) for travel to Maldives (www.fcg.pentagon.mil). All official travel and personal travel for active-duty personnel must be submitted through an APACS request. Contact information for the Defense Attaché Office can be found in the FCG if you have additional questions.

Passport/Visa

Arriving travelers require a valid passport, an onward/return ticket, and sufficient funds for entry into Maldives.

A no-cost visitor visa, valid for 30 days, is issued upon arrival. Within 96 hours prior to travel, all travelers travelling to and from Maldives must submit a Traveler Health Declaration (https://imuga.immigration.gov.mv/traveller).

The Department of Immigration and Emigration (https://www.immigration.gov.mv/), routinely approves requests for extension of stays up to 90 days for travelers who present evidence of sufficient funds and who stay in a resort/hotel or who present a letter from a local sponsor. People staying more than 60 days without proper

authorization face heavy fines and deportation.

Safety and Security

Terrorism: Terrorist groups and those inspired by such organizations are intent on attacking U.S. citizens abroad. Terrorists are increasingly using less sophisticated methods of attack – e.g., knives, firearms, and vehicles – to more effectively target crowds. Frequently, their aim is to attack unprotected or vulnerable targets, such as:

- High-profile public events (sporting contests, political rallies, demonstrations, holiday events, celebratory gatherings, etc.)
- Hotels, clubs, and restaurants frequented by tourists
- Places of worship
- Schools
- Parks
- Markets
- Public transportation systems (including subways, buses, trains, and scheduled commercial flights)

Crime: Maldives has a low crime rate and crime on resort islands is rare. Valuables may be stolen when left unattended on beaches or in hotels. The penalty for drug use or possession is severe.

Demonstrations may take place in response to political or economic issues but primarily take place in Malé or other larger cities and are unlikely to be noticed by tourists. Demonstrations can be unpredictable; avoid areas around protests and demonstrations. Check local media for updates and traffic advisories.

Technology Usage Abroad: Mobile devices are vulnerable to compromise, theft, and physical damage anywhere in the world. Best practices prior to traveling abroad are keeping all software (operating system and apps) updated and using virtual private network (VPN) and encrypted voice over IP (VoIP) applications if possible. Make sure that all VPN/VoIP are reputable and U.S.-based. Do not connect to unknown open Wi-Fi. Prior to using a GPS app, make sure you

research the route to make sure it is safe. GPS navigation apps may give you the shortest route without safety consideration.

Be cautious of using dating apps/online dating websites abroad as U.S. citizens can be targeted by scammers. Make sure to inform your friends and family of your whereabouts, meet at a wellknown public location, and do not consume suspicious food or drinks. Avoid traveling alone to bars or nightclubs.

Victims of Crime: There is no local U.S. diplomatic or consular mission. U.S. citizen victims of sexual assault are encouraged to contact the U.S. Embassy in Colombo, Sri Lanka, for assistance.

Report crimes to the local police at 119 and contact the U.S. Embassy in Colombo at +94-11-202-8500. Local authorities are responsible for investigating and prosecuting crime.

If needed, the U.S. Embassy can:

- Help find appropriate medical care
- Assist in reporting a crime to the police
- Contact relatives or friends with written consent
- Provide general information regarding the victim's role during the local investigation and following its conclusion
- Provide a list of local attorneys
- Provide information on victim's compensation programs in the U.S.
- Provide an emergency loan for repatriation to the United States and/or limited medical support in cases of destitution
- Help find accommodation and arrange flights home; and
- Replace a stolen or lost passport.

U.S. citizen victims of domestic violence are encouraged to contact the Embassy for assistance.

Emergency Contact Information

U.S. Embassy Colombo

210 Galle Road Colombo 03, Sri Lanka Tel: +94 11 202-8500

Emergency: +94 11 202-8500

Fax: +94 11 249-8590 Email: MaleACS@state.gov

Web: https://mv.usmission.gov/mission/

Currency Information

Maldivian Rufiyaa (MVR or Rf) Rf 1.00 = US\$0.065 or Rf 15.37 = US\$1.00 (as of Section 1)22 August 2024)

Travel Health Information

The CDC provides guidance that all travelers to Maldives should be up to date on routine vaccinations. The following are additional recommendations for travel to Maldives. The information in Tables 13 and 14 is taken directly from the CDC website under the Travelers Health Section (https://wwwnc.cdc.gov/travel/ destinations/list/).496

Health Alerts for Maldives: As of August 2024, there are no health risk alerts for Maldives.

The following actions you can take to stay healthy and safe on your trip include:

Eat and Drink Safely

Unclean food and water can cause travelers' diarrhea and other diseases. Reduce your risk by sticking to safe food and water habits.

Eat

- Food that is cooked and served hot
- Hard-cooked eggs
- Fruits and vegetables, you have washed in clean water or peeled yourself
- Pasteurized dairy products

Don't Eat

- Food served at room temperature
- Food from street vendors
- Raw or soft-cooked (runny) eggs
- Raw or undercooked (rare) meat or fish
- Unwashed or unpeeled raw fruits and vegetables
- Unpasteurized dairy products
- "Bushmeat" (monkeys, bats, or other wild game)

Drink

- Bottled water that is sealed
- Water that has been disinfected
- Ice made with bottled or disinfected water
- Carbonated drinks
- Hot coffee or tea
- Pasteurized milk

Don't Drink

- Tap or well water
- Ice made with tap or well water
- Drinks made with tap or well water (such as reconstituted juice)
- Unpasteurized milk

Take Medicine

Talk with your doctor about taking prescription or over-the-counter drugs with you on your trip in case you get sick. If you are going to a high-risk area, fill your malaria prescription before you leave, and take enough with you for the entire length of your trip. Follow your doctor's instructions for taking the pills; some need to be started before you leave.

Prevent Bug Bites

Bugs (like mosquitoes, ticks, and fleas) can spread a number of diseases in Maldives. Many of these diseases cannot be prevented with a vaccine or medicine. You can reduce your risk by taking steps to prevent bug bites.

To prevent bug bites:

- Cover exposed skin by wearing long-sleeved shirts, long pants, and hats.
- Use an appropriate insect repellent (see below).
- Use permethrin-treated clothing and gear (such as boots, pants, socks, and tents). Do not use permethrin directly on skin.
- Stay and sleep in air-conditioned or screened rooms.
- Use a bed net if the area where you are sleeping is exposed to the outdoors.

For protection against ticks and mosquitoes:

Use a repellent that contains 20 percent or more DEET for protection that lasts up to several

For protection against mosquitoes only:

Products with one of the following active ingredients can also help prevent mosquito bites. Higher percentages of active ingredient provide longer protection.

- DEET
- Picaridin (also known as KBR 3023, Bayrepel, and Icaridin)
- Oil of lemon eucalyptus (OLE) or para-Menthane-3,8-diol (PMD)
- IR3535
- 2-undecanone

If you are bitten by bugs:

- Avoid scratching bug bites and apply hydrocortisone cream or calamine lotion to reduce the itching.
- Check your entire body for ticks after outdoor activity. Be sure to remove ticks properly.

Safety and Security

Note that conditions can change rapidly in a country at any time. To receive updated Travel Advisories and Alerts for the countries you choose, sign up at https://step.state.gov.

Routine Vaccines	All travelers should be up-to-date on all routine vaccines. Some of these vaccines include: Chickenpox (Varicella) Diphtheria-Tetanus-Pertussis Flu (influenza) Measles-Mumps-Rubella (MMR) Polio Shingles			
COVID-19	All eligible travelers should be up to date with their COVID-19 vaccines.			
Chikungunya	There has been evidence of chikungunya virus transmission in the Maldives within the last 5 years. Chikungunya vaccination may be considered for the following travelers: People aged 65 years or older, especially those with underlying medical conditions, who may spend at least 2 weeks (cumulative time) in indoor or outdoor areas where mosquitoes are present in the Maldives People planning to stay in the Maldives for a cumulative period of 6 months or more			
Hepatitis A	Recommended for unvaccinated travelers one year old or older going to the Maldives. Infants 6 to 11 months old should be vaccinated against Hepatitis A. The dose does not count toward the routine 2-dose series. Travelers allergic to a vaccine component should receive a single dose of immune globulin, which provides effective protection for up to 2 months depending on dosage given. Unvaccinated travelers who are over 40 years old, are immunocompromised, or have chronic medical conditions planning to depart to a risk area in less than 2 weeks should get the initial dose of vaccine and at the same appointment receive immune globulin.			
Hepatitis B	Recommended for unvaccinated travelers of all ages traveling to the Maldives.			
Measles	Travelers are at risk of measles if they have not been fully vaccinated at least two weeks prior to departure or have not had measles in the past and travel internationally to areas where measles is spreading. All international travelers should be fully vaccinated against measles with the measles-mumps-rubella (MMR) vaccine, including an early dose for infants 6–11 months.			
Rabies	Dogs infected with rabies are not commonly found in the Maldives. If rabies exposures occur while in the Maldives, rabies vaccines may only be available in larger suburban/urban medical facilities. Rabies preexposure vaccination considerations include whether travelers: • will be performing occupational or recreational activities that increase risk for exposure to potentially rabid animals and • might have difficulty getting prompt access to safe post-exposure prophylaxis. • Consult with a healthcare provider to determine whether you should receive pre-exposure vaccination before travel.			
Typhoid	Recommended for most travelers, especially those staying with friends or relatives or visiting smaller cities or rural areas.			
Yellow Fever	Required for travelers ≥9 months old arriving from countries with risk for yellow fever virus transmission; this includes >12-hour airport transits or layovers in countries with risk for transmission.			

Table 13: CDC Advice Regarding Vaccine- or Prophylaxis-Preventable Diseases, Maldives

Chikungunya	Chikungunya is transmitted by the bite of a mosquito that carries the virus. To avoid infection, avoid bug bites.		
Dengue	The Dengue family of viruses is transmitted by the bite of a mosquito that carries the virus. To avoid infection, avoid bug bites.		
Hantavirus	Hanta infection occurs when a person breathes in air or eats food contaminated with the urine, droppings, or saliva of infected rodents, from the bite of an infected rodent, or by being around someone sick with Hanta. To avoid infection, avoid rodents and areas where they live, and avoid sick people.		
Leptospirosis	Leptospirosis can be contracted by touching urine of other body fluids from an animal infected with the bacteria, by swimming or wading in urine-contaminated fresh water, through contact with urine-contaminated mud, or by drinking water or eating food contaminated with animal urine. To avoid infection, avoid contaminated water and soil, and avoid flood waters.		
Tuberculosis (TB)	TB can be contracted by breathing in TB bacteria that is in the air from an infected and contagious persor who has coughed, spoken, or sun. To avoid exposure, avoid sick people.		
Zika	Zika is transmitted by the bite of a carrier mosquito or can be passed from a pregnant woman to her unborn baby. To avoid infection, avoid bug bites.		

 Table 14: CDC Advice Regarding Non-Vaccine- or -Prophylaxis-Preventable Diseases, Maldives

Sendai Framework

The Sendai Framework for Disaster Risk Reduction 2015-2030 is the global blueprint and 15-year plan to build the world's resilience to natural disasters. 497 The Sendai Framework is the successor instrument to the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters. 498 Adopted at the Third United Nations World Conference on Disaster Risk Reduction in Sendai, Japan, in 2015, the Framework aims to achieve the substantial reduction of disaster risk and losses in lives, livelihoods, and health and in the economic, physical, social, cultural, and environmental assets of persons, businesses, communities, and countries over the next 15 vears.499

The Framework outlines seven targets and four priorities for action to prevent new and reduce existing disaster risks.

The Seven Global Targets include:

- Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality rates in the decade 2020-2030 compared to the period 2005-2015.
- Substantially reduce the number of affected people globally by 2030, aiming to lower average global figure per 100,000 in the decade 2020-2030 compared to the period 2005-2015.
- Reduce direct disaster economic loss in relation to global GDP by 2030.
- Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030.
- Substantially increase the number of countries with national and local DRR strategies by 2020.
- Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this Framework by 2030.
- Substantially increase the availability of

and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030. 500

The Four Priorities of Action include:

- Understanding disaster risk;
- Strengthening disaster risk governance to manage disaster risk;
- Investing in disaster reduction for resilience; and
- Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation, and reconstruction.

Figure 32 shows the Sendai DRR Framework.⁵⁰¹

In a recent assessment, the World Bank considered progress Maldives has made toward the four priority areas of the Sendai Framework. Details include:

Priority 1: Understanding disaster risk

The GoM has initiated measures to enhance understanding and monitoring of risks with the support of international partners, and while multi-hazard risk profiles have been developed, they have become outdated and inadequately address current sub-national risk awareness. The first detailed island risk assessment (DIRAM -2007) marked a significant step, but it does not appear to have been followed-up or updated. Sector-specific assessments - e.g., within the health sector amid the COVID-19 threat - have been initiated, but there are financial constraints, personnel shortages, and geographic obstacles to data collection and management. Tools for understanding and monitoring risk at the local level are limited. There is some positive movement in fostering government mechanisms to endorse local risk assessments and action plans via the CBDRRF.

A National Post-Disaster Assessment Framework was adopted in 2015, and the country has made substantial efforts to expand meteorological observation networks, which, in turn, improve climate data collection and forecasting, both of which enhance early warning

Chart of the Sendai Framework for Disaster Risk Reduction 2015-2030

Scope and Purpose

The present framework will apply to the risk of small-scale and large-scale, frequent and infrequent, sudden and slow-onset disasters, caused by natural or manmade hazards as well as related environmental, technological, and biological hazards and risks. It aims to guide the multi-hazard management of disaster risk in development at all levels as well as within and across all sectors

Expected Outcome

The substantial reduction of disaster risk and losses in lives, livelihoods, and health and in the economic, physical, social, cultural, and environmental assets of persons, businesses, communities, and countries

Goal

Prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political, and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience

largets								
Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality during 2020-2030 compared to 2005-2015 Substantially reduce the number of affected pec globally by 2 aiming to low the average global figure 100,000 dur 2020-2030 compared to 2005-2015	disaster economic loss in relation to 030, ver 2030 per ng	Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030	Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020	Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this framework by 2030	Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030			

Priorities for Action

There is a need for focused action within and across sectors by States at local, national, regional, and global levels in the following

Tour priority areas.	four priority areas.							
Priority 1	Priority 2	Priority 3	Priority 4					
Understanding disaster risk	Strengthening disaster risk governance to manage disaster risk	Investing in disaster risk reduction for resilience	Enhancing disaster preparedness for effective response, and to "Build Back Better" in recovery, rehabilitation, and reconstruction					
Disaster risk management needs to be based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics, and the environment	Disaster risk governance at the national, regional, and global levels is vital to the management of disaster risk reduction in all sectors and ensuring the coherence of national and local frameworks of laws, regulations, and public policies that, by defining roles and responsibilities, guide, encourage, and incentivize the public and private sectors to take action and address disaster risk	Public and private investment in disaster risk prevention and reduction through structural is non-structural measures are essential to enhance the economic, social, health, and cultural resilience of persons, communities, countries, and their assets, as well as the environment. These can be drivers of innovation, growth, and job creation. Such measures are cost-effective and instrumental to save lives, prevent and reduce losses, and ensure effective recovery and rehabilitation	Experience indicates that disaster preparedness needs to be strengthened for more effective response and to ensure capacities are in place for effective recovery. Disasters have also demonstrated that the recovery, rehabilitation, and reconstruction phase, which needs to be prepared ahead of the disaster, is an opportunity to "Build Back Better" through integrating disaster risk reduction measures. Women and persons with disabilities should publicly lead and promote genderequitable and universally accessible approaches during the response and reconstruction phases					

Figure 32: UN Sendai Framework for Disaster Risk Reduction 2015-2030

and disaster preparation capabilities. Additional - albeit fragmented - efforts to establish EWS are ongoing, but dissemination of information to the public consistently presents a challenge, despite the establishment of platforms such as the Common Alerting Protocol (CAP) and the Multi-Agency Situational Awareness (MASA) system. Although these systems facilitate rapid information exchange during emergencies, their reach and coverage remain fragmented. Finally, various actors use differing systems and techniques for collecting, managing, and disseminating information, and this lack of harmony hobbles consolidating integrated decision-making.

Priority 2: Strengthening disaster risk governance to manage disaster risk

Maldives has built a substantial legal and institutional framework to address preparedness. The basis of the institutional structure is the DMA 2015, and, since 2018, the NDMA has been fully in charge of coordinating responses. Furthermore, the establishment of the NEOC has played a crucial role in managing recent crises. Nonetheless, most aspects of the existing framework focus on response, although the NDMA has expressed an objective of transitioning from a reactive approach to tackling climate and disaster risks proactively. NDMA continues to work to aligning DRM plans with plans for response, relief, and recovery across all sectors. Sub-national and local authorities also have strong authority to develop and implement their own plans and manage their own response funds.

Priority 3: Investing in disaster reduction for resilience

Budget limitations have significantly constrained the NDMA's initiatives. While international collaboration has offered the country's disaster managers expertise and resources, these resources have fallen short in funding infrastructure and equipment. The fiscal model is primarily program-centric and relies on government funding to cover administrative expenses and staff salaries, with a dedicated

disaster response fund earmarked by the Ministry of Finance and Treasury for emergency scenarios. Thus, capacity for more proactive preparedness and risk reduction is limited by a lack of dedicated or discretionary funding.

Maldives faces insufficient contingency financing to effectively address vulnerabilities. Although the DMA provisions a Disaster Management Fund, there is no dedicated disaster risk financing policy, and there is a fragmented approach in managing disaster-related fiscal risk. The Maldives Monetary Authority has collaborated with the UNDP to conduct a Risk Insurance Diagnostic Study, with the aim of addressing gaps and proposing new insurance solutions. However, the legal framework under which insurance companies operate poses limitations on effective oversight and industry growth. The lack of extensive and detailed hazard data complicates the development and application of certain financial tools for effective risk management.

Priority 4: Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation, and reconstruction

Key legal underpinnings of building resilience are the DMA (2015) and Construction Act (2017), both of which have climate change mitigation components. However, translating these legal elements to sectoral action has been uneven. The water sector has made progress in ensuring safe water access and sanitation nationally. More broadly, the planned centralized database of public assets is still under development as are efforts to maintain critical infrastructure during crises. Given climate change impacts, there is a need to assess the resilience of all critical infrastructure especially electric power - to rising seas and intensified storms. The Decentralization Act (2019) entrust local councils with authority over certain infrastructure projects and areas of revenue collection and management, but this fragmentation also means that small-scale project lack connection to broader resilience building. Local emergency responders rely heavily on external – national or international – support. 502

Country Profile

The information in the Country Profile section is sourced directly from the U.S. Central Intelligence Agency (CIA) World Factbook for Maldives. Additional numbers on country comparison to the world can be found by going directly to the CIA website (https://www.cia. gov). It discusses topics including geography, people and society, government, economy, energy, communications, military and security, transportation, terrorism, and transnational issues.503

Background

A sultanate since the 12th century, the Maldives became a British protectorate in 1887 and a republic in 1968, three years after independence. President Maumoon Abdul GAYOOM dominated Maldives' political scene for 30 years, elected to six successive terms by single-party referendums. After political demonstrations in the capital Malé in 2003, GAYOOM and his government pledged to embark upon a process of liberalization and democratic reforms, including a more representative political system and expanded political freedoms. Political parties were legalized in 2005.

In 2008, a constituent assembly -- termed the "Special Majlis" -- finalized a new constitution ratified by GAYOOM. The first-ever presidential elections under a multi-candidate, multi-party system were held later that year. GAYOOM was defeated in a runoff by Mohamed NASHEED, a political activist whom the regime had jailed several years earlier. In 2012, after several weeks of street protests in response to a top judge's arrest, NASHEED resigned from the presidency and handed over power to Vice President Mohammed WAHEED Hassan Maniku, A government-appointed Commission of National Inquiry concluded that there was no evidence of a coup, but NASHEED contended that police and military personnel forced him to resign. NASHEED, WAHEED, and Abdulla YAMEEN Abdul Gayoom ran in the 2013 elections with YAMEEN ultimately winning the presidency

after three rounds of voting. In 2018, YAMEEN lost his reelection bid to parliamentarian Ibrahim Mohamed SOLIH. YAMEEN was arrested and jailed in 2022 on corruption charges. Maldives' fourth democratic election was held in September 2023. The winner, Malé City Mayor Dr. Mohamed MUIZZU, campaigned on a platform of Maldivian sovereignty, vowing to remove Indian military personnel from the country. MUIZZU represents a joint Progressive Party of Maldives and People's National Congress (PPM/PNC) coalition.

Geography

Location

Southern Asia, a group of atolls in the Indian Ocean, south-southwest of India

Geographic coordinates 3 15 N, 73 00 E

Area

total: 298 sq km land: 298 sq km water: 0 sq km

comparison ranking: total 209

<u>Area - comparative</u>

about 1.7 times the size of Washington, DC

Land boundaries

total: 0 km

Coastline

644 km

Maritime claims

territorial sea: 12 nm contiguous zone: 24 nm exclusive economic zone: 200 nm measured from claimed archipelagic straight baselines

Climate

tropical; hot, humid; dry, northeast monsoon (November to March); rainy, southwest monsoon (June to August)

Terrain

flat coral atolls, with white sandy beaches; sits atop the submarine volcanic Chagos-Laccadive Ridge

Elevation

highest point: 8th tee, golf course, Villingi Island

5 m

lowest point: Indian Ocean 0 m

mean elevation: 2 m

Natural resources

fish

Land use

agricultural land: 23.3% (2018 est.)

arable land: 10% (2018 est.) permanent crops: 10% (2018 est.) permanent pasture: 3.3% (2018 est.)

forest: 3% (2018 est.) other: 73.7% (2018 est.)

<u>Irrigated land</u>

0 sq km (2012)

Population distribution

about a third of the population lives in the centrally located capital city of Malé 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

Natural hazards

tsunamis; low elevation of islands makes them sensitive to sea level rise

Geography - note

smallest Asian country; archipelago of 1,190 coral islands grouped into 26 atolls (200 inhabited islands, plus 80 islands with tourist resorts); strategic location astride and along major sea lanes in Indian Ocean

People and Society

Population

total: 388,858 male: 197,739

female: 191,119 (2024 est.)

comparison rankings: female 177; male 176; total

177

Nationality

noun: Maldivian(s) adjective: Maldivian

Ethnic groups

homogeneous mixture of Sinhalese, Dravidian, Arab, Australasian, and African resulting from historical changes in regional hegemony over marine trade routes

Languages

Dhivehi (official, closely related to Sinhala, script derived from Arabic), English (spoken by most government officials)

Religions

Sunni Muslim (official)

Age structure

0-14 years: 22.4% (male 44,321/female 42,626) 15-64 years: 71.5% (male 143,021/female

135,044)

65 years and over: 6.1% (2024 est.) (male 10,397/

female 13,449)

Figure 33 shows the population pyramid for

Maldives for 2023.⁵⁰⁴

Dependency ratios

total dependency ratio: 35.6 youth dependency ratio: 29.5 elderly dependency ratio: 6.2

potential support ratio: 16.2 (2021 est.)

Median age

total: 31.9 years (2024 est.)

male: 31.3 years female: 32.4 years

comparison ranking: total 120

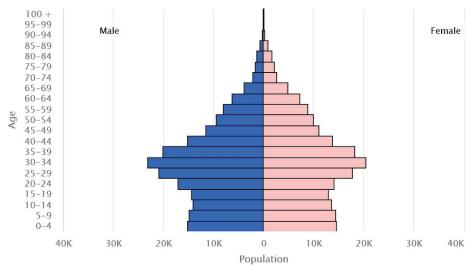


Figure 33: Population Pyramid, Maldives (2023)

Population growth rate

-0.2% (2024 est.)

comparison ranking: 210

Birth rate

15.1 births/1,000 population (2024 est.) comparison ranking: 108

Death rate

4.3 deaths/1,000 population (2024 est.) comparison ranking: 210

Net migration rate

-12.8 migrant(s)/1,000 population (2024 est.) comparison ranking: 225

Population distribution

growth rate, 2000-2030

about a third of the population lives in the centrally located capital city of Malé 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

Urbanization

urban population: 42% of total population (2023) rate of urbanization: 2.34% annual rate of change (2020-25 est.) total population growth rate v. urban population

Major urban areas - population 177,000 Malé (capital) (2018)

Sex ratio

at birth: 1.05 male(s)/female 0-14 years: 1.04 male(s)/female 15-64 years: 1.06 male(s)/female 65 years and over: 0.77 male(s)/female total population: 1.04 male(s)/female (2024 est.)

Mother's mean age at first birth

23.2 years (2016/17 est.)

note: data represents median age at first birth among women 25-49

Maternal mortality ratio

57 deaths/100,000 live births (2020 est.) comparison ranking: 95

Infant mortality rate

total: 24.4 deaths/1,000 live births (2024 est.) male: 27.3 deaths/1,000 live births female: 21.3 deaths/1,000 live births comparison ranking: total 62

<u>Life expectancy at birth</u>

total population: 77.4 years (2024 est.)

male: 75.1 years female: 79.9 years

comparison ranking: total population 90

Total fertility rate

1.7 children born/woman (2024 est.)

comparison ranking: 165

Gross reproduction rate

0.83 (2024 est.)

Contraceptive prevalence rate

18.8% (2016/17)

Drinking water source

improved: urban: 99% of population

rural: 100% of population total: 99.6% of population

unimproved: urban: 1% of population

rural: 0% of population

total: 0.4% of population (2020 est.)

Current health expenditure

11.4% of GDP (2020)

Physician density

2.05 physicians/1,000 population (2019)

Hospital bed density

4.3 beds/1,000 population

Sanitation facility access

improved: urban: 100% of population

rural: 99.1% of population total: 99.5% of population

unimproved: urban: 0% of population

rural: 0.9% of population

total: 0.5% of population (2020 est.)

Obesity - adult prevalence rate

8.6% (2016)

comparison ranking: 149

Alcohol consumption per capita

total: 1.38 liters of pure alcohol (2019 est.) beer: 0.33 liters of pure alcohol (2019 est.) wine: 0.59 liters of pure alcohol (2019 est.) spirits: 0.45 liters of pure alcohol (2019 est.) other alcohols: 0 liters of pure alcohol (2019 est.)

comparison ranking: total 142

Tobacco use

total: 25.2% (2020 est.) male: 44.4% (2020 est.) female: 6% (2020 est.)

comparison ranking: total 50

Children under the age of 5 years underweight

14.8% (2016/17)

comparison ranking: 34

Currently married women (ages 15-49)

71.9% (2023 est.)

Child marriage

women married by age 18: 2.2%

men married by age 18: 2.2% (2017 est.)

Education expenditures

5.8% of GDP (2020 est.)

comparison ranking: 50

Literacy

definition: age 15 and over can read and write

total population: 97.9%

male: 97.6%

female: 98.4% (2021)

School life expectancy (primary to tertiary

education)

total: 13 years

male: 12 years

female: 14 years (2019)

Environment

Environment - current issues

rising sea levels threaten land; depletion of freshwater aquifers threatens water supplies; inadequate sewage treatment; coral reef

bleaching

Environment - international agreements

party to: Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Climate Change-Paris Agreement, Comprehensive Nuclear Test Ban, Desertification, Endangered Species, Hazardous Wastes, Law of the Sea, Ozone Layer Protection,

Ship Pollution

signed, but not ratified: none of the selected agreements

Climate

tropical; hot, humid; dry, northeast monsoon (November to March); rainy, southwest monsoon (June to August)

Land use

agricultural land: 23.3% (2018 est.) arable land: 10% (2018 est.) permanent crops: 10% (2018 est.) permanent pasture: 3.3% (2018 est.)

forest: 3% (2018 est.) other: 73.7% (2018 est.)

Urbanization

urban population: 42% of total population (2023) rate of urbanization: 2.34% annual rate of change

(2020-25 est.)

total population growth rate v. urban population

growth rate, 2000-2030

Revenue from forest resources

0% of GDP (2018 est.) comparison ranking: 183

Revenue from coal

0% of GDP (2018 est.) comparison ranking: 79

Air pollutants

particulate matter emissions: 13 micrograms per cubic meter (2019 est.)

carbon dioxide emissions: 1.44 megatons (2016

methane emissions: 0.14 megatons (2020 est.)

Waste and recycling

municipal solid waste generated annually: 211,506 tons (2015 est.)

Total water withdrawal

municipal: 10 million cubic meters (2020 est.) industrial: 300,000 cubic meters (2017 est.) agricultural: 0 cubic meters (2017 est.)

Total renewable water resources 30 million cubic meters (2020 est.)

Government

Country name

conventional long form: Republic of Maldives conventional short form: Maldives local long form: Dhivehi Raajjeyge Jumhooriyyaa local short form: Dhivehi Raajje etymology: archipelago apparently named after the main island (and capital) of Malé; the word "Maldives" means "the islands (dives) of Malé"; alternatively, the name may derive from the

of islands"; Dhivehi Raajje in Dhivehi means "Kingdom of the Dhivehi people"

Sanskrit word "maladvipa" meaning "garland

Government type presidential republic

Capital

name: Malé

geographic coordinates: 4 10 N, 73 30 E time difference: UTC+5 (10 hours ahead of Washington, DC, during Standard Time) etymology: derived from the Sanskrit word "mahaalay" meaning "big house"

Administrative divisions

21 administrative atolls (atholhuthah, singular - atholhu); Addu (Addu City), Ariatholhu Dhekunuburi (South Ari Atoll), Ariatholhu Uthuruburi (North Ari Atoll), Faadhippolhu, Felidhuatholhu (Felidhu Atoll), Fuvammulah, Hahdhunmathi, Huvadhuatholhu Dhekunuburi (South Huvadhu Atoll), Huvadhuatholhu Uthuruburi (North Huvadhu Atoll), Kolhumadulu, Maale (Male), Maaleatholhu (Male Atoll), Maalhosmadulu Dhekunuburi (South Maalhosmadulu), Maalhosmadulu Uthuruburi (North Maalhosmadulu), Miladhunmadulu Dhekunuburi (South Miladhunmadulu), Miladhunmadulu Uthuruburi (North Miladhunmadulu), Mulakatholhu (Mulaku Atoll), Nilandheatholhu Dhekunuburi (South Nilandhe Atoll),

Nilandheatholhu Uthuruburi (North Nilandhe Atoll), Thiladhunmathee Dhekunuburi (South Thiladhunmathi), Thiladhunmathee Uthuruburi (North Thiladhunmathi)

<u>Independence</u>

26 July 1965 (from the UK)

National holiday

Independence Day, 26 July (1965)

Legal system

Islamic (sharia) legal system with English common law influences, primarily in commercial matters

Constitution

history: many previous; latest ratified 7 August

amendments: proposed by Parliament; passage requires at least three-quarters majority vote by its membership and the signature of the president of the republic; passage of amendments to constitutional articles on rights and freedoms and the terms of office of Parliament and of the president also requires a majority vote in a referendum; amended 2015

<u>International law organization participation</u> has not submitted an ICJ jurisdiction declaration; accepts ICCt jurisdiction

Citizenship

citizenship by birth: no citizenship by descent only: at least one parent must be a citizen of Maldives dual citizenship recognized: yes residency requirement for naturalization: unknown

Suffrage

18 years of age; universal

Executive branch

chief of state: President Mohamed MUIZZU (since 17 November 2023)

head of government: President Mohamed

MUIZZU (since 17 November 2023) cabinet: Cabinet of Ministers appointed by the president, approved by Parliament elections/appointments: president directly elected by absolute majority popular vote in 2 rounds if needed for a 5-year term (eligible for a second term); first round held on 9 September 2023 and runoff held on 30 September 2023 (next to be held in 2028)

election results:

2023: Mohamed MUIZZU elected president in the second round; percent of vote in first round - Mohamed MUIZZU (PNC) 46.1%, Ibrahim Mohamed SOLIH (MDP) 39.1%, Ilyas LABEEB (DEMS) 7.1%, other 7.7%; percent of vote in the second round - Mohamed MUIZZU 54%, Ibrahim Mohamed SOLIH 46% 2018: Ibrahim Mohamed SOLIH elected president in first round; Ibrahim Mohamed SOLIH (MDP) 58.3%, Abdulla YAMEEN Abdul Gayoom (PPM) 41.7%

Legislative branch

description: unicameral People's Assembly or People's Majlis (93 seats; members directly elected in single-seat constituencies by simple majority vote to serve 5-year terms) elections: last held on 21 April 2024 (next to be held in 2029)

election results: percent of vote by party - NA; seats by party - PNC 66, MDP 12, MDA 2, JP 1, MNP 1, independent 11; composition - men 90, women 3, percentage women 3.3%

Judicial branch

highest court(s): Supreme Court (consists of the chief justice and 6 justices judge selection and term of office: Supreme Court judges appointed by the president in consultation with the Judicial Service Commission - a 10-member body of selected high government officials and the public - and upon confirmation by voting members of the People's Majlis; judges serve until mandatory retirement at age 70 subordinate courts: High Court; Criminal, Civil, Family, Juvenile, and Drug Courts; Magistrate Courts (on each of the inhabited islands)

Political parties

Adhaalath (Justice) Party or AP Dhivehi Rayyithunge Party or DRP Maldives Development Alliance or MDA Maldivian Democratic Party or MDP Maldives Third Way Democrats or MTD People's National Congress or PNC People's National Front Republican (Jumhooree) Party or JP

<u>International organization participation</u> ADB, AOSIS, C, CP, FAO, G-77, IBRD, ICAO, ICC (NGOs), ICCt, IDA, IDB, IFAD, IFC, IFRCS, ILO, IMF, IMO, Interpol, IOC, IOM, IPU, ITU, MIGA, NAM, OIC, OPCW, SAARC, SACEP, UN, UNCTAD, UNESCO, UNIDO, UNWTO, UPU, WCO, WHO, WIPO, WMO, WTO

Diplomatic representation in the US

chief of mission: Ambassador Abdul GHAFOOR

Mohamed (since 15 June 2023)

chancery: 1100 H Street NW, Suite 250,

Washington, D.C. 20005 Tel: [1] (202) 516-5458

Email: WashingtonInfo@foreign.gov.mv

Web: https://mdvmission.gov.mv

Diplomatic representation from the US

chief of mission: Ambassador Hugo Yue-Ho YON (since 6 September 2023); note - Ambassador YON is the first resident US ambassador to the Republic of Maldives embassy: 210 Galle Road, Colombo 03, Sri Lanka; note - as of early November 2023, the US has no consular or diplomatic offices in Maldives; the US Mission to Maldives operates from US Embassy Colombo, Sri Lanka

Tel: [94] (11) 249-8500 Fax: [94] (11) 243-7345

Flag description

red with a large green rectangle in the center bearing a vertical white crescent moon; the closed side of the crescent is on the hoist side of the flag; red recalls those who have sacrificed their lives in defense of their country, the green rectangle represents peace and prosperity, and the white crescent signifies Islam

National symbol(s)

coconut palm, yellowfin tuna; national colors: red, green, white

National anthem

name: "Gaumee Salaam" (National Salute) lyrics/music: Mohamed Jameel DIDI/ Wannakuwattawaduge DON AMARADEVA note: lyrics adopted 1948, music adopted 1972; between 1948 and 1972, the lyrics were sung to the tune of "Auld Lang Syne"

Economy

Economic overview

upper middle-income Indian Ocean island economy; major tourism, fishing, and shipping industries; high public debt; systemic corruption; crippled by COVID-19; ongoing deflation; poverty has tripled since pandemic began

Real GDP (purchasing power parity)

\$11.651 billion (2023 est.) \$11.206 billion (2022 est.) \$9.838 billion (2021 est.) note: data in 2021 dollars comparison ranking: 164

Real GDP growth rate

3.97% (2023 est.) 13.91% (2022 est.) 37.69% (2021 est.)

note: annual GDP % growth based on constant

local currency

comparison ranking: 79

Real GDP per capita

\$22,400 (2023 est.) \$21,400 (2022 est.)

\$18,900 (2021 est.)

note: data in 2021 dollars

comparison ranking: 95

GDP (official exchange rate)

\$6.6 billion (2023 est.)

note: data in current dollars at official exchange rate

<u>Inflation rate (consumer prices)</u>

2.33% (2022 est.) 0.54% (2021 est.) -1.37% (2020 est.)

note: annual % change based on consumer prices comparison ranking: 48

Credit ratings

Fitch rating: CCC (2020) Moody's rating: B3 (2020)

note: The year refers to the year in which the current credit rating was first obtained.

GDP - composition, by sector of origin

agriculture: 3% (2015 est.) industry: 16% (2015 est.) services: 81% (2015 est.)

comparison rankings: services 30; industry 174;

agriculture 149

GDP - composition, by end use

household consumption: (2016 est.) NA government consumption: (2016 est.) NA investment in fixed capital: (2016 est.) NA investment in inventories: (2016 est.) NA exports of goods and services: 93.6% (2016 est.) imports of goods and services: 89% (2016 est.)

Agricultural products

fruits, vegetables, nuts, other meats, tomatoes, bananas, maize, pulses, coconuts, papayas (2022) note: top ten agricultural products based on tonnage

Industries

tourism, fish processing, shipping, boat building, coconut processing, woven mats, rope, handicrafts, coral and sand mining

Industrial production growth rate

7.26% (2023 est.)

note: annual % change in industrial value added based on constant local currency comparison ranking: 33

Labor force

260,000 (2023 est.)

note: number of people ages 15 or older who are employed or seeking work comparison ranking: 170

<u>Unemployment rate</u>

4.13% (2023 est.) 4.42% (2022 est.) 5.02% (2021 est.)

note: % of labor force seeking employment comparison ranking: 80

Youth unemployment rate (ages 15-24)

total: 14.9% (2023 est.) male: 18.6% (2023 est.) female: 9.2% (2023 est.)

note: % of labor force ages 15-24 seeking

employment

comparison ranking: total 96

Population below poverty line

5.4% (2019 est.)

note: % of population with income below

national poverty line

Gini Index coefficient - distribution of family income

income

29.3 (2019 est.)

note: index (0-100) of income distribution; higher values represent greater inequality comparison ranking: 127

Household income or consumption by

percentage share

lowest 10%: 3.8% (2019 est.) highest 10%: 23.3% (2019 est.)

note: % share of income accruing to lowest and

highest 10% of population

Remittances

0.07% of GDP (2023 est.) 0.08% of GDP (2022 est.) 0.09% of GDP (2021 est.)

note: personal transfers and compensation between resident and non-resident individuals/ households/entities

APPENDICES

Budget

revenues: \$993 million (2020 est.) expenditures: \$1.797 billion (2020 est.)

Public debt

63.9% of GDP (2017 est.) comparison ranking: 68

Taxes and other revenues 19.45% (of GDP) (2021 est.) comparison ranking: 91

Current account balance

-\$1.033 billion (2022 est.)

- -\$455.003 million (2021 est.)
- -\$1.327 billion (2020 est.)

note: balance of payments - net trade and primary/secondary income in current dollars comparison ranking: 143

Exports

\$5.096 billion (2022 est.) \$3.985 billion (2021 est.) \$1.787 billion (2020 est.) note: balance of payments - exports of goods and services in current dollars comparison ranking: 140

Exports - partners

India 71%, Thailand 12%, Germany 3%, Oman 2%, UK 2% (2022) note: top five export partners based on

percentage share of exports

Exports - commodities

aircraft, fish, natural gas, scrap iron, refined petroleum (2022)

note: top five export commodities based on value in dollars

Imports

\$4.904 billion (2022 est.) \$3.484 billion (2021 est.) \$2.449 billion (2020 est.) note: balance of payments - imports of goods and services in current dollars comparison ranking: 153

<u>Imports - partners</u>

India 16%, China 16%, UAE 10%, Oman 9%, Malaysia 6% (2022) note: top five import partners based on percentage share of imports

<u>Imports - commodities</u>

refined petroleum, ships, aircraft, plastic products, broadcasting equipment (2022) note: top five import commodities based on value in dollars

Reserves of foreign exchange and gold

\$590.523 million (2023 est.) \$832.094 million (2022 est.) \$805.808 million (2021 est.)

note: holdings of gold (year-end prices)/foreign exchange/special drawing rights in current dollars

comparison ranking: 147

Debt - external

\$848.8 million (31 December 2016 est.) \$696.2 million (31 December 2015 est.) comparison ranking: 167

Exchange rates

rufiyaa (MVR) per US dollar -15.387 (2023 est.) 15.387 (2022 est.) 15.373 (2021 est.) 15.381 (2020 est.) 15.382 (2019 est.)

Energy

Electricity access

electrification - total population: 100% (2022 est.)

Electricity

installed generating capacity: 566,000 kW (2022

consumption: 821.397 million kWh (2022 est.) transmission/distribution losses: 25.867 million kWh (2022 est.)

comparison rankings: transmission/distribution losses 29; consumption 164; installed generating capacity 149

Electricity generation sources

fossil fuels: 93.2% of total installed capacity (2022 est.)

solar: 6.6% of total installed capacity (2022 est.) wind: 0.2% of total installed capacity (2022 est.)

Coal

imports: 1 metric tons (2022 est.)

Petroleum

refined petroleum consumption: 14,000 bbl/day (2022 est.)

Carbon dioxide emissions

2.247 million metric tonnes of CO_2 (2022 est.) from petroleum and other liquids: 2.247 million metric tonnes of CO_2 (2022 est.) comparison ranking: total emissions 157

Energy consumption per capita

56.264 million Btu/person (2022 est.) comparison ranking: 89 Communications

Telephones - fixed lines

total subscriptions: 13,000 (2022 est.) subscriptions per 100 inhabitants: 3 (2022 est.) comparison ranking: total subscriptions 184

<u>Telephones - mobile cellular</u>

total subscriptions: 715,000 (2022 est.) subscriptions per 100 inhabitants: 137 (2022 est.) comparison ranking: total subscriptions 170

<u>Telecommunication systems</u>

general assessment: with its economy so heavily dependent on tourism, the Maldives has suffered heavy economic as well as health casualties during the pandemic; the country had a relatively short period of lock down and was willing to welcome visitors back as early as July 2020; but the effective shutdown of international air travel for most of the year resulted in the bottom falling out of the Maldives' tourism industry, taking GDP down 32% in the process; the economy fared better in 2021, with a return to growth, yet

it may still be a few years before the country's key industries can return to the same level of prosperity that they previously enjoyed; the country's high number of tourists and expatriate workers has inflated the penetration rate for mobile services, making it one of the highest in the world; that rate crashed in 2020 as demand for subscriber identification module (SIM) cards (primarily prepaid) dried up; however, the number of contract subscribers increased as locals took advantage of competitive pricing offers from operators; with commercial 5G services already launched and fiber networks rapidly expanding around the country, the Maldives is primed to deliver world-class telecommunications services to its domestic and international customers (2021) domestic: fixed-line is at nearly 3 per 100 persons and mobile-cellular subscriptions stands at nearly 135 per 100 persons (2021) international: country code - 960; landing points for Dhiraagu Cable Network, NaSCOM, Dhiraagu-SLT Submarine Cable Networks and WARF submarine cables providing connections to 8 points in Maldives, India, and Sri Lanka; satellite earth station - 3 Intelsat (Indian Ocean) (2019)

Broadcast media

state-owned radio and TV monopoly until recently; 4 state-operated and 7 privately owned TV stations and 4 state-operated and 7 privately owned radio stations (2019)

Internet country code

.mv

<u>Internet users</u>

total: 447,200 (2021 est.) percent of population: 86% (2021 est.) comparison ranking: total 169

Broadband - fixed subscriptions

comparison ranking: total 139

total: 63,685 (2020 est.) subscriptions per 100 inhabitants: 12 (2020 est.)

Transportation

National air transport system

number of registered air carriers: 3 (2020) inventory of registered aircraft operated by air carriers: 36

annual passenger traffic on registered air carriers: 1,147,247 (2018)

annual freight traffic on registered air carriers: 7.75 million (2018)

Civil aircraft registration country code prefix 8Q

Airports

19 (2024)

comparison ranking: 140

Roadways

total: 93 km

paved: 93 km (2018) - 60 km in Malé; 16 km on

Addu Atoll; 17 km on Laamu

note: island roads are mainly compacted coral

comparison ranking: total 216

Merchant marine

total: 82 (2023)

by type: general cargo 30, oil tanker 20, other 32

comparison ranking: total 98

Ports

total ports: 1 (2024)

large: 0 medium: 0 small: 0 very small: 1

ports with oil terminals: 1

key ports: Malé

Military and Security

Military and security forces

Maldives National Defense Force (MNDF): the MNDF has combined force structure with seven services divided into Combat and Maneuver Forces (Coast Guard, Marine Corps, and Fire and Rescue Service) and Support Services (Service

Corps, Defense Intelligence Service, Medical Corps, Adjutant General's Corps); there is also a separate Special Forces command and a Special Protection Service (2024)

note: the Maldives Police Service is responsible for internal security and reports to the Ministry of Homeland Security and Technology

Military expenditures

not available

Military and security service personnel strengths approximately 3-4,000 personnel (2023)

Military equipment inventories and acquisitions India has provided most of the equipment in the MNDF's inventory (2023)

Military service age and obligation

18-28 years of age for voluntary service; no conscription; 10th grade or equivalent education required; must not be a member of a political party (2023)

Military - note

the Maldives National Defense Force (MNDF) is responsible for defending and safeguarding the Maldives' territorial integrity, economic exclusion zone, and people; it is also responsible for disaster relief, and if requested, assisting the Maldives Police Service in maintaining internal security and law and order; the MNDF is organized into four area commands and a functional Special Forces command; the head of the MNDF reports to the Minister of Defense (2023)

Terrorism

<u>Terrorist group(s)</u>

Terrorist group(s): Islamic State of Iraq and ash-Sham (ISIS)

note: details about the history, aims, leadership, organization, areas of operation, tactics, targets, weapons, size, and sources of support of the group(s) appear(s) in the Terrorism reference guide

Transnational Issues

Trafficking in persons

tier rating: Tier 2 Watch List — the Maldives did not demonstrate overall increasing efforts to eliminate trafficking compared with the previous reporting period and was downgraded to Tier 2 Watch List; for more details, go to: https://www. state.gov/reports/2024-trafficking-in-personsreport/maldives/

Illicit drugs NA

Acronyms and Abbreviations

° degree(s) – of temperature or latitude/longitude

\$ dollar(s) – of the U.S.

AAP Accountability to Affected Populations
ACOC Area Command Operations Centre

ADB Asian Development Bank

ADPC Asian Disaster Preparedness Center

ADRC Asian Disaster Reduction Center

AEH Addu Equatorial Hospital
AOR Area of Responsibility

APAN All Partners Access Network

ARISE Accelerating Renewable Energy Integration and Sustainable Energy

ART Antiretroviral therapy

ASPIRE Accelerating Sustainable Private Investments in Renewable Energy

BHA Bureau for Humanitarian Assistance (of USAID)

BRI Belt and Road Initiative (of the PRC)

CAA Civil Aviation Authority

CAM Communications Authority of Maldives

CAP Common Alerting Protocol

CBDRM Community-Based Disaster Risk Management

CBDRRF Community Based Risk Reduction and Disaster Management Framework

CCA Climate Change Adaptation
CCS Country Cooperation Strategy

CDC Centers for Disease Control and Prevention (of the U.S.)

CDM Clean Development Mechanism

CEDAW Convention on the Elimination of All Forms of Discrimination Against Women

CER Certified Emission Reduction

CERT Community Emergency Response Team

CFE-DM Center for Excellence in Disaster Management and Humanitarian Assistance (of the U.S. De-

partment of Defense)

CIA Central Intelligence Agency (U.S.)
cm / cm² centimeter(s) / square centimeter(s)

COVID-19 Coronavirus Disease 2019

CO₂ Carbon dioxide

CPGA Crises Preparedness Gap Analysis (of the World Bank)

DASD Deputy Assistant Secretary of Defense (U.S.)

DHN Declaration of Humanitarian Need
DHIS2 District Health Information System 2

DIS Defence Intelligence Service

DKI-APCSS Daniel K. Inouye Asia-Pacific Center for Security Studies (of the U.S. Department of Defense)

DMA Disaster Management Act

DMC Disaster Management Committee

DMHA Disaster Management and Humanitarian Assistance

DMSC Disaster Management Steering Committee

DoD Department of Defense (of the U.S.)

DRR disaster risk reduction
EEZ Exclusive Economic Zone

EMOPS Emergency Operations System

ENSO El Niño Southern Oscillation (ENSO)

EOD explosive ordnance disposal

EPA Environmental Protection Agency (of the Maldives)

EOP Emergency Operations Plan
EPC Emergency Planning Committee

ER4 early recovery, risk reduction, and resilience programming (of the USAID/BHA)

ERT Emergency Response Team
ESF Emergency Support Functions

EU European Union

EW4All Early Warnings for All EWS Early Warning System

FAO Food and Agriculture Organization (of the UN)

FCG Foreign Clearance Guide
FCODE Feature Code (of OneMap)
FDR Foreign Disaster Response

FETP Field Epidemiology Training Program

FHS Faculty of Health Sciences

 ft / ft^2 feet / square feet FTA Free Trade Agreement

FY Fiscal year

GDACS Global Disaster Alert and Coordination System

GDP gross domestic product

GEAP National Gender Equality Action Plan

GHG Greenhouse gas

GIS geographic information system

GNI Gross National Income
GoM Government of Maldives

gWh gigawatt hours

HADR Humanitarian Assistance and Disaster Response

HAA/M Humanitarian Assistance Advisors to the Military (of the USAID/BHA)

HCT Humanitarian Country Team

APPENDICES

HDX Humanitarian Data Exchange

HECC Health Emergency Coordination Committee

HEOC Health Emergency Operations Center HEOP Health Emergency Operations Plan **HERP** Health Emergency Response Plan

HIP **Hazard Information Profiles**

HMT Hulhumale International Terminal

HPA Health Protection Agency HPL Hithadhoo Ports Limited HPV **Human Papilloma Virus** HRP Hithadhoo Regional Port

HSEOP Health Sector Emergency Operations Plan

IASC Inter-Agency Standing Committee

IATA International Air Transport Association ICAO-APEC International Civil Aviation Organization **ICRC** International Committee of the Red Cross

ICS Incident Command System

ICT information and communication technology

ICU Intensive care unit

Island Disaster Management Plan **IDMP**

IDP Internally displaced person

IFAD International Fund for Agricultural Development

IFRC International Federation of Red Cross and Red Crescent Societies

IGMH Indira Gandhi Memorial Hospital **IHR** International Health Regulations IHQ Integrated Headquarters (of MNDF) ILO International Labour Organization **IMF** International Monetary Fund **IMT Incident Management Team**

inch(es)

InaTEWS Indonesian Tsunami Early Warning System

INCOIS Indian National Centre for Ocean Information Sciences

INFORM Index for Risk Management

IOC Intergovernmental Oceanographic Commission

IOD Indian Ocean Dipole

IOC-UNESCO Intergovernmental Oceanographic Commission of UNESCO

IOM International Organization on Migration **IOTWS** Indian Ocean Tsunami Warning System **IPAMS** Indo-Pacific Armies Management Seminar

IPCC Intergovernmental Panel on Climate Change (of the UN) IPICC Indo-Pacific Intelligence Chiefs Conference

ISPS International Ship and Port Facility Security Code

ITEWC Indian Tsunami Early Warning Centre
ITU International Telecommunications Union

IU Interim Unit (of the SDMC)

IUUF Illegal, unreported, and unregulated fishing

JATWC Joint Australian Tsunami Warning Centre

JEE Joint External Evaluation

JICA Japan International Cooperation Agency

JOC Joint Operations Center

JTWC Joint Typhoon Warning Center

kg kilogram(s) kj kilojoule(s)

km / km² kilometer(s) / square kilometer(s)

KPL Kulhudhufushi Ports Limited
KRP Kulhudhufushi Regional Port
kW / kWh kilowatt / kilowatt hours

kWp kilowatts peak

lb pound(s)

LNG Liquid natural gas

LOS Law of the Sea Convention

LTE Long-Term Evolution

m / m² meter(s) / square meter(s)

MAC Maldives Airports Company

MACA Military Aid to Civil Authorities

MACC Military Aid to Civil Communities

MACS Multi-Agency Coordination System

MASA Multi-Agency Situational Awareness System

Mbps megabits per second

MBS Maldives Bureau of Statistics

MCCEE Ministry of Climate Change, Environment, and Energy

MCEP Maldives Clean Environment Project

MCH Malé Commercial Harbor

MD Doctor of Medicine

MDP Maldivian Democratic Party

MDR-TB Multidrug-resistant TB
MDU Marine Deployment Unit
MEA Maldives Energy Authority

MEERY Maldives Enhancing Employability and Resilience of Youth Project

Mi / mi2 Mile(s) / square mile(s)

APPENDICES

MIA Ministry of Islamic Affairs (of the Maldives)

MIP Maamigili International Port

mm millimeter(s)

MMS Maldives Meteorological Service
MNDF Maldives National Defense Force
MNDF FRS MNDF Fire and Rescue Services
MNU Maldives National University

MoD Ministry of Defence
MoE Ministry of Education

MoEE Ministry of Environment and Energy
MoFT Ministry of Finance and Treasury

MoH Ministry of Health

MoTCA Ministry of Transport and Civil Aviation

MPI Multidimensional Poverty Index

MPL Maldives Ports Limited
MPS Maldives Police Service
MRC Maldivian Red Crescent
MSRI Maritime Silk Road Initiative
MTANG Montana Air National Guard

MTCC Maldives Transport and Contracting Company

MTCT Mother-to-child transmission
MTNG Montana National Guard

MVI Multivariate Vulnerability Index (of the UN)

MW / MWp megawatt / megawatts-peak

MWSC Malé Water and Sewerage Company

NALO National Assessment of Learning Outcomes

NAP National Adaptation Plan (for climate change)

NAPHS National Action Plan for Health Security

NCD Non-communicable disease

NCIT National Centre for Information Technology

NDC Nationally Determined Contribution

ND-GAIN Notre Dame Global Adaptation Initiative's (ND-GAIN) Country Index

NDMA National Disaster Management Authority

NDMC National Disaster Management Center (now the National Disaster Management Authority)

NDMP National Disaster Management Plan

NEET not in employment, education, or training
NEOC National Emergency Operations Center
NEOP National Emergency Operations Plan
NERF National Emergency Response Force
NERT National Emergency Response Team

NGO Non-government organization

NIE National Institute of Education

NTWC National Tsunami Warning Centre

ODA Official Development Assistance

OCHA ROAP Office for the Coordination of Humanitarian Affairs Regional Office for Asia and the Pacific (of

the United Nations)

OECD Organisation for Economic Co-operation and Development

OHDACA Overseas Humanitarian, Disaster, and Civic Aid funds

OP Operation procedure

OSOCC On-Site Operations Coordination Center

PCV Pneumococcal Conjugate Vaccine

PDC Pacific Disaster Center (also "PDC Global")

PEER Program for the Enhancement of Emergency Response

PLOTE People's Liberation Organization of Tamil Eelam

PNC People's National Congress

POISED Preparing Outer Islands for Sustainable Energy Development

PPM Progressive Party of Maldives

PPP Peoples Progress Party (Dhivehi Rayyithunge Muthagaddim Party)

PRC People's Republic of China
PrEP Pre-exposure prophylaxis

PV photovoltaic

RCP Representative Concentration Pathways

Rf / MVR Maldivian Rufiyaa

RHCC Changi Regional HADR Coordination Centre

RIMES Regional Integrated Multi-Hazard Early Warning System for Africa and Asia

RO Reverse osmosis

ROMO Range of Military Operations

SAARC South Asian Association for Regional Cooperation

SAP Strategic Action Plan

SAREP South Asia Regional Energy Partnership

SDG Sustainable Development Goals

SDMC SAARC Disaster Management Centre
SecDef Secretary of Defense (of the US)
SEOP School Emergency Operations Plans

SIDS Small Island Developing State
SIM subscriber identification module

SLAF Sri Lanka Air Force
SLR Sea level rise

SME Subject Matter Experts

SMW6 Sea-Me-We 6 submarine cable system

APPENDICES

SNAP Sustainable National Anticipatory Actions through Preparedness (of the USAID/BHA)

SOCPAC Special Operations Command Pacific (U.S.)

SOP **Standard Operating Procedures SPHE** State of Public Health Emergency

SPP State Partnership Program

square sq.

SSAC School Safety Advisory Committee **Shared Socioeconomic Pathways** SSP

STELCO State Electric Company Ltd. TAC **Technical Advisory Committee** TAG technical advisory group

TB **Tuberculosis**

Td Tetanus-Diphtheria

TEU twenty-foot equivalent unit TSP Tsunami Service Providers

TVET Technical and Vocational Education and Training

TWFP Tsunami Warning Focal Points

U.S. **United States**

UAE **United Arab Emirates** UHC Universal health coverage

UK **United Kingdom**

UKM Universiti Kebangsaan Malaysia **UMIC** upper middle-income country

UN **United Nations**

UNCT United Nations Country Team

UNDP United Nations Development Programme

UNDRR United Nations Office of Disaster Risk Reduction

UNEP United Nations Environment Programme

UNESCAP United Nations Economic and Social Commission for Asia and the Pacific

UNESCO United Nations Educational, Scientific, and Cultural Organization

UNFCCC United Nations Framework Convention on Climate Change

UNFPA **United Nations Population Fund**

UNHCR United Nations High Commissioner on Refugees

UNICEF United Nations' Children's Fund

UNODC United Nations Office on Drugs and Crime **UNOPS** United Nations Office for Project Services **UNSCR** United Nations Security Council Resolution

UNSDCF Sustainable Development Cooperation Framework (of the UN)

USAID United States Agency for International Development

USAR Urban search and rescue **USARPAC** United States Army Pacific **USINDOPACOM** U.S. Indo-Pacific Command VIA Velana International Airport

VoIP Voice over IP

VPN Virtual private network

Waste Management Corporation WAMCO

WHO World Health Organization

WMO World Meteorological Organisation **WMSL 757** U.S. Coast Guard Cutter Midgett WPS Women, Peace and Security

WRR World Risk Report

Endnotes

- 1 Strategic Action Plan: 2019-2023. Government of Maldives. 2019. https://presidency.gov.mv/SAP/; Permanent Mission of the Republic of Maldives. History. Accessed 15 September 2024. http://maldivesmission.com/history
- 2 Naseema, Mohamed. Maldivian Seafaring in the Pre-Portuguese Period. The National Centre for Linguistic and Historical Research. Accessed 15 September 2024. http://gaumiyyath.gov.mv/docs/whitepapers/history/ seafaring.pdf; Naseema, Mohamed. Maldivian Seafaring in the Pre-Portuguese Period. The National Centre for Linguistic and Historical Research. Accessed 15 September 2024. http://qaumiyyath.gov.mv/docs/whitepapers/history/seafaring.pdf
- 3 Permanent Mission of the Republic of Maldives History. Accessed 15 September 2024. http://maldivesmission. com/history
- 4 Feener, R. Michael, TIMELINE OF MALDIVES HISTORY. Maldives Heritage Survey. MHS Project Database. Accessed 15 September 2024. https://maritimeasiaheritage. cseas.kyoto-u.ac.jp/wp-content/uploads/2021/03/Maldives-Timeline-MHS.pdf
- 5 Permanent Mission of the Republic of Maldives. History. Accessed 15 September 2024. http://maldivesmission. com/history
- 6 Feener, R. Michael. TIMELINE OF MALDIVES HISTO-RY. Maldives Heritage Survey. MHS Project Database. Accessed 15 September 2024. https://maritimeasiaheritage.cseas.kyoto-u.ac.jp/wp-content/uploads/2021/03/ Maldives-Timeline-MHS.pdf; Republic of Maldives. The President's Office. President Dr Muizzu meets Sri Lankan President Ranil Wickremesinghe. 17 November 2023. https://presidency.gov.mv/Press/Article/29052
- 7 The Times. Ibrahim Nasir: first President of the Maldives. 2 December 2008. https://www.thetimes.com/ article/ibrahim-nasir-first-president-of-the-maldives-cnfw33tdnb3
- 8 The Times. Ibrahim Nasir: first President of the Maldives. 2 December 2008. https://www.thetimes.com/ article/ibrahim-nasir-first-president-of-the-maldives-cnfw33tdnb3
- 9 Fernando, Srimal. Modern Diplomacy. The Making of Modern Maldives: A Look at Maumoon Gayoom. 15 November 2018. https://moderndiplomacy.eu/2018/11/15/ the-making-of-modern-maldives-a-look-at-maumoongayoom/
- 10 Sultana, Gulbin. Operation Cactus: India's First Rapid Reaction Strategic Mission in the Neighbourhood. Journal of Defence Studies, Volume 17, No. 4. Oct-Dec 2023. https://www.idsa.in/system/files/jds/jds-17-4-Gulbin-Sultana.pdf
- 11 U.S. Department of State. 2008 Country Report on Human Rights Practices. 25 February 2009. https://2009-2017.state.gov/j/drl/rls/hrrpt/2008/ sca/119137.htm
- 12 Republic of Maldives. Maldives: One Year After The Tsunami, Ministry of Planning and National Development. Accessed 15 October 2024. https://www.preventionweb. net/files/2190_VL323129.pdf; World Bank-Asian Development Bank-UN. Maldives tsunami impact and recovery:

- Joint needs assessment. 14 February 2005. https://reliefweb.int/report/maldives/maldives-tsunami-impact-andrecovery-joint-needs-assessment-world-bank-asian
- 13 Gregersen, Erik and Murray, Lorraine. Britannica. Mohamed Nasheed president of Maldives. Accessed 15 September 2024. https://www.britannica.com/biography/ Mohamed-Nasheed#ref1097069; University of Central Arkansas. Government, Public Service, and International Studies. 41. Maldives (1965-present). Accessed 15 September 2024. https://uca.edu/politicalscience/home/ research-projects/dadm-project/asiapacific-region/maldives-1965-present/
- 14 Nasheed, M. [@MohamedNasheed]. X. 7yrs ago today we held the underwater cabinet meeting in the #Maldives. Today, more than 190 states reached agreement to phase out #HFCs [Post]. 15 October 2016. https://x. com/MohamedNasheed/status/787325728559800320; Gregersen, Erik and Murray, Lorraine. Britannica. Mohamed Nasheed president of Maldives. Accessed 15 September 2024. https://www.britannica.com/biography/ Mohamed-Nasheed#ref1097069
- 15 U.S. Department of State. Psaki, Jen. Statement on the Trial of Former President Nasheed in Maldives. 13 March 2015. https://2009-2017.state.gov/r/pa/prs/ ps/2015/03/238884.htm
- 16 BBC. Maldives leaves Commonwealth amid democracy row. 13 October 2015. https://www.bbc.com/news/ world-asia-37647310
- 17 BBC. Maldives election: Ibrahim Mohamed Solih claims victory. 23 September 2018. https://www.bbc. com/news/world-asia-45592375; Indian Council of World Affairs. Mallempati, Dr. Samantha. 2018 Presidential Election in Maldives: Outcome and Implications. 17 October 2018. https://www.icwa.in/show content. php?lang=1&level=3&ls_id=4893&lid=2823
- 18 Robinson, J.J. Reuters. New Maldives leader vows stability after crisis, protests. 1 November 2013. https:// www.reuters.com/article/world/new-maldives-leader-vows-stability-after-crisis-protests-idUSBRE9AG09L/
- 19 PSM News. Speaker Nasheed joins The Democrats. 14 July 2023. https://psmnews.mv/en/123509; University of Central Arkansas, Government, Public Service, and International Studies. 41. Maldives (1965-present). Accessed 15 September 2024. https://uca.edu/politicalscience/ home/research-projects/dadm-project/asiapacific-region/ maldives-1965-present/
- 20 U.S. Department of State. 2023 Investment Climate Statements: Maldives. Accessed 15 September 2024. https://www.state.gov/reports/2023-investment-climate-statements/maldives/; International Foundation for Electoral Systems. Election Guide. Election for Maldivian Presidency Results. Accessed 15 September 2024. https:// www.electionguide.org/elections/id/2640/
- 21 Haleem, Mohamed. Maldives Republic. President Solih Reflects on Five Years of Transformative Achievements in Republic Day Address. 11 November 2023. https:// mvrepublic.com/news/president-solih-reflects-on-fiveyears-of-transformative-achievements-in-republic-dayaddress/; Rasheed, Athaulla A. National University of Singapore. Institute of South Asian Studies. Implications

- of Securitising and Desecuritising the Maldives' Partnerships. 23 July 2024. https://www.isas.nus.edu.sg/papers/implications-of-securitising-and-desecuritising-the-maldives-partnerships/
- 22 U.S. Department of State. 2023 Investment Climate Statements: Maldives. Accessed 15 September 2024. https://www.state.gov/reports/2023-investment-climate-statements/maldives/
- 23 Banka, Neha. Indian Express. Maldives ex-President Yameen acquitted. 21 April 2024. https://indianexpress.com/article/explained/explained-global/maldives-ex-president-yameen-acuitted-9279522/
- 24 Permanent Mission of the Republic of Maldives. History. Accessed 15 September 2024. http://maldivesmission.com/history
- 25 Naseema, Mohamed. The National Centre for Linguistic and Historical Research. Maldivian Seafaring in the Pre-Portuguese Period. Accessed 15 September 2024. http://qaumiyyath.gov.mv/docs/whitepapers/history/seafaring.pdf
- 26 Maldives. Culture of the Maldives. 10 June 2024. https://www.maldives.com/blog/culture-of-maldives
- 27 Maldives The Sunny Side of Life. Walk down memory lane with Maldivian cultural attires. 7 Mar 2022. https://visitmaldives.com/en/experience/walk-down-memory-lane-with-maldivian-cultural-attires
- 28 Maldives The Sunny Side of Life. Walk down memory lane with Maldivian cultural attires. 7 Mar 2022. https://visitmaldives.com/en/experience/walk-down-memory-lane-with-maldivian-cultural-attires
- 29 Maldives. Culture of the Maldives. 10 June 2024. https://www.maldives.com/blog/culture-of-maldives
- 30 CIA. The World Factbook. Maldives. Accessed 30 September 2024. https://www.cia.gov/the-world-factbook/countries/maldives/#people-and-society
- 31 IOM. Maldives Migration Profile Highlights Key Role of Foreign Migrant Workers. 28 June 2019. https://www.iom.int/fr/node/100809
- 32 Maldives Bureau of Statistics. Census Results Summary. 9 July 2023. https://census.gov.mv/2022/census-results-summary/
- 33 IFRC. Maldives Lymphatic Filariasis Response. Accessed 15 September 2024. https://go.ifrc.org/emergencies/6804/details; Maldives Bureau of Statistics. 2022 Maldives Population and Housing Census. Accessed 15 September 2024. https://census.gov.mv/2022/wp-content/uploads/2023/03/Provisional-Result-Publication. pdf; U.S. Department of State. 2024 Trafficking in Persons Report: Maldives. Accessed 15 September 2024. https://www.state.gov/reports/2024-trafficking-in-persons-report/maldives/
- 34 Neoscapes Maldives. About the Maldives. Location & How to Get There. Accessed 23 October 2024. https://www.neoscapesmaldives.com/about-the-maldives/
- 35 United Nations Population Fund. World Population Dashboard Maldives. Accessed 15 September 2024. https://www.unfpa.org/data/world-population/MV
- 36 Maldives Bureau of Statistics. Census Results Summary. 9 July 2023. https://census.gov.mv/2022/census-results-summary/

- 37 Maldives Bureau of Statistics. 2023 Yearbook. Table 3.14. Accessed 30 September 2024. https://statisticsmaldives.gov.mv/yearbook/2023/wp-content/uploads/sites/10/2023/04/3.14.pdf
- 38 South Asia Co-operative Environment Programme. Maldives. Accessed 30 September 2024. http://www.sacep.org/member-countries/maldives; "Census Results Summary," Maldives Bureau of Statistics, 9 July 2023, https://census.gov.mv/2022/census-results-summary/; "2022 Maldives Population and Housing Census," Maldives Bureau of Statistics, https://census.gov.mv/2022/wp-content/uploads/2023/03/Provisional-Result-Publication.pdf. Accessed 15 September 2024; "2024 Trafficking in Persons Report: Maldives," U.S. Department of State, https://www.state.gov/reports/2024-trafficking-in-persons-report/maldives/. Accessed 15 September 2024.
- 39 "Education in the Maldives," University of Bristol, https://www.bristol.ac.uk/education/research/sites/small-states/education-in-the-maldives. Accessed 15 September 2024; Inayath, Mohamed, LTC. Maldives National Defense Force. Key Informant Interview. 24 September 2024; Original Travel. Culture: Maldives. Accessed 30 September 2024. https://www.originaltravel.co.uk/travel-guide/maldives/culture
- 40 Feener, R. Michael. Maldives Heritage Survey Team. TIMELINE OF MALDIVES HISTORY. Accessed 30 October 2024. https://maritimeasiaheritage.cseas.kyoto-u.ac.jp/wp-content/uploads/2021/03/Maldives-Timeline-MHS.pdf; The President's Office. Republic of Maldives. A crucial component of celebrating the day Maldives embraced Islam is to embed social and moral values advocated by Islam, says the President. 16 October 2023. https://presidency.gov.mv/Press/Article/28958
- 41 Permanent Mission of the Republic of Maldives. History. Accessed 15 September 2024. http://maldivesmission.com/history
- 42 Ministry of Islamic Affairs. Government of Maldives. Accessed 30 September 2024. https://islamicaffairs.gov.mv/
- 43 U.S. Department of State. 2023 Report on International Religious Freedom: Maldives. Accessed 15 September 2024. https://www.state.gov/reports/2023-report-on-international-religious-freedom/maldives/
- 44 Disaster Management Act 28/2015, 3.(a) and 48.(b), National Disaster Management Agency, Government of Maldives.
- 45 UNHCR. World Directory of Minorities and Indigenous Peoples Maldives. 2007. https://webarchive.archive.unhcr.org/20230518165312/https://www.refworld.org/docid/4954ce3923.html
- 46 U.S. Department of State. 2023 Report on International Religious Freedom: Maldives. Accessed 15 September 2024. https://www.state.gov/reports/2023-report-on-international-religious-freedom/maldives/
- 47 UNICEF. Situation Analysis of Children and Youth in the Maldives. October 2021. https://maldives.un.org/sites/default/files/2022-08/Situation%20Analysis%20 of%20Children%20and%20Youth%20in%20the%20Maldives.pdf

- 48 Office of the UN Resident Coordinator for the Maldives. Common Country Analysis. June 2023. https:// maldives.un.org/en/241592-common-country-analysiscca-maldives-june-2023
- 49 Situation Analysis Maldives, United Nations Children Fund, UNICEF 2021, https://www.unicef.org/maldives/ media/2736/file/Situation%20Analysis%20of%20Children%20and%20Youth%20in%20the%20Maldives.pdf
- 50 Maldives Bureau of Statistics. Census 2022. https:// census.gov.mv/2022/wp-content/uploads/2024/08/ Child-Infographics.pdf
- 51 UNICEF. Situation Analysis of Children and Youth in the Maldives. October 2021. https://maldives.un.org/ sites/default/files/2022-08/Situation%20Analysis%20 of%20Children%20and%20Youth%20in%20the%20Maldives.pdf
- 52 Office of the UN Resident Coordinator for the Maldives. Common Country Analysis. June 2023. https:// maldives.un.org/en/241592-common-country-analysiscca-maldives-june-2023
- 53 UN Women. Maldives. Women Count. Accessed 15 October 2024. https://data.unwomen.org/country/maldives
- 54 World Bank. Gender Data Portal. Maldives. Accessed 16 October 2024. https://liveprod.worldbank.org/en/ economies/maldives#:~:text=In%20Maldives%2C%20 the%20labor%20force,women%20is%20higher%20in%20 Maldives
- 55 United Nations. UN Expert: Maldives Stuck Between Rock and Hard Place on Climate Change Issue. 25 April 2024. https://maldives.un.org/en/267078-un-expert-maldives-stuck-between-rock-and-hard-place-climate-changeissue
- 56 Bradbury, Stacey and Suchodolska, Liliana. UN Women. No data, no debate: Integrating gender in the national statistical strategy in the Maldives. 27 May 2022. https:// data.unwomen.org/features/no-data-no-debate-integrating-gender-national-statistical-strategy-maldives
- 57 UN Women. Maldives. Women Count. Accessed 15 October 2024. https://data.unwomen.org/country/mal-
- 58 U.S. Department of State. 2022 Country Reports on Human Rights Practices: Maldives, Accessed 15 October 2024. https://www.state.gov/reports/2022-country-reports-on-human-rights-practices/maldives/
- 59 United Nations. UN Expert: Maldives Stuck Between Rock and Hard Place on Climate Change Issue. 25 April 2024. https://maldives.un.org/en/267078-un-expert-maldives-stuck-between-rock-and-hard-place-climate-changeissue
- 60 National Bureau of Statistics, Government of Maldives. Maldives Disability Demographics. Household Income and Expenditure. 2019. https://statisticsmaldives. gov.mv/nbs/wp-content/uploads/2020/12/Disability-Demographics.pdf
- 61 National Bureau of Statistics, Government of Maldives. Maldives Disability Demographics. Household Income and Expenditure. 2019. https://statisticsmaldives. gov.mv/nbs/wp-content/uploads/2020/12/Disability-Demographics.pdf

- 62 UNESCAP. Strengthening National and Subnational Capacity for Sustainable Disaster Risk Reduction, Climate Change Adaptation and Mitigation in Maldives. July 2024. https://www.unescap.org/events/2024/capacity-building-national-and-subnational-planning-sustainable-disaster-risk-reduction
- 63 The World Bank Group. Crisis Preparedness Gap Analysis. Maldives Briefing Note. October 2023. https://documents1.worldbank.org/curated/ en/099032224020533320/pdf/P1802841f641380f1bed-01d3a3e38f256a.pdf
- 64 U.S. Department of State. 2022 Country Reports on Human Rights Practices: Maldives. Accessed 15 October 2024. https://www.state.gov/reports/2022-country-reports-on-human-rights-practices/maldives/
- 65 The World Bank Group. Crisis Preparedness Gap Analysis. Maldives Briefing Note. October 2023. https://documents1.worldbank.org/curated/ en/099032224020533320/pdf/P1802841f641380f1bed-01d3a3e38f256a.pdf
- 66 United Nations Maldives. Common Country Analysis. June 2023. https://maldives.un.org/sites/default/ files/2023-08/CCA%20Maldives%20-%20June%202023.
- 67 UNESCAP. Strengthening National and Subnational Capacity for Sustainable Disaster Risk Reduction, Climate Change Adaptation and Mitigation in Maldives. July 2024. https://www.unescap.org/events/2024/capacity-building-national-and-subnational-planning-sustainable-disaster-risk-reduction
- 68 U.S. Department of State. 2024 Investment Climate Statements: Maldives. Accessed 15 October 2024. https:// www.state.gov/reports/2024-investment-climate-statements/maldives/
- 69 U.S. Department of State. 2024 Investment Climate Statements: Maldives. Accessed 15 October 2024. https:// www.state.gov/reports/2024-investment-climate-statements/maldives/
- 70 Elsevier Inc. National perspectives of COVID-19 in the Maldives. 2022. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9212231/
- 71 Maldivian Red Crescent. Annual Report. 2023. https:// portal.redcrescent.org.mv/api/files/20240804-114905-MRC Annual Report 2023 Web.pdf
- 72 UNDP. Briefing note for countries on the 2023 Multidimensional Poverty Index. Accessed 15 October 2024. https://hdr.undp.org/sites/default/files/Country-Profiles/ MPI/MDV.pdf
- 73 UNDP. Briefing note for countries on the 2023 Multidimensional Poverty Index. Accessed 15 October 2024. https://hdr.undp.org/sites/default/files/Country-Profiles/MPI/MDV.pdf
- 74 Asian Development Bank. Maldives. Accessed 15 October 2024. https://www.adb.org/where-we-work/maldives/poverty
- 75 UNICEF. Situation Analysis of Children and Youth in the Maldives. October 2021. https://www.unicef. org/maldives/documents/situation-analysis-children-and-youth-maldives

- 76 UN Maldives Annual Report. 2023, https://maldives.un.org/sites/default/files/2024-04/UN%20Maldives%20 Annual%20Results%20Report%202023.pdf
- 77 The World Bank. World Bank Country and Lending Groups. Accessed 30 September 2024. https://datahelp-desk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups; The World Bank. World Bank Country and Lending Groups. Accessed 30 September 2024. https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups; UNICEF. Situation Analysis of Children and Youth in the Maldives. October 2021. https://maldives.un.org/sites/default/files/2022-08/Situation%20Analysis%20of%20Children%20and%20Youth%20in%20the%20 Maldives.pdf
- 78 The World Bank. International Bank for Reconstruction and Development. 2023. https://openknowledge.worldbank.org/entities/publication/d16fbb0d-0899-4da1-8e7f-f5dcf92e4789; World bank. Maldives: Human Capital Review. November 2023. https://thedocs.worldbank.org/en/doc/e5316790a77abe5d945d921529fe8b24-0310062023/original/Maldives-Human-Capital-Review-Unleashing-People-s-Full-Potential.pdf
- 79 World Bank Group. Maldives. Data. Accessed 30 September 2024. https://data.worldbank.org/country/maldives?most_recent_year_desc=false; United Nations Maldives. Common Country Analysis. Maldives. June 2023. https://maldives.un.org/en/241592-common-country-analysis-cca-maldives-june-2023
- 80 The World Bank Group. Maldives: Outlook. Accessed 15 October 2024. https://www.worldbank.org/en/country/maldives/overview#1
- 81 United Nations. Blue Economy Definitions. Accessed 15 October 2024. https://www.un.org/regularprocess/sites/www.un.org.regularprocess/files/rok_part_2.pdf
- 82 Government of Maldives. Strategic Action Plan 2019-2023. https://presidency.gov.mv/SAP/
- 83 World Bank Group. The World Bank In Maldives: Overview. Accessed 30 September 2024. https://www.worldbank.org/en/country/maldives/overview; The Edition. Tourist arrivals from China exceed 200,000. 8 September 2024. https://edition.mv/bml/35903
- 84 Asian Development Bank. Asian Development Outlook April 2024: Maldives. Accessed 30 September 2024. https://www.adb.org/sites/default/files/publication/957856/mld-ado-april-2024.pdf
- 85 Ministry of Fisheries and Agriculture. Background report of fishery products. Accessed 30 September 2024. https://www.fao.org/fileadmin/user_upload/fisheries/docs/Maldives_Edited_.docx; Ministry of Fisheries and Ocean Resources. Contribution from the Maldives to the seventeenth round of Informal Consultations of States Parties to the United Nations Fish Stocks Agreement. 17 May 2024. https://www.un.org/depts/los/convention_agreements/ICSP17/ICSP17 Maldives.pdf
- 86 Asian Development Bank. Asian Development Outlook. Maldives. April 2024. https://www.adb.org/sites/default/files/publication/957856/mld-ado-april-2024.pdf
- 87 FAO. Maldives. Accessed 15 October 2024. https://www.fao.org/family-farming/detail/en/c/289383/

- 88 FAO. Maldives. Accessed 15 October 2024. https://www.fao.org/family-farming/detail/en/c/289383/#
- 89 Permanent Committee on Geographical Names. TOP-ONYMIC FACTFILE: Maldives. Accessed 15 October 2024. https://assets.publishing.service.gov.uk/media/654cff-da5d60950011bec8b5/Maldives Toponymic Factfile.pdf
- 90 Republic of Maldives. Election Guide. International Foundation for Electoral Systems. Accessed 15 October 2024. https://www.electionguide.org/countries/id/132/
- 91 Judiciaries Worldwide. Maldives Country Profile. Accessed 15 October 2024. https://judiciariesworldwide.fjc.gov/country-profile/maldives
- 92 globalEDGE. Michigan State University. Maldives: Government. Accessed 15 October 2024. https://globaledge.msu.edu/countries/maldives/government#source 1
- 93 Maldives Bureau of Statistics. Census Results Summary. 9 July 2023. https://census.gov.mv/2022/census-results-summary/
- 94 OneMap. Map of Maldives. Accessed 15 October 2024. https://onemap.mv/; Aishath Ifa Mohamed, Republic of Maldives Country Report, Visiting Researcher Program FY2023, NDMA and ADRC.
- 95 Waheed, Brigadier General W. College of Defence and Security Studies. Maldives National Defence Force. Republic of Maldives. CHANGING DYNAMICS INTHE GLOBAL ENVIRONMENT: THE MALDIVES STORY. 8 June 2018. http://ir.kdu.ac.lk/handle/345/1705?show=full
- 96 Maldives, CIA World Factbook, https://www.cia.gov/the-world-factbook/countries/maldives/#geography, Accessed 15 November 2024; World Bank Group. Maldives Country Climate and Development Report. Washington, DC, http://hdl.handle.net/10986/41729; UNESCAP. South and South-West Asia Office; Strengthening National and Subnational Capacity for Sustainable Disaster Risk Reduction, Climate Change Adaptation and Mitigation in Maldives. July 2024. https://www.unescap.org/events/2024/capacity-building-national-and-subnation-al-planning-sustainable-disaster-risk-reduction; Maldives National Defence Force Capstone Doctrine
- 97 Office of Oceans Affairs. U.S. Department of State. Limits in the Seas: No. 126. Maldives Maritime Claims and Boundaries. 8 September 2005. https://www.state.gov/wp-content/uploads/2019/12/LIS-126.pdf
- 98 UNESCAP. South and South-West Asia Office. Strengthening National and Subnational Capacity for Sustainable Disaster Risk Reduction, Climate Change Adaptation and Mitigation in Maldives. July 2024. https://www.unescap.org/events/2024/capacity-building-national-and-subnational-planning-sustainable-disaster-risk-reduction; Office of Oceans Affairs. U.S. Department of State. Limits in the Seas: No. 126. Maldives Maritime Claims and Boundaries. 8 September 2005. https://www.state.gov/wp-content/uploads/2019/12/LIS-126.pdf
- 99 UNESCAP. South and South-West Asia Office. Strengthening National and Subnational Capacity for Sustainable Disaster Risk Reduction, Climate Change Adaptation and Mitigation in Maldives. July 2024. https://www.unescap.org/events/2024/capacity-building-national-and-subnational-planning-sustainable-disaster-risk-reduction

- 100 World Bank Group. Maldives Country Climate and Development Report. © Washington, DC: World Bank. License: CC BY-NC 3.0 IGO. 2024. http://hdl.handle. net/10986/41729
- 101 Prangya Paramita Gupta. UN ESCAP. Presentation, "Key Findings: Strengthening National and Subnational Capacity for Sustainable Disaster Risk Reduction, Climate Change Adaptation and Mitigation in Maldives. 30 January 2024. https://www.unescap.org/sites/default/d8files/ event-documents/Day1.SessionIII.1.pdf
- 102 Asian Development Bank. Multihazard Risk Atlas of Maldives Geography—Volume I. Metro Manila, Philippines. March 2020. https://www.adb.org/publications/ multihazard-risk-atlas-maldives
- 103 OneMap.mv, Maldives Land and Survey Authority, https://readme.onemap.mv/. Accessed 15 November 2024.
- 104 Asian Development Bank. Multihazard Risk Atlas of Maldives Geography-Volume I. Metro Manila, Philippines. March 2020. https://www.adb.org/publications/ multihazard-risk-atlas-maldives
- 105 U.S. Department of State. Limits in the Seas. No. 126. Maldives Maritime Claims and Boundaries. 8 September 2005. https://www.state.gov/wp-content/uploads/2019/12/LIS-126.pdf; Harding, Andrew. BBC. UK will give sovereignty of Chagos Islands to Mauritius. 3 October 2024. https://www.bbc.com/news/articles/c98ynejg4l5o
- 106 U.S. Department of State. Limits in the Seas. No. 126. Maldives Maritime Claims and Boundaries. 8 September 2005. https://www.state.gov/wp-content/uploads/2019/12/LIS-126.pdf
- 107 National Bureau of Statistics. Republic of Maldives. Statistical Pocket Book. 2017. http://statisticsmaldives.gov. mv/nbs/wp-content/uploads/2017/11/Statistical-Pocketbook-of-Maldives-2017-Web.pdf
- 108 The World Bank Group and the Asian Development Bank. Climate Risk Country Profile: Maldives. 2021. https://www.adb.org/publications/climate-risk-country-profile-maldives
- 109 The World Bank Group and the Asian Development Bank. Climate Risk Country Profile: Maldives. 2021. https://www.adb.org/publications/climate-risk-country-profile-maldives
- 110 The World Bank Group and the Asian Development Bank. Climate Risk Country Profile: Maldives. 2021. https://www.adb.org/publications/climate-risk-country-profile-maldives
- 111 The World Bank Group and the Asian Development Bank. Climate Risk Country Profile: Maldives. 2021. https://www.adb.org/publications/climate-risk-country-profile-maldives; OECD (2024), "Using the new UN Multidimensional Vulnerability Index to identify and fill in vulnerability financing gaps in SIDS", OECD, Paris.
- 112 UNDRR. Disaster Risk Reduction in Republic of Maldives: Status Report. 2019. https://www.undrr.org/ publication/disaster-risk-reduction-republic-maldives-status-report-2019
- 113 The World Bank Group. Maldives World Bank Group Country Climate and Development Report. June 2024. https://openknowledge.worldbank.org/entities/publicatio n/0b2772e9-1ed6-41c8-81c5-92b550b2eaf0

- 114 Hasfather, Zeke. Carbon Brief. Explainer: How 'Shared Socioeconomic Pathways' explore future climate change. 19 April 2018. https://www.carbonbrief.org/explainer-how-shared-socioeconomic-pathways-explore-future-climate-change/; Coastal climate change infographic series, Australian Government Department of the Environment and Energy, https://coastadapt.com.au/sites/ default/files/infographics/15-117-NCCARFINFOGRAPH-ICS-01-UPLOADED-WEB%2827Feb%29.pdf. Accessed 15 November 2024; "Explainer: How 'Shared Socioeconomic Pathways' explore future climate change," Carbon Brief, 19 April 2018, https://www.carbonbrief.org/explainer-how-shared-socioeconomic-pathways-explore-future-climate-change/. Accessed 15 November 2024.
- 115 ESCAP. New Delhi, India. Strengthening National and Subnational Capacity for Sustainable Disaster Risk Reduction, Climate Change Adaptation and Mitigation in Maldives. July 2024. https://www.unescap.org/events/2024/ capacity-building-national-and-subnational-planning-sustainable-disaster-risk-reduction
- 116 The World Bank Group, Maldives World Bank Group Country Climate and Development Report. June 2024. https://openknowledge.worldbank.org/entities/publicatio n/0b2772e9-1ed6-41c8-81c5-92b550b2eaf0
- 117 ESCAP. New Delhi, India. Strengthening National and Subnational Capacity for Sustainable Disaster Risk Reduction, Climate Change Adaptation and Mitigation in Maldives. July 2024. https://www.unescap.org/events/2024/ capacity-building-national-and-subnational-planning-sustainable-disaster-risk-reduction
- 118 ESCAP. New Delhi, India. Strengthening National and Subnational Capacity for Sustainable Disaster Risk Reduction, Climate Change Adaptation and Mitigation in Maldives. July 2024. https://www.unescap.org/events/2024/ capacity-building-national-and-subnational-planning-sustainable-disaster-risk-reduction
- 119 The World Bank Group and the Asian Development Bank. Climate Risk Country Profile: Maldives. 2021. https://www.adb.org/publications/climate-risk-country-profile-maldives
- 120 The World Bank Group. Maldives World Bank Group Country Climate and Development Report. June 2024. https://openknowledge.worldbank.org/entities/publicatio n/0b2772e9-1ed6-41c8-81c5-92b550b2eaf0
- 121 The World Bank Group. Maldives World Bank Group Country Climate and Development Report. June 2024. https://openknowledge.worldbank.org/entities/publicatio n/0b2772e9-1ed6-41c8-81c5-92b550b2eaf0
- 122 The World Bank Group. Maldives World Bank Group Country Climate and Development Report. June 2024. https://openknowledge.worldbank.org/entities/publicati on/0b2772e9-1ed6-41c8-81c5-92b550b2eaf0; "Contribution from the Maldives to the seventeenth round of Informal Consultations of States Parties to the United Nations Fish Stocks Agreement," 17 May 2024, Ministry of Fisheries and Ocean Resources Male', Republic of Maldives; Noo Raajje. Maldives Coral Reef Assessment. 2021. https://www.nooraajje.org/coral-reef-assessment

- 123 Ministry of Fisheries and Ocean Resources. Republic of Maldives. Contribution from the Maldives to the seventeenth round of Informal Consultations of States Parties to the United Nations Fish Stocks Agreement. 17 May 2024. https://www.un.org/depts//los/convention_agreements/Report_ICSP_17.pdf
- 124 The World Bank Group. Maldives World Bank Group Country Climate and Development Report. June 2024. https://openknowledge.worldbank.org/entities/publicatio n/0b2772e9-1ed6-41c8-81c5-92b550b2eaf0
- 125 The World Bank Group. Maldives World Bank Group Country Climate and Development Report. June 2024. https://openknowledge.worldbank.org/entities/publicatio n/0b2772e9-1ed6-41c8-81c5-92b550b2eaf0
- 126 OECD. Using the new UN Multidimensional Vulnerability Index to identify and fill in vulnerability financing gaps in SIDS. 2024. https://one.oecd.org/document/DCD(2024)16/en/pdf
- 127 OECD. Using the new UN Multidimensional Vulnerability Index to identify and fill in vulnerability financing gaps in SIDS. 2024. https://one.oecd.org/document/DCD(2024)16/en/pdf
- 128 UNDP RMSI. Developing a Disaster Risk Assessment for Maldives. Volume 1 & 2. Accessed 15 October 2024. https://www.undp.org/maldives/publications/developing-disaster-risk-profile-maldives; National Adaptation Plan of Action, Republic of Maldives, December 2006, https://unfccc.int/resource/docs/napa/mdv01.pdf. Accessed 15 October 2024.
- 129 Government of Maldives. Disaster Risk Reduction Strategy. 2024-2030. https://www.adb.org/documents/disaster-risk-management-action-plan-2024-2030
- 130 Government of Maldives. Disaster Risk Reduction Strategy. 2024-2030. https://www.adb.org/documents/disaster-risk-management-action-plan-2024-2030
- 131 The National Disaster Management Centre. The National Emergency Operations Plan, Volume I: Legal and Institutional Arrangements and Processes. Accessed 30 October 2024. https://ndma.gov.mv/en/laws-and-regulation; UNDP. Detailed Island Risk Assessment in Maldives. Natural Hazard and Physical Vulnerability Assessment Report. 2008. http://ndmc.gov.mv/assets/Uploads/DI-RAM-Vol1-Executive-Summary-V2.pdf.
- 132 Plus. NDMA Reports 61 Fire Incidents Across the Maldives Last Year. 30 November 2023. https://www.plus.mv/english/ndma-reports-61-fire-incidents-across-the-maldives-last-year/
- 133 Government of Maldives. Disaster Risk Reduction Strategy. 2024-2030. https://www.adb.org/documents/disaster-risk-management-action-plan-2024-2030
- 134 World Bank Group. Maldives Country Climate and Development Report. June 2024. https://openknowledge.worldbank.org/server/api/core/bitstreams/ff0d23ef-4786-4c3d-9a47-520e13e677ce/content
- 135 World Bank Group. Maldives Country Climate and Development Report. June 2024. https://openknowledge.worldbank.org/server/api/core/bitstreams/ff0d23ef-4786-4c3d-9a47-520e13e677ce/content

- 136 UNDRR. Disaster Risk Reduction in Republic of Maldives: Status Report. 2019. https://www.undrr.org/publication/disaster-risk-reduction-republic-maldives-status-report-2019
- 137 Government of Maldives. Disaster Risk Reduction Strategy. 2024-2030. https://www.adb.org/documents/disaster-risk-management-action-plan-2024-2030
- 138 Maldives Meteorological Service. Republic of Maldives. Climate Outlook for Seasonal Rainfall and Temperature over the Maldives for June September 2024. 6 May 2024. https://www.meteorology.gov.mv/single-news/80
- 139 Sun. Yellow alert for torrential rain and strong wind in central Maldives. 15 August 2024. https://sun.com. mv/91291
- 140 Osmanagic, Ameera. The Edition. 183 houses in Male' flooded, residents from 3 houses being relocated. 13 August 2024. https://edition.mv/apple_app_store/35336; NDMA. Republic of Maldives. 89 houses in 10 islands damaged in rain. 3 September 2024. https://ndma.gov.mv/en/news/vihsaaraigai-10-rashehge-89-geakah-gehlun
- 141 Osmanagic, Ameera. The Edition. 183 houses in Male' flooded, residents from 3 houses being relocated. 13 August 2024. https://edition.mv/apple_app_store/35336; NDMA. Republic of Maldives. 89 houses in 10 islands damaged in rain. 3 September 2024. https://ndma.gov.mv/en/news/vihsaaraigai-10-rashehge-89-geakah-gehlun
- 142 U.S. Environmental Protection Agency. Bti for Mosquito Control. Accessed 30 October 2024. https://www.epa.gov/mosquitocontrol/bti-mosquito-control
- 143 IFRC. Maldives Lymphatic Filariasis Response. Accessed 10 October 2024. https://go.ifrc.org/emergencies/6804/details
- 144 Asian Disaster Reduction Centre. Republic of Maldives: Visiting Researcher FY2023. 2023. https://www.adrc.asia/countryreport/MDV/2023/Maldives_CountryReport FY2023.pdf
- 145 Asian Disaster Reduction Centre. Republic of Maldives: Visiting Researcher FY2023. 2023. https://www.adrc.asia/countryreport/MDV/2023/Maldives_CountryReport_FY2023.pdf
- 146 Ratnakaran, Athira P. and B., Abish. ResearchGate. Role of warm ocean conditions in the genesis and rapid intensification of tropical cyclone "Tauktae" along the west coast of India. May 2023. https://www.researchgate.net/publication/370779452_Role_of_warm_ocean_conditions_in_the_genesis_and_rapid_intensification_of_tropical_cyclone_'Tauktae'_along_the_west_coast_of_India; Extremely Severe Cyclonic Storm TAUKTAE over the Arabian Sea. 14-19 May 2021. https://internal.imd.gov.in/press_release/20210611_pr_1132.pdf; ECHO. ReliefWeb. India, Pakistan Tropical Cyclone Tauktae. 17 May 2021. https://reliefweb.int/report/india/india-pakistan-tropical-cyclone-tauktae-dg-echo-dg-echo-partners-gdacs-jtwc-imd-pmd
- 147 WordData. Cyclones on the Maldives. Accessed 30 September 2024. https://www.worlddata.info/asia/maldives/cyclones.php

- 148 Sun. Deep depression intensified to cyclone, moves away from Maldives. 15 May 2021. https://en.sun. mv/66711; drishti. Cyclone Tauktae. 18 May 2021. https:// www.drishtiias.com/daily-news-analysis/cyclone-tauktae/ print manually; WorldData. Cyclones on the Maldives. Accessed 30 September 2024. https://www.worlddata. info/asia/maldives/cyclones.php
- 149 Asian Disaster Reduction Centre. Republic of Maldives: Visiting Researcher FY2023. 2023. https://www. adrc.asia/countryreport/MDV/2023/Maldives_CountryReport FY2023.pdf; Sattar SA, Musthafa M, Rushdhy I, Pal I. National perspectives of COVID-19 in the Maldives. Pandemic Risk, Response, and Resilience, 2022:157–72, doi: 10.1016/B978-0-323-99277-0.00013-9. Epub 2022 Jun 17. PMCID: PMC9212231.
- 150 Asian Disaster Reduction Centre. Republic of Maldives: Visiting Researcher FY2023. 2023. https://www. adrc.asia/countryreport/MDV/2023/Maldives_CountryReport FY2023.pdf; Sattar SA, Musthafa M, Rushdhy I, Pal I. National perspectives of COVID-19 in the Maldives. Pandemic Risk, Response, and Resilience. 2022:157-72. doi: 10.1016/B978-0-323-99277-0.00013-9. Epub 2022 Jun 17. PMCID: PMC9212231.
- 151 Asian Disaster Reduction Centre. Republic of Maldives: Visiting Researcher FY2023. 2023. https://www. adrc.asia/countryreport/MDV/2023/Maldives CountryReport FY2023.pdf; Sattar SA, Musthafa M, Rushdhy I, Pal I. National perspectives of COVID-19 in the Maldives. Pandemic Risk, Response, and Resilience. 2022:157-72. doi: 10.1016/B978-0-323-99277-0.00013-9. Epub 2022 Jun 17. PMCID: PMC9212231.
- 152 Sattar SA, Musthafa M, Rushdhy I, Pal I. National perspectives of COVID-19 in the Maldives. Pandemic Risk, Response, and Resilience. 2022:157–72. doi: 10.1016/ B978-0-323-99277-0.00013-9. Epub 2022 Jun 17. PMCID: PMC9212231.
- 153 Sattar SA, Musthafa M, Rushdhy I, Pal I. National perspectives of COVID-19 in the Maldives. Pandemic Risk, Response, and Resilience. 2022:157-72. doi: 10.1016/ B978-0-323-99277-0.00013-9. Epub 2022 Jun 17. PMCID: PMC9212231.
- 154 Ajmal, Ismail. ResearchGate. Simulation of Energy Harnessing from Speed-Breakers in Male', Maldives. Jan 2014. https://www.researchgate.net/figure/ Population-density-comparisons-of-selected-main-cities-with-Male tbl1 261879297
- 155 Glode Number. MDV Maldives. 2019. https://www. glidenumber.net/glide/public/search/details.jsp?glide=21605&record=4&last=12
- 156 Asian Disaster Reduction Centre. Republic of Maldives: Visiting Researcher FY2023. 2023. Accessed 30 September 2024. https://www.adrc.asia/countryreport/ MDV/2023/Maldives_CountryReport_FY2023.pdf; "Maldives: Fire - Emergency Plan of Action (EPoA) DREF Operation n° MDRMV003 Final Report," 14 July 2020, IFRC, https://reliefweb.int/report/maldives/maldives-fire-emergency-plan-action-epoa-dref-operation-n-mdrmv003-finalreport
- 157 X Post. @NDMAMV. https://x.com/ndmamv/status/936666160803692544

- 158 ADRC. Maldives: Damage to 60 islands after extreme weather. Accessed 30 September 2024. https://www.adrc.asia/view disaster en.php?Nation-Code=462&Lang=en&Key=2238
- 159 Maldives Independent. Addu City suffers worst floods in 40 years. 25 November 2015. https://maldivesindependent.com/environment/addu-city-suffers-worstfloods-in-40-years-120126
- 160 Maldives Independent. Addu City suffers worst floods in 40 years. 25 November 2015. https://maldivesindependent.com/environment/addu-city-suffers-worstfloods-in-40-years-120126
- 161 The Hindu. How India staved off Maldives' water crisis. 16 Nov 2021. https://www.thehindu.com/news/national/How-India-staved-off-Maldives%E2%80%99-drinking-water-crisis/article60321923.ece
- 162 Indian Aerospace & Defence Bulletin. IAF's Significant Global Air Reach. 16 Feb 2024. https://www.iadb. in/2024/02/16/iafs-significant-global-air-reach/
- 163 High Commission of India Male, Maldives. Ministry of External Affairs. Operation Neer: Indian assistance to Maldives during Male Water Crisis. Accessed 4 Sep 2024. https://eoi.gov.in/eoisearch/MyPrint.php?3840?001/0011
- 164 IFRC. ReliefWeb. Maldives Annual Report 2014. 29 April 2015. https://reliefweb.int/report/maldives/maldives-annual-report-2014-maamv001; "Tropical Cyclone Nilam: Maldives, Sri Lanka and India - Situation Report (SR-1), 01 November 2012," Situation Report, World Health Organization, 1 November 2012, https://reliefweb. int/report/india/tropical-cyclone-nilam-maldives-sri-lanka-and-india-situation-report-sr-1-01-november.
- 165 Fitzgibbon, C. and Crosskey, A. Disaster risk reduction management in the drylands in the Horn of Africa. Brief prepared by a Technical Consortium hosted by CGIAR in partnership with the FAO Investment Centre. Technical Consortium Brief 4. Nairobi: International Livestock Research Institute. 2013. https://repo.mel.cgiar.org/handle/20.500.11766/5197
- 166 UNDRR. Terminology. Accessed 8 September 2022. https://www.undrr.org/terminology
- 167 OECD. Small Island Developing States. Accessed 30 October 2024. https://www.oecd.org/content/oecd/en/ topics/sub-issues/small-islands-developing-states.html
- 168 OECD. Small Island Developing States. Accessed 30 October 2024. https://www.oecd.org/content/oecd/en/ topics/sub-issues/small-islands-developing-states.html
- 169 European Commission. Disaster Risk Management Knowledge Centre (DRMKC). INFORM. Accessed 30 January 2023. https://drmkc.jrc.ec.europa.eu/inform-index
- 170 European Commission. Disaster Risk Management Knowledge Centre (DRMKC). INFORM Global Risk Index. Methodology. https://drmkc.jrc.ec.europa.eu/inform-index/InDepth/Methodology
- 171 Disaster Risk Management Knowledge Centre. European Commission. INFORM Global Risk Index. Methodology. https://drmkc.jrc.ec.europa.eu/inform-index/InDepth/ Methodology

- 172 Disaster Risk Management Knowledge Centre. European Commission. INFORM Country Risk Profile 2025 – Maldives. Accessed 15 November 2024. https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Risk/Country-Risk-Profile
- 173 European Commission. Disaster Risk Management Knowledge Centre (DRMKC). INFORM Climate Change Tool. Accessed 31 January 2023. https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Climate-Change/INFORM-Climate-Change-Tool
- 174 Poljansek, K., Marzi, S., Galimberti, L., Dalla Valle, D., Pal, J., Essenfelder, A.H., Mysiak, J., Corbane, C. 2022. INFORM Climate Change Risk Index Concept and Methodology. Publications, European Union, Luxembourg, doi:1.0.2760/822072, JRC129896. https://drmkc.jrc.ec.europa.eu/inform-index/Portals/0/InfoRM/2022/IN-FORM%20Climate%20Change%20Risk%20Index%20Concept%20and%20Methodology.pdf
- 175 Bündnis Entwicklung Hilft. WorldRiskReport. 2023. https://weltrisikobericht.de/wp-content/up-loads/2024/01/WorldRiskReport_2023_english_online.pdf
- 176 University of Notre Dame Global Adaptation Initiative. Country Index Technical Report. 26 August 2024. https://gain.nd.edu/assets/581554/nd_gain_countryindex_technicalreport_2024.pdf
- 177 Beasley, Brett. New ND-GAIN data shines spotlight on small islands' climate vulnerability and adaptation efforts. 15 December 2023, https://research.nd.edu/news-and-events/news/new-nd-gain-data-shines-spotlight-on-small-islands-climate-vulnerability-and-adaptation-efforts/
- 178 University of Notre Dame Global Adaptation Initiative. Country Index Technical Report. 26 August 2024. https://gain.nd.edu/assets/581554/nd_gain_countryindex_technicalreport_2024.pdf
- 179 Beasley, Brett. New ND-GAIN data shines spotlight on small islands' climate vulnerability and adaptation efforts. 15 December 2023, https://research.nd.edu/news-and-events/news/new-nd-gain-data-shines-spotlight-on-small-islands-climate-vulnerability-and-adaptation-efforts/
- 180 ND-GAIN. Rankings. Accessed 30 October 2024. https://gain.nd.edu/our-work/country-index/rankings/
- 181 Rice, Bridi and McKeown, Shannon. CSIS. The Case for a Globally Accepted Vulnerability Index. 20 July 2022. https://www.csis.org/analysis/case-globally-accepted-vulnerability-index
- 182 OECD. Small Island Developing States. Accessed 30 October 2024. https://www.oecd.org/content/oecd/en/topics/sub-issues/small-islands-developing-states.html
- 183 OECD. Using the new UN Multidimensional Vulnerability Index to identify and fill in vulnerability financing gaps in SIDS. 2024. https://one.oecd.org/document/DCD(2024)16/en/pdf
- 184 United Nations President of the General Assembly's High Level Panel on the Development of a Multidimensional Vulnerability Index Final Edited Version. February 2024. https://www.un.org/ohrlls/sites/www.un.org.ohrlls/files/final mvi report 1.pdf

- 185 United Nations President of the General Assembly's High Level Panel on the Development of a Multidimensional Vulnerability Index Final Edited Version. February 2024. https://www.un.org/ohrlls/mvi
- 186 United Nations President of the General Assembly's High Level Panel on the Development of a Multidimensional Vulnerability Index Final Edited Version. February 2024. https://www.un.org/ohrlls/mvi
- 187 United Nations President of the General Assembly's High Level Panel on the Development of a Multidimensional Vulnerability Index Final Edited Version. February 2024. https://www.un.org/ohrlls/mvi
- 188 United Nations. Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States. MVI Preliminary Country Scores. Accessed 30 October 2024. https://www.un.org/ohrlls/content/mvi-preliminary-country-scores
- 189 The World Bank Group. Crisis Preparedness Gap Analysis. October 2023. https://www.worldbank.org/en/topic/fragilityconflictviolence/brief/cpga
- 190 Disaster Management Act 28/2015, Maldives.
- 191 Interview with NDMA Director Policy & Plans, Mr. Kashif Naseer, 1 October 2024.
- 192 Briefing "NDMA: An Introduction," U.S.-Maldives Disaster Management Workshop: Strengthening City-level Emergency Management in the Maldives. Hithahdoo, Addu City. 21 May 2023.
- 193 The National Emergency Operations Plan, Volume I: Legal and Institutional Arrangements and Processes, The National Disaster Management Centre.
- 194 NDMA. Organization Structure of National Disaster Management Authority. About Us. Accessed 30 October 2024. https://ndma.gov.mv/en/organizational-structure-2
- 195 Maldives Urban Development and Resilience Project. Consulting Services For Establishment Of National Emergency Operation Coordination Center. Accessed 30 October 2024. https://finance.gov.mv/public/attachments/9bvkq8mYX9ykc1Rdtb4MKLV5I34OWE2BT3t5X4dZ.pdf
- 196 The National Emergency Operations Plan, Volume I: Legal and Institutional Arrangements and Processes, The National Disaster Management Centre.
- 197 The National Emergency Operations Plan, Volume I: Legal and Institutional Arrangements and Processes, The National Disaster Management Centre.
- 198 The National Emergency Operations Plan, Volume I: Legal and Institutional Arrangements and Processes, The National Disaster Management Centre.
- 199 UNICEF Maldives. Community Emergency Response Team Conceptual Framework. National Disaster Management Center. Accessed 30 October 2024. https://www.unicefusa.org/what-unicef-does/where-unicef-works/asia/maldives
- 200 Slide 13, "Day 2 (22 May) National Disaster Coordination in the Maldives_NDMA," Briefing during 22 May 2023 Workshop, Addu City.

- 201 Slide 27, "Humanitarian Civil-Military Coordination Roles of MNDF," Briefing given by MNDF Southern Area Command, 21 May 2023, Addu City, Maldives.
- 202 The National Emergency Operations Plan, Volume I: Legal and Institutional Arrangements and Processes, The National Disaster Management Centre.
- 203 The National Emergency Operations Plan, Volume II: Emergency Support Functions, The National Disaster Management Centre.
- 204 Maldives Disaster Management Act 2015.
- 205 The National Emergency Operations Plan, Volume I: Legal and Institutional Arrangements and Processes, The National Disaster Management Centre.
- 206 The National Emergency Operations Plan, Volume I: Legal and Institutional Arrangements and Processes, The National Disaster Management Centre.
- 207 Bill on the Armed Forces 2006, Maldives.
- 208 Maldives National Defence Force Capstone Doctrine.
- 209 Maldives National Defence Force Capstone Doctrine.
- 210 Maldives National Defence Force Capstone Doctrine.
- 211 Maldives National Defence Force Capstone Doctrine.
- 212 "Humanitarian Civil-Military Coordination Roles of MNDF," Briefing given by MNDF Southern Area Command, 21 May 2023, Addu City, Maldives.
- 213 "Humanitarian Civil-Military Coordination Roles of MNDF," Briefing given by MNDF Southern Area Command, 21 May 2023, Addu City, Maldives.
- 214 "Humanitarian Civil-Military Coordination Roles of MNDF," Briefing given by MNDF Southern Area Command, 21 May 2023, Addu City, Maldives.
- 215 International Committee of the Red Cross (ICRC). The Movement. Accessed 23 March 2020. https://www. icrc.org/en/movement#:~:text=The%20International%20 Red%20Cross%20and,armed%20conflicts%20and%20 other%20emergencies.
- 216 International Federation of Red Cross (IFRC). Who we are. Accessed 23 March 2021. http://www.ifrc.org/en/ who-we-are/
- 217 Maldives Red Crescent Strategic Report 2019-2030. https://redcrescent.org.mv/api/files/20211205-015810-MRC-Strategic-Plan-2019-2030.pdf
- 218 Strategic Plan 2019-2030, Maldivian Red Crescent.
- 219 Maldives Red Crescent Annual Report. 2023. https:// portal.redcrescent.org.mv/api/files/20240804-114905-MRC_Annual_Report_2023_Web.pdf
- 220 NDMA. Policy Dialogue on Private Sector Engagement in Disaster Management. 11 July 2024. https:// ndma.gov.mv/storage/uploads/yXqPDBqB/hqznsuxk.pdf
- 221 The National Emergency Operations Plan, Volume II: Emergency Support Functions, The National Disaster Management Centre.
- 222 Slide 11, "Day 1 (21 May) Addu City Police," Briefing by Maldives Police Services during workshop with CFE-DM. 21 May 2023.

- 223 Slide 26, "Humanitarian Civil-Military Coordination Roles of MNDF," Briefing given by MNDF Southern Area Command, 21 May 2023, Addu City, Maldives.
- 224 Maldives Meteorological Service. About Us. Accessed 15 October 2024. https://www.meteorology.gov. mv/about-us
- 225 Maldives Meteorological Service, Service Charter. Accessed 15 October 2024. https://meteorology.gov.mv/ downloads/64/view
- 226 Maldives Meteorological Service. Homepage. Accessed 15 October 2024. https://www.meteorology.gov.
- 227 Government of Maldives. Health Emergency Operations Plan, Ministry of Health. Accessed 15 October 2024. https://old.health.gov.mv/Uploads/Downloads/Informations/Informations(124).pdf
- 228 Government of Maldives. Health Emergency Operations Plan, Ministry of Health. Accessed 15 October 2024. https://old.health.gov.mv/Uploads/Downloads/Informations/Informations(124).pdf
- 229 Government of Maldives. Health Emergency Operations Plan, Ministry of Health. Accessed 15 October 2024. https://old.health.gov.mv/Uploads/Downloads/ Informations/Informations(124).pdf
- 230 Government of Maldives. Health Emergency Operations Plan, Ministry of Health. Accessed 15 October 2024. https://old.health.gov.mv/Uploads/Downloads/ Informations/Informations(124).pdf
- 231 Government of Maldives. Health Emergency Operations Plan, Ministry of Health. Accessed 15 October 2024. https://old.health.gov.mv/Uploads/Downloads/ Informations/Informations(124).pdf
- 232 The National Emergency Operations Plan, Volume II: Emergency Support Functions, The National Disaster Management Centre.
- 233 Republic of Maldives. United Nations Sustainable Development Cooperation Framework. 2022-2026. https://maldives.un.org/sites/default/files/2021-10/UN-SDCF%20Final%20for%20Website%20%28111021%29.pdf
- 234 United Nations. Maldives Annual Results Report. 2023. https://maldives.un.org/sites/default/files/2024-04/ UN%20Maldives%20Annual%20Results%20Report%20 2023.pdf
- 235 United Nations. Maldives Annual Results Report. 2023. https://maldives.un.org/sites/default/files/2024-04/ UN%20Maldives%20Annual%20Results%20Report%20 2023.pdf
- 236 United Nations. Maldives Annual Results Report. 2023. https://maldives.un.org/sites/default/files/2024-04/ UN%20Maldives%20Annual%20Results%20Report%20 2023.pdf
- 237 U.S. Mission to Maldives. Accessed 15 October 2024. https://mv.usmission.gov/our-relationship/policy-history/
- 238 Memorandum for NGB J53-IA, "FY25 to FY29 Montana Security Cooperation (SC) Partnership Support Plan (PSP) for Maldives," 12 June 2024, NGMT-JFQ-AG.
- 239 USAID Bureau for Humanitarian Assistance. Maldives Assistance Overview. Accessed 30 October 2024. https:// www.usaid.gov/maldives

- 240 USAID Bureau for Humanitarian Assistance. Maldives Assistance Overview. Accessed 30 October 2024. https://www.usaid.gov/maldives
- 241 USAID Bureau for Humanitarian Assistance. Maldives Assistance Overview. Accessed 30 October 2024. https://www.usaid.gov/maldives
- 242 USAID Bureau for Humanitarian Assistance. Maldives Assistance Overview. Accessed 30 October 2024. https://www.usaid.gov/maldives
- 243 USAID Bureau for Humanitarian Assistance. Maldives Assistance Overview. Accessed 30 October 2024. https://www.usaid.gov/maldives
- 244 USAID. Events. South Asia Clean Energy Forum. 2024. https://sarepenergy.net/event_years/2024/
- 245 The National Emergency Operations Plan, Volume I: Legal and Institutional Arrangements and Processes, The National Disaster Management Centre.
- 246 World Bank Group. Crisis Preparedness Gap Analysis. Maldives Briefing Note October. 2023. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099032224020533320/p1802841f641380f1bed01d3a3e38f256a; Aishath Ifa Mohamed, "Republic of Maldives," Visiting Researcher Program FY2023, Asian Disaster Reduction Center; UNDRR. Disaster Risk Reduction in Republic of Maldives: Status Report. 2019. https://www.undrr.org/publication/disaster-risk-reduction-republic-maldives-status-report-2019
- 247 Aishath Ifa Mohamed, "Republic of Maldives," Visiting Researcher Program FY2023, Asian Disaster Reduction Center.
- 248 UNICEF. National Disaster Management Center. Community Emergency Response Team. Conceptual Framework. https://www.preventionweb.net/files/74900_nationalcbdrrframework.pdf; National Disaster Management Authority. Community Emergency Response Team Framework. Accessed 30 October 2024. https://ndma.gov.mv/en/community-based-disaster-risk-management-cb-drm
- 249 Disaster Management Act 28/2015, Republic of Maldives; UNDRR. Disaster Risk Reduction in Republic of Maldives: Status Report. 2019. https://www.undrr.org/publication/disaster-risk-reduction-republic-maldives-status-report-2019
- 250 The National Emergency Operations Plan, Volume I: Legal and Institutional Arrangements and Processes, The National Disaster Management Centre.
- 251 The National Emergency Operations Plan, Volume II: Emergency Support Functions, The National Disaster Management Centre.
- 252 Ministry of Health. Government of Maldives. Health Emergency Operations Plan. Accessed 15 October 2024. https://old.health.gov.mv/Uploads/Downloads/Informations/Informations(124).pdf
- 253 Maldives Strategic Action Plan 2019 2023.
- 254 Scaling Up Early Warning Systems Implementation Roadmap, Maldives 2023 2027.
- 255 The National Emergency Operations Plan, Volume I: Legal and Institutional Arrangements and Processes, The National Disaster Management Centre.

- 256 The National Emergency Operations Plan, Volume I: Legal and Institutional Arrangements and Processes, The National Disaster Management Centre.
- 257 The National Emergency Operations Plan, Volume I: Legal and Institutional Arrangements and Processes, The National Disaster Management Centre.
- 258 The National Emergency Operations Plan, Volume I: Legal and Institutional Arrangements and Processes, The National Disaster Management Centre.
- 259 Scaling Up Early Warning Systems Implementation Roadmap: Maldives 2023-2027. Accessed 28 Aug 2024. https://www.environment.gov.mv/v2/wp-content/files/20240115-news-maldives-roadmap-to-achieve-theearly-warning-for-all-initiative-published.pdf
- 260 UNDRR. Early Warning for All. Accessed 30 October 2024. https://www.undrr.org/implementing-sendai-framework/sendai-framework-action/early-warnings-for-a
- 261 UNDRR. Early Warning for All. Accessed 30 October 2024. https://www.undrr.org/implementing-sendai-framework/sendai-framework-action/early-warnings-for-all
- 262 UNDRR. Early Warning for All. Accessed 30 October 2024. https://www.undrr.org/implementing-sendai-framework/sendai-framework-action/early-warnings-for-all
- 263 World Bank Group. Crisis Preparedness Gap Analysis: Maldives Briefing Note. 2023. https://documents.world-bank.org/en/publication/documents-reports/document-detail/099032224020533320/p1802841f641380f1bed-01d3a3e38f256a
- 264 World Bank Group. Crisis Preparedness Gap Analysis: Maldives Briefing Note. 2023. https://documents.world-bank.org/en/publication/documents-reports/document-detail/099032224020533320/p1802841f641380f1bed-01d3a3e38f256a
- 265 Joint Publication 3-29. Foreign Humanitarian Assistance. 14 May 2019. Page IV-35. https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_29.pd-f?ver=2019-05-21-150525-607
- 266 Indian Tsunami Early Warning System, Ministry of Earth Sciences Government of India, https://tsunami.incois.gov.in/TEWS/AboutTSP.jsp. Accessed 15 November 2024.
- 267 Pacific Disaster Center (PDC Global). About Disaster-AWARE. Accessed 23 March 2021. https://www.pdc.org/apps/disasteraware/about-disasteraware/
- 268 Pacific Disaster Center (PDC Global). Disaster Alert. Accessed 23 March 2021. https://disasteralert.pdc.org/disasteralert/
- Pacific Disaster Center (PDC Global). DisasterAWARE Quick Start User Guide, 2019, Version 6.5. https://disasteraware.pdc.org/help/Quick-Start-Guide-DisasterAWARE-screen.pdf
- 269 Pacific Disaster Center (PDC Global). DisasterAlert™. Accessed 23 March 2021. https://www.pdc.org/apps/disaster-alert/
- 270 All Partners Access Network (APAN). About Us. Accessed 23 March 2021. https://www.apan.org/pages/about

- 271 Invest Maldives. Transport & Logistics. Accessed 29 August 2024. https://investmaldives.gov.mv/Opportunities/Transport#:~:text=The%20government%20plans%20 to%20connect,the%20expansion%20of%20industries%20
- 272 Republic of Maldives. Ministry of Environment. UNFCCC. Update of Nationally Determined Contribution of Maldives. 2020. https://unfccc.int/sites/default/files/ NDC/2022-06/Maldives%20Nationally%20Determined%20 Contribution%202020.pdf
- 273 Republic of Maldives. Ministry of Transport & Civil Aviation. About Us. Accessed 26 August 2024. https:// www.transport.gov.mv/en/about-us
- 274 Republic of Maldives. Ministry of Transport and Civil Aviation. Organizational Structure. Accessed 26 August 2024. https://www.transport.gov.mv/en/organizational-structure
- 275 Government of Maldives. Strategic Action Plan: 2019-2023. https://storage.googleapis.com/presidency. gov.mv/Documents/SAP2019-2023.pdf
- 276 MTCC. About Us. Accessed 30 August 2024. https:// mtcc.mv/about-us/
- Republic of Maldives. Civil Aviation Authority. Accessed 26 August 2024. https://www.caa.gov.mv/about
- 278 CIA World Factbook. Maldives. Transportation. Accessed 30 August 2024. https://www.cia.gov/the-worldfactbook/countries/maldives/#transportation
- 279 Maldives-Magazine. List of Domestic & International Airports in Maldives: A Complete Guide. January 2023. https://maldives-magazine.com/general-info/maldives-airports.htm
- 280 World Data. The 10 largest airports and airlines on the Maldives. Accessed 30 August 2024. https://www. worlddata.info/asia/maldives/airports.php
- 281 World Data. The 10 largest airports and airlines on the Maldives. Accessed 30 August 2024. https://www. worlddata.info/asia/maldives/airports.php
- 282 Airport Technology. Velena International Airport Expansion. 19 October 2023. https://www.airport-technology.com/projects/velena-international-airport-expansion/?cf-view
- 283 Airport Technology. Velena International Airport Expansion. 19 October 2023. https://www.airport-technology.com/projects/velena-international-airport-expansion/?cf-view
- 284 Avas. New runway, seaplane terminal open at international airport. 6 October 2022. https://avas.mv/ en/123170
- 285 Maldivian. About Maldivian. Accessed 4 September 2024. https://maldivian.aero/corporate/about-maldivian. html
- 286 U.S. Department of State. Maldives International Travel Information. Accessed 9 September 2024. https:// travel.state.gov/content/travel/en/international-travel/ International-Travel-Country-Information-Pages/Maldives.
- 287 Trans Maldivian. Our Seaplane Fleet. The Twin Otter. Accessed 4 September 2024. https://www.transmaldivian. com/twin-otter/

- 288 Aviators Maldives. BeOnd: The New Luxury Airline By SIMDI Group and ARABESQUE Will Operate Airbus A321Neo's. 7 October 2022. https://www.aviatorsmaldives.com/post/131155271
- 289 BeOnd. Our Routes. Accessed 4 September 2024. https://flybeond.com/
- 290 U.S. Department of State. Maldives International Travel Information. Accessed 9 September 2024. https:// travel.state.gov/content/travel/en/international-travel/ International-Travel-Country-Information-Pages/Maldives. html
- 291 U.S. News. Maldives Travel Guide. Getting Around Maldives. Accessed 9 September 2024. https://travel. usnews.com/Maldives/Getting_Around/
- 292 Holidify. Transportation in Maldives Pick Your Ride for a Hassle Free Vacation. Accessed 9 September 2024. https://www.holidify.com/pages/transportation-in-maldives-1192.html
- 293 Visit to Maldives. Bokkura (small traditional vessel of Maldives). 10 June 2012. https://visittomaldives.wordpress.com/2012/06/10/bokkura-small-traditional-vessel-of-maldives/
- 294 Voegeli, Rainer. Flickr. Photostream. Accessed 25 October 2024. https://www.flickr.com/photos/ ravpix/8337936402
- 295 DD. Flickr. Photostream. Accessed 25 October 2024. https://www.flickr.com/photos/didi8/843309617
- 296 Maldives Ports Limited. Company Profile. Accessed 9 September 2024. https://www.port.mv/company/?tab=profile
- 297 Maldives Ports Limited. Company Profile. General Overview. Accessed 9 September 2024. https://www.port. mv/company/?tab=overview
- 298 Maldives Ports Limited. Hulhumale International Terminal. Accessed 9 September 2024. https://www.port. mv/ports/hmt/
- 299 Maldives Ports Limited. Kulhudhufushi Ports Limited. Accessed 9 September 2024. https://www.port.mv/ports/ kpl/
- 300 Maldives Ports Limited. Hithadhoo Port Limited. Accessed 9 September 2024. https://www.port.mv/ports/
- 301 PSM News. Economic Minister inaugurates Maamigili International Port. 3 May 2018. https://psmnews.mv/ en/33989#:~:text=Discussions%20will%20be%20held%20 with, Haleem %20 said %20 addressing %20 the %20 function
- 302 CIA World Factbook. Maldives. Transportation. Accessed 30 August 2024. https://www.cia.gov/the-worldfactbook/countries/maldives/#transportation
- 303 U.S. Department of State. Maldives International Travel Information. Accessed 9 September 2024. https:// travel.state.gov/content/travel/en/international-travel/ International-Travel-Country-Information-Pages/Maldives. html
- 304 Rasheed, Minwal. The Maldives Journal. Vehicle Registration Now Strictly Regulated: Minister Ameen. 29 July 2024. https://themaldivesjournal.com/69413#:~:text=Minister%20Ameen%20revealed%20that%20over,activities%20to%20ensure%20city%20safety.

- 305 The Economic Times. Maldives to Kuwait: Countries without a railway network. 16 September 2023. https://economictimes.indiatimes.com/industry/transportation/railways/maldives-to-kuwait-countries-without-a-railway-network/no-rail-network/slideshow/103716286.cms
- 306 South Asia Co-operative Environment Programme. Maldives. Accessed 30August 2024. http://www.sacep.org/member-countries/maldives
- 307 GISGeography. Maldives Map Atolls and Channels. Accessed 25 October 2024. https://gisgeography.com/maldives-map/
- 308 Javaid, Arfa. JagranJosh. 8, 9, 10 Degree Channels: All you need to know. 24 February 2021. https://www.jagranjosh.com/general-knowledge/8-9-and-10-degree-channel-1614095548-1
- 309 UNICEF. The Maldives. Education. Accessed 18 September 2024. https://www.unicef.org/maldives/whatwe-do/education
- 310 United Nations. Maldives Common Country Analysis. 1 March 2020. https://maldives.un.org/en/102363-maldives-common-country-analysis
- 311 World Bank. Literacy rate, youth male (% of males ages 15-24) Maldives. 24 April 2024. https://data.worldbank.org/indicator/SE.ADT.1524.LT.MA.ZS?locations=MV
- 312 Ministry of Education and Ministry of Higher Education. Republic of Maldives. Education Sector Plan. 2019-2023. https://support.moe.gov.mv/wp-content/up-loads/2020/05/ESP.pdf
- 313 UNICEF. The Maldives. Education. Accessed 18 September 2024. https://www.unicef.org/maldives/whatwe-do/education
- 314 UNICEF. The Maldives. Education. Accessed 18 September 2024. https://www.unicef.org/maldives/whatwe-do/education
- 315 United Nations Maldives. Common Country Analysis. June 2023. https://maldives.un.org/en/241592-common-country-analysis-cca-maldives-june-2023#:~:tex-t=The%20Common%20Country%20Analysis%20(CCA)%20 is%20designed%20to%20reflect%20the,basis%20for%20 the%20UN%20programmatic
- 316 UNICEF. Situation Analysis of Children and Youth in the Maldives. October 2021. https://maldives.un.org/sites/default/files/2022-08/Situation%20Analysis%20 of%20Children%20and%20Youth%20in%20the%20Maldives.pdf
- 317 Sunny, Rahul; Ismail, Affero; Hashim, Mohamed; and Naser, Ahmad. Exploring Strategies to Enhance TVET Engagement in Maldives to Improve Youth Career Development. Journal of Technical Education and Training. Volume 15 No. 1. 31 March 2023. https://publisher.uthm.edu.my/ojs/index.php/JTET/article/view/12245/5647
- 318 UNICEF. The Maldives. Education. Accessed 18 September 2024. https://www.unicef.org/maldives/whatwe-do/education
- 319 The Maldives National University. Faculty of Education. Courses. Accessed 18 September 2024. https://courses.mnu.edu.mv/FE?page=1
- 320 Maldives Disaster Management Act 2015.

- 321 Republic of Maldives. Ministry of Education. Guide for School Emergency Operations Plan Maldives. 2009. https://inee.org/sites/default/files/resources/School_ Emergency_Ops_Plan_Maldives.pdf
- 322 National Disaster Management Authority. Republic of Maldives. Community-Based Disaster Risk Management. Accessed 20 September 2024. https://ndma.gov.mv/en/community-based-disaster-risk-management-cb-drm
- 323 National Disaster Management Authority. Republic of Maldives. Mandate. Accessed 20 September 2024. https://ndma.gov.mv/en/mandate
- 324 Republic of Maldives. Ministry of Education. Guide for School Emergency Operations Plan Maldives. 2009. https://inee.org/sites/default/files/resources/School_ Emergency Ops Plan Maldives.pdf
- 325 Ministry of Education. X. Tsunami Drill and Training. 18 February 2018. https://x.com/MoEdumv/status/965469569149104128
- 326 Government of Maldives. Strategic Action Plan. 2019-2023. https://health.gov.mv/storage/uploads/Bxop-1dwv/fse7lmco.pdf
- 327 Dhiraagu. About Us. Investor Relations. Accessed 25 September 2024. https://www.dhiraagu.com.mv/about-us/investor-relations/overview
- 328 Ooredoo Maldives. About Us. Accessed 25 September 2024. https://www.ooredoo.mv/
- 329 Communications Authority of Maldives. About Us. Accessed 25 September 2024. https://www.cam.gov.mv/aboutus.htm
- 330 Communications Authority of Maldives. 2024 Monthly Figures. Accessed 25 September 2024. https://www.cam.gov.mv/stats monthly2024.htm
- 331 Rehan, Mohamed. Sun. Ooredoo Maldives introduces 5G in Guraidhoo. 14 August 2024. https://en.sun.mv/91283#:~:text=Ooredoo%20Maldives%20has%20introduced%20high,of%20its%2019th%20anniversary
- 332 Business Wire. Maldives Telecoms, Mobile and Broadband Markets, Statistics and Analyses Report 2021 Featuring Dhiraagu, Wataniya, Ooredoo Maldives, Focus Infocom, Thuraya, and Cable & Wireless Communications ResearchAndMarkets.com. 19 January 2022. https://www.businesswire.com/news/home/20220119005808/en/Maldives-Telecoms-Mobile-and-Broadband-Markets-Statistics-and-Analyses-Report-2021-Featuring-Dhiraagu-Wataniya-Ooredoo-Maldives-Focus-Infocom-Thuraya-and-Cable-Wireless-Communications---ResearchAnd-Markets.com
- 333 Barton, James. Developing Telecoms. Strong infrastructure and LTE performance in the Maldives R&M. 23 August 2019. https://developingtelecoms.com/telecom-business/telecom-trends-forecasts/8695-strong-infrastructure-and-lte-performance-in-the-maldives-r-m. html.
- 334 CIA World Factbook. Maldives. Communications. Accessed 30 August 2024. https://www.cia.gov/the-world-factbook/countries/maldives/#transportation
- 335 Communications Authority of Maldives. 2024 Monthly Figures. Accessed 25 September 2024. https://www.cam.gov.mv/stats_monthly2024.htm

- 336 Maldives Tourism. Mobile and Internet Services in Maldives. Accessed 25 September 2024. https://www. maldivestourism.net/maldives/communications/#:~:text=Wi%2DFi%20is%20widely%20available,have%20 access%20to%20Wi%2DFi
- 337 Dhiraagu. Dhiraagu inaugurates the latest global super-highway SEA-ME-WE 6 submarine cable landing in the Maldives. 1 August 2024. https://www.dhiraagu.com. mv/about-us/media-centre/press-releases/dhiraagu-inaugurates-the-latest-global-super-highway-sea-me-we-6submarine-cable-landing-in-the-maldives
- 338 U.S. Department of State, Bureau of Democracy, Human Rights and Labor. Country Reports on Human Rights Practices for 2018: Maldives. https://mv.usmission.gov/ wp-content/uploads/sites/212/HR-report-2018-Maldives-English.pdf
- 339 British Broadcasting Corporation (BBC). Maldives Country Profile - Mass Media. Accessed 21 March 2023. https://www.bbc.com/news/world-south-asia-12653775
- 340 British Broadcasting Corporation (BBC). Maldives Country Profile - Mass Media. Accessed 21 March 2023. https://www.bbc.com/news/world-south-asia-12653775
- 341 Kemp, Simon. DataReportal. Digital 2024: The Maldives. 23 February 2024. https://datareportal.com/ reports/digital-2024-maldives#:~:text=There%20were%20 435.8%20thousand%20internet%20users%20in%20 the%20Maldives%20in,the%20beginning%20of%20 the%20year.
- 342 Reporters Without Borders. Maldives. Accessed 15 October 2024. https://rsf.org/en/country/maldives
- 343 Newton, Robbie. Human Rights Watch. Maldives Press Freedom in Danger. 3 May 2023. https://www.hrw. org/news/2023/05/03/maldives-press-freedom-danger
- 344 Newton, Robbie. Human Rights Watch. Maldives Press Freedom in Danger. 3 May 2023. https://www.hrw. org/news/2023/05/03/maldives-press-freedom-danger
- 345 Maldives Post, Ltd. About Us. Accessed 16 October 2024. https://www.maldivespost.com/about-us
- 346 ADPC. UNDRR. Disaster Risk Reduction in Republic of Maldives, Status Report. 31 July 2019. https://reliefweb. int/report/maldives/disaster-risk-reduction-republic-maldives-status-report-july-2019
- 347 CIA World Factbook. Maldives. Energy. Accessed 30 August 2024. https://www.cia.gov/the-world-factbook/ countries/maldives/#transportation
- 348 Asian Development Bank. A Brighter Future for Maldives Powered by Renewables. Road Map for the Energy Sector 2020-2030. November 2020. https://www.adb.org/ sites/default/files/publication/654021/renewables-roadmap-energy-sector-maldives.pdf
- 349 Ministry of Environment. Republic of Maldives. Update of Nationally Determined Contribution of Maldives. 2020. https://unfccc.int/sites/default/files/NDC/2022-06/ Maldives%20Nationally%20Determined%20Contribution%202020.pdf
- 350 Energy Department. Ministry of Climate Change, Environment and Energy. Republic of Maldives. 14 July 2016. https://www.environment.gov.mv/v2/en/department/170

- 351 Utility Regulatory Authority. Republic of Maldives. Mandate. Accessed 14 October 2024. https://www.ura. gov.mv/about-us/mandate/
- 352 Asian Development Bank. A Brighter Future for Maldives Powered by Renewables: Road Map for the Energy Sector 2020-2030. November 2020. https://www. adb.org/sites/default/files/publication/654021/ renewables-roadmap-energy-sector-maldives.pdf
- 353 CIA World Factbook. Maldives. Energy. Accessed 30 August 2024. https://www.cia.gov/the-world-factbook/ countries/maldives/#transportation
- 354 Asian Development Bank. A Brighter Future for Maldives Powered by Renewables: Road Map for the Energy Sector 2020-2030. November 2020. https://www. adb.org/sites/default/files/publication/654021/ renewables-roadmap-energy-sector-maldives.pdf
- 355 The Observatory of Economic Complexity. Petroleum Gas in Maldives. Accessed 14 October 2024. https://oec. world/en/profile/bilateral-product/petroleum-gas/reporter/mdv
- 356 Ministry of Environment and Energy. Republic of Maldives. Maldives Energy Policy & Strategy. 2016. https://www.environment.gov.mv/v2/wp-content/files/ publications/20161220-pub-mv-energy-policy-strategy-2016-20dec2016.pdf
- 357 Asian Development Bank. Sector Assessment: Energy. Accessed 15 October 2024. https://www.adb.org/ sites/default/files/linked-documents/mld-46122-005-ssa. pdf
- 358 Asian Development Bank. A Brighter Future for Maldives Powered by Renewables: Road Map for the Energy Sector 2020-2030. November 2020. https://www. adb.org/sites/default/files/publication/654021/ renewables-roadmap-energy-sector-maldives.pdf
- 359 Asian Development Bank. A Brighter Future for Maldives Powered by Renewables: Road Map for the Energy Sector 2020-2030. November 2020. https://www. adb.org/sites/default/files/publication/654021/ renewables-roadmap-energy-sector-maldives.pdf
- 360 Asian Development Bank. Preparing Outer Islands for Sustainable Energy Development: Maldives' Experience in Deploying Advanced Hybrid Renewable Energy Systems. August 2024. https://www.adb.org/publications/ maldives-deploying-hybrid-renewable-energy
- 361 Ministry of Climate Change, Environment and Energy. Republic of Maldives. Preparing Outer Islands for Sustainable Energy Development (POISED). 2 August 2016. https://www.environment.gov.mv/v2/en/project/304
- 362 Ministry of Climate Change, Environment and Energy. Republic of Maldives. South Asia Regional Energy Partnership Maldives. 22 August 2024. https://www.environment.gov.mv/v2/en/project/28902
- 363 Food and Agriculture Organization of the United Nations. FAOLEX Database. Maldives. Water and Sewerage Act, no. 8 of 2020. 2020. https://www.fao.org/faolex/ results/details/en/c/LEX-FAOC220696/#:~:text=The%20 Act%20aims%20at%20achieving,water%20and%20sewerage%20services%20and

- 364 Water and Sanitation Department. Ministry of Climate Change, Environment and Energy. Republic of Maldives. Accessed 15 October 2024. https://www.environment.gov.mv/v2/en/department/184
- 365 Ahmed, Zameela. National Bureau of Statistics. Republic of Maldives. Review Report on Water and Waste Accounts. 2018. https://statisticsmaldives.gov.mv/nbs/wp-content/uploads/2023/06/Water-and-Waste-Account-Review-Report-NBS.pdf
- 366 South Asia Co-operative Environment Programme. Maldives. Accessed 30 August 2024. http://www.sacep.org/member-countries/maldives
- 367 Government of Maldives. Strategic Action Plan: 2019-2023. https://storage.googleapis.com/presidency.gov.mv/Documents/SAP2019-2023.pdf
- 368 Ministry of Environment. Departments. Accessed 15 October 2024. https://www.environment.gov.mv/v2/en/department
- 369 Asian Development Bank (ADB). A Brighter Future for Maldives Powered by Renewables: Road Map for the Energy Sector 2020-2030. November 2020. https://www.adb.org/sites/default/files/publication/654021/renewables-roadmap-energy-sector-maldives.pdf
- 370 Ministry of Environment. National Water and Sewerage Strategic Plan 2020-2025. 04 November 2020.https://www.environment.gov.mv/v2/wp-content/ files/publications/20201104-pub-national-water-and- sewerage-strategic-action-plan-2020-2025.pdf
- 371 Ministry of Environment. National Water and Sewerage Strategic Plan 2020-2025. 04 November 2020.https://www.environment.gov.mv/v2/wp-content/files/publications/20201104-pub-national-water-and-sewerage-strategic-action-plan-2020-2025.pdf
- 372 FENAKA Corporation Limited. Water Services. Accessed 15 October 2024. https://fenaka.mv/services/water
- 373 Ministry of Environment. National Water and Sewerage Strategic Plan 2020-2025. 04 November 2020.https://www.environment.gov.mv/v2/wp-content/files/publications/20201104-pub-national-water-and-sewerage-strategic-action-plan-2020-2025.pdf
- 374 Ahmed, Zameela. National Bureau of Statistics. Republic of Maldives. Review Report on Water and Waste Accounts. 2018. https://statisticsmaldives.gov.mv/nbs/wp-content/uploads/2023/06/Water-and-Waste-Account-Review-Report-NBS.pdf
- 375 FENAKA Corporation Limited. Sewer Services. Accessed 15 October 2024. https://fenaka.mv/services/sewer
- 376 Ahmed, Zameela. National Bureau of Statistics. Republic of Maldives. Review Report on Water and Waste Accounts. 2018. https://statisticsmaldives.gov.mv/nbs/wp-content/uploads/2023/06/Water-and-Waste-Account-Review-Report-NBS.pdf
- 377 Waste Management Corporation. Our Company. Accessed 15 October 2024. https://wamco.com.mv/our-company/1

- 378 World Bank Group. Maldives Is Turning Waste to Wealth, Energizing Youth, to Safeguard its Future. 27 July 2022. https://www.worldbank.org/en/news/feature/2022/07/22/maldives-is-turning-waste-to-wealth-energizing-youth-to-safeguard-its-future
- 379 Macrotrends. Maldives Life Expectancy 1950-2024. Accessed 16 October 2024. https://www.macrotrends.net/global-metrics/countries/MDV/maldives/life-expectancy
- 380 UNICEF. Country Profiles. Maldives. Accessed 17 October 2024. https://data.unicef.org/country/mdv/
- 381 World Bank Group. Maldives. Featured Indicators. Accessed 16 October 2024. https://liveprod.worldbank.org/en/economies/maldives
- 382 Situation Analysis of Children and Youth in the Maldives, United Nations Children's Fund (UNICEF), October 2021, https://maldives.un.org/sites/default/files/2022-08/Situation%20Analysis%20of%20Children%20and%20 Youth%20in%20the%20Maldives.pdf.
- 383 Nutrition: Maldives, UNICEF, https://www.unicef.org/maldives/what-we-do/nutrition. Accessed 15 October 2024.
- 384 World Health Organization. Immunization Dashboard Maldives. Accessed 16 October 2024. https://immunizationdata.who.int/dashboard/regions/south-east-asia-region/MDV
- 385 UNICEF. Maldives receives Pfizer vaccines and supplies through COVAX, donated by the United States. 12 August 2021. https://www.unicef.org/maldives/press-releases/maldives-receives-pfizer-vaccines-and-supplies-through-covax-donated-united-states
- 386 Ministry of Health. Republic of Maldives. 154th Session of WHO Executive Board. National Statement-Maldives. 22-27 January 2024. https://apps.who.int/gb/statements/EB154/PDF/Maldives-9.pdf
- 387 Sustainable Development Solutions Network. Sustainable Development Report. P. 294. June 2024. https://s3.amazonaws.com/sustainabledevelopment.report/2024/sustainable-development-report-2024.pdf
- 388 Sustainable Development Solutions Network. Sustainable Development Report. P. 295. June 2024. https://s3.amazonaws.com/sustainabledevelopment.report/2024/sustainable-development-report-2024.pdf
- 389 WHO. Maldives WHO Country Cooperation Strategy 2018-2022. 2018. https://www.who.int/publications/i/item/3670902292978
- 390 Areeba. Addu Equatorial Hospital starts a dedicated Obstetric OT. The Times of Addu. 25 January 2021. https://timesofaddu.com/2021/01/25/addu-equatorial-hospital-starts-a-dedicated-obstetric-ot/
- 391 Ministry of Health. Republic of Maldives. Accessed 17 October 2024. https://health.gov.mv/en
- 392 Ministry of Health. Republic of Maldives. Accessed 17 October 2024. https://health.gov.mv/en/ministry-of-health
- 393 Ministry of Health. Maldives Bureau of Statistics. Table 6.2: Health Personnel By Locals and Expatriates. 2021. 12 March 2023. https://statisticsmaldives.gov.mv/yearbook/2023/wp-content/uploads/sites/10/2023/07/6.2.pdf

- 394 WHO. Maldives WHO Country Cooperation Strategy 2018-2022. 2018. https://www.who.int/publications/i/ item/3670902292978
- 395 WHO. Maldives WHO Country Cooperation Strategy 2018-2022. 2018. https://www.who.int/publications/i/ item/3670902292978
- 396 Maldives Ministry of Health, UNICEF, and WHO. Health Emergency Operations Plan. Accessed 17 October 2024. https://old.health.gov.mv/Uploads/Downloads/Informations/Informations(124).pdf
- 397 WHO. Launching of the Health Emergency Operations Center in the Maldives. 9 April 2018. https://reliefweb.int/report/maldives/launching-health-emergency-operations-center-maldives
- 398 Maldives Ministry of Health, UNICEF, and WHO. Health Emergency Operations Plan. Page 23. https://old. health.gov.mv/Uploads/Downloads/Informations/Informations(124).pdf
- 399 Aasandha. About Us. Company Overview. Accessed 16 October 2024. https://aasandha.mv/en/company/ overview
- 400 Aasandha. Aasandha Scheme. Emergency Evacuation. Accessed 16 October 2024. https://aasandha.mv/en/ scheme/aasandha-scheme/emergency-evacuation
- 401 Zahir, Ahmed. The Arrival. Commencing Air Ambulance Services on 1st March 2024; A New Milestone for Maldives in Emergency Medical Transport Services. 1 March 2024. https://thearrival.mv/commencing-air-ambulance-services-on-1st-march-2024-a-new-milestone-formaldives-in-emergency-medical-transport-services/
- 402 WHO. Maldives WHO Country Cooperation Strategy 2018-2022. 2018. https://www.who.int/publications/i/ item/3670902292978
- 403 WHO. Maldives WHO Country Cooperation Strategy 2018-2022. 2018. https://www.who.int/publications/i/ item/3670902292978
- 404 PSM News. WHO Country Cooperation Strategy 2024-2029 launched. 17 October 2024. https:// psmnews.mv/en/145934#:~:text=WHO%20Country%20 Cooperation%20Strategy%202024,has%20been%20 reached%2C%20Thank%20you
- 405 Global Health Security Index. 2021 GHS Index Country Profile for Maldives. Accessed 19 October 2024. https://ghsindex.org/country/maldives/
- 406 World Health Organization. Maldives concluded its second Joint External Evaluation of the International Health Regulations core capacities in September 2024. 30 September 2024. https://www.who.int/southeastasia/ news/detail/30-09-2024-ml-jee-ihr-2024
- 407 World Health Organization. Maldives concluded its second Joint External Evaluation of the International Health Regulations core capacities in September 2024. 30 September 2024. https://www.who.int/southeastasia/ news/detail/30-09-2024-ml-jee-ihr-2024
- 408 Ministry of Health. Maldives COVID-19 Response A Summary. Accessed 18 October 2024. https://health.gov. mv/storage/uploads/bVw9OLqv/0vzbhf0z.pdf
- 409 Maldives Ministry of Tourism. Maldives' Covid-19 Situation Updates. https://www.tourism.gov.mv/en/page/ updates_on_the_covid_19_situation_in_the_maldives

- 410 U.S. Mission. U.S. Response to COVID-19 in Maldives. Accessed 18 October 2024. https://mv.usmission.gov/ wp-content/uploads/sites/212/Maldives-Fact-Sheet.pdf
- 411 Maldives COVID-19 cases cross 24,000, deaths reach 67. Xinhua. 1 April 2021. http://www.xinhuanet.com/ english/asiapacific/2021-04/01/c_139852480.htm
- 412 World Health Organization, WHO COVID-19 dashboard. Accessed 18 October 2024. https://data.who.int/ dashboards/covid19/cases?m49=462&n=c
- 413 Johns Hopkins University of Medicine. Coronavirus Resource Center. Understanding Vaccination Progress. 10 March 2023. https://coronavirus.jhu.edu/vaccines/international
- 414 Health Protection Agency. Dengue Trend. Accessed 18 October 2024. https://hpa.gov.mv/alerts-and-outbreaks/dengue-chikungunya-zika/
- 415 Zalif, Zunana. Raajje. Dengue cases spiral drastically across the Maldives. 13 June 2024. https://raajje. mv/154472
- 416 Miolene, Elissa. UNICEF. In the Maldives, UNICEF and partners work to increase adolescent-friendly services. 14 March 2019. https://www.unicef.org/maldives/stories/ maldives-unicef-and-partners-work-increase-adolescent-friendly-services
- 417 Health Protection Agency. General Information on HIV/AIDS. 14 December 2023. https://hpa.gov.mv/ health-topics/hiv-aids/#:~:text=As%20of%2031%20 December%202022,treatment%20given%20to%20prevent%20HIV
- 418 World Health Organization. South-East Asia. Maldives eliminates mother-to-child transmission of HIV, Syphilis. 15 July 2019. https://www.who.int/southeastasia/news/detail/15-07-2019-maldives-eliminates-motherto-child-transmission-of-hiv-syphilis
- 419 Sustainable Development Solutions Network. Sustainable Development Report. P. 294. June 2024. https://s3.amazonaws.com/sustainabledevelopment. report/2024/sustainable-development-report-2024.pdf
- 420 AIDS Data Hub. Tuberculosis profile: Maldives. 2022. https://www.aidsdatahub.org/sites/default/files/ resource/maldives-tb-profile.pdf
- 421 AVAS. HPA confirms measles case in Greater Male Area. 28 July 2023. https://avas.mv/en/133804#:~:text=The%20Health%20Protection%20Agency%20(HPA,diagnosed%20with%20measles%20on%20Tuesday.
- 422 World Health Organization. Measles. 12 July 2024. https://www.who.int/news-room/fact-sheets/detail/ measles#:~:text=Symptoms%20include%20a%20high%20 fever, spreading %20 it %20 to %20 other %20 people.
- 423 Ministry of Health. Republic of Maldives. Maldives Health Statistics 2020. Accessed 18 October 2024. https:// health.gov.mv/storage/uploads/BkoMELod/utbdxbkp.pdf
- 424 Institute for Health Metrics and Evaluation. Health research by location. Maldives. Accessed 21 October 2024. https://www.healthdata.org/research-analysis/ health-by-location/profiles/maldives
- 425 Institute for Health Metrics and Evaluation. Health research by location. Maldives. Accessed 21 October 2024. https://www.healthdata.org/research-analysis/ health-by-location/profiles/maldives

- 426 Cristina. Honest Travel Stories. Alcohol in the Maldives: customs, rules, and availability of alcohol in the Maldives. 7 July 2023. https://honesttravelstories.com/alcohol-in-the-maldives-customs-rules-and-availability-of-alcohol-in-the-maldives/
- 427 World Bank Group. Total alcohol consumption per capita, male (liters of pure alcohol, projected estimates, male 15+ years of age). Accessed 18 October 2024. https://data.worldbank.org/indicator/SH.ALC.PCAP.MA.LI
- 428 World Health Organization. WHO report on the global tobacco epidemic. Country Profile: Maldives. 2023. https://www.who.int/publications/m/item/tobacco-mdv-2023-country-profile
- 429 Tobacco Control Laws. Legislation by Country/Jurisdiction: Maldives. Accessed 18 October 2024. https://www.tobaccocontrollaws.org/legislation/maldives
- 430 The Maldives University. School of Medicine. Accessed 18 October 2024. https://mnu.edu.mv/sm/
- 431 The Maldives National University. Faculty of Health Sciences. Accessed 18 October 2024. https://mnu.edu.mv/fhs/
- 432 World Health Organization. South-East Asia. Maldives strengthens Disease Surveillance and Field Epidemiology capacities. 5 August 2024. https://www.who.int/maldives/news/detail/05-08-2024-maldives-strengthens-disease-surveillance-and-field-epidemiology-capacities
- 433 Georgetown Institute for Women, Peace and Security. Women Peace and Security Index. 2023-2024. https://giwps.georgetown.edu/wp-content/uploads/2023/10/WPS-Index-full-report.pdf
- 434 World Bank. Gender Data Portal. Maldives. Accessed 16 October 2024. https://liveprod.worldbank.org/en/economies/maldives#:~:text=In%20Maldives%2C%20 the%20labor%20force,women%20is%20higher%20in%20 Maldives.
- 435 UN Expert: Maldives Stuck Between Rock and Hard Place on Climate Change Issue, 25 April 2024, United Nations, https://maldives.un.org/en/267078-un-expert-maldives-stuck-between-rock-and-hard-place-climate-change-issue.
- 436 United Nations. Convention on the Elimination of All Forms of Discrimination Against Women. List of State Parties. Accessed 16 October 2024. https://www.un.org/womenwatch/daw/cedaw/cedaw/20/list.htm
- 437 IWRAW Asia Pacific. CEDAW. State and Non-State Parties to CEDAW. Accessed 16 October 2024. https://cedaw.iwraw-ap.org/cedaw/state-and-non-state-parties-to-cedaw.
- 438 Peace Women. Women's International League for Peace and Freedom. About Women, Peace and Security in the Security Council. Women, Peace and Security Agenda. https://www.peacewomen.org/security-council/WPS-in-SC-Council
- 439 Peace Women. Women's International League for Peace and Freedom. About Women, Peace and Security in the Security Council. Women, Peace and Security Agenda. https://www.peacewomen.org/security-council/WPS-in-SC-Council

- 440 Australian Government. Australian National Action Plan on Women, Peace and Security 2021-2031. https://acmc.gov.au/resources/publications/australian-nation-al-action-plan-women-peace-and-security-2021-2031
- 441 Women's International League for Peace and Freedom. 1325 National Action Plans. Accessed 16 October 2024. http://1325naps.peacewomen.org/
- 442 UNDP. "Women as Peacebuilders and Agents of Change in the Maldives" 15 June 2021. https://www.undp.org/maldives/publications/women-peacebuilders-and-agents-change-maldives
- 443 Permanent Mission of the Republic of Maldives to the United Nations. Statement by H.E Ahmed Khaleel Minister of State for Foreign Affairs of the Republic of Maldives, at the UNSC Open Debate on 'Advancing the Women, Peace, and Security: Women's economic inclusion and participation as a key to building peace'. 8 March 2022. http://maldivesmission.com/statements/statement_by_he_ahmed_khaleel_minister_of_state_for_foreign_affairs_of_the_republic_of_maldives_at_the_unsc_open_debate_on_advancing_the_women_peace_and_security_womens_economic_inclusion_and_participation_as_a_key_to_building_peace
- 444 Ministry of Gender, Family and Social Services. Republic of Maldives. National Gender Equality Action Plan. 2022-2026. https://gender.gov.mv/en/wp-content/ uploads/sites/1/2022/03/GEAPFinal.pdf
- 445 Ministry of Gender, Family and Social Services. Republic of Maldives. National Gender Equality Action Plan. 2022-2026. https://gender.gov.mv/en/wp-content/ uploads/sites/1/2022/03/GEAPFinal.pdf
- 446 UN Women. Asia and the Pacific. Maldives. Accessed 16 October 2024. https://asiapacific.unwomen.org/en/countries/maldives
- 447 Allgaier, Nora. UN Women. Asia and the Pacific. Maldives joins the global discussion on women's participation and leadership in peace and security. 1 November 2016. https://asiapacific.unwomen.org/en/news-and-events/stories/2016/12/maldives-joins-the-global-discussion-on-womens-participation
- 448 U.S. Department of State. DRL Strengthening Women's Leadership in the Maldives. 31 January 2024. https://www.state.gov/drl-strengthening-womens-leadership-in-the-maldives/
- 449 Ministry of Environment. Republic of Maldives. Update of Nationally Determined Contribution of Maldives. 2020. https://unfccc.int/sites/default/files/NDC/2022-06/Maldives%20Nationally%20Determined%20Contribution%202020.pdf
- 450 Maldives National Disaster Management Center and Asian Disaster Reduction Center. Aminath Shaufa, Project Officer. 2023. https://www.adrc.asia/nationinformation.php?NationCode=462&Lang=en&NationNum=36
- 451 Maldives National Disaster Management Center and Asian Disaster Reduction Center. Aminath Shaufa, Project Officer. 2023. https://www.adrc.asia/nationinformation.php?NationCode=462&Lang=en&NationNum=36
- 452 The World Bank Group. Crisis Preparedness Gap Analysis: Maldives Briefing Note. October 2023. https://documents.worldbank.org/pt/publication/documents-reports/documentdetail/099032224020533320/p1802841f641380f1bed01d3a3e38f256a

- 453 U.S. Army Pacific Affairs Office. U.S. Department of Defense. Fiji, U.S., Host Seminar for Regional Land Forces. 15 August 2024. https://www.defense.gov/News/ News-Stories/Article/Article/3875092/fiji-us-host-seminar-for-regional-land-forces/
- 454 "US&R AA AAR, Atlas Angel Exercise, Sri Lanka, 5-9 August 2024," After Action Report, Montana National Guard, State Partnership Program.
- 455 Avas. Maldives. Fourth iteration of "Black Marlin" military exercise underway. 5 May 2024. https://avas.mv/ en/140624
- 456 CFE-DM. CFE-DM News. CFE-DM & Montana National Guard Instruct Emergency Management Workshop in Maldives. 1 June 2023. https://www.cfe-dmha.org/Link-Click.aspx?fileticket=9G5uG1Q Yfw%3d&portalid=0
- 457 Coast Guard Pacific Area Public Affairs. First U.S. Coast Guard cutter visits Maldives since 2009. 25 September 2022. https://www.cpf.navy.mil/Newsroom/News/ Article/3169664/first-us-coast-guard-cutter-visits-maldives-since-2009/
- 458 CFE-DM. CFE-DM News. CFE-DM staff collaborates with Maldives counterparts during three-day HADR training. 1 July 2022. https://www.cfe-dmha.org/News/ LinkClick.aspx?fileticket=zEgorltjFXg%3d&portalid=0×tamp=1656724111451
- 459 U.S. Indo-Pacific Command. U.S. Indo-Pacific Command co-host 14th Annual Indo-Pacific Intelligence Chiefs Conference 2021 with the Maldives National Defense force. 13 September 2021. https://www.pacom.mil/Media/News/News-Article-View/Article/2766624/us-indo-pacific-command-co-host-14th-annual-indo-pacific-intelligence-chiefs-co/
- 460 Readout of U.S.-Maldives Inaugural Defense and Security Dialogue. USINDOPACOM. 6 January 2021.
- https://www.pacom.mil/Media/News/News-Article-View/ Article/2464306/readout-of-us-maldives-inauguraldefense-

and-security-dialogue/

- 461 Tonacchio, William, Chief Petty Officer. US, Maldives Share Experiences During Military-to-Military Contact. DVIDS. 8 January 2021. https://www.dvidshub.net/ news/386630/us-maldives-share-experiences-during-military-military-contact
- 462 The Maldives and U.S. Sign Defense Agreement. U.S. Department of Defense. 11 September 2020. https:// www.defense.gov/Newsroom/Releases/Release/Article/2344512/the-maldives-and-us-sign-defense-agreement/
- 463 Verma, Pranshu. U.S. to Establish Embassy in the Maldives. The New York Times. 28 October 2020. https:// www.nytimes.com/2020/10/28/us/politics/us-embassy-maldives.html
- 464 Permanent Mission of the Republic of Maldives to the United Nations. International Relations. Accessed 26 August 2024. http://maldivesmission.com/international relations
- 465 Republic of Maldives. Ministry of Foreign Affairs. Diplomatic Relations. Accessed 26 August 2024. https:// foreign.gov.mv/index.php/en/policy/diplomatic-relations

- 466 Republic of Maldives. Ministry of Foreign Affairs. Embassies and Consulates. Accessed 26 August 2024. https://foreign.gov.mv/index.php/en/ministry/embassies-and-consulates
- 467 Republic of Maldives. Ministry of Foreign Affairs. Embassies and Consulates. Accessed 26 August 2024. https://foreign.gov.mv/index.php/en/ministry/embassies-and-consulates
- 468 Ministry of External Affairs. India-Maldives Bilateral Relations. March 2024. https://www.mea.gov.in/Portal/ ForeignRelation/Bilateral-Brief-Unclassified-March-2024. pdf
- 469 Ministry of External Affairs. India-Maldives Bilateral Relations. March 2024. https://www.mea.gov.in/Portal/ ForeignRelation/Bilateral-Brief-Unclassified-March-2024. pdf
- 470 Ministry of External Affairs. India-Maldives Bilateral Relations. March 2024. https://www.mea.gov.in/Portal/ ForeignRelation/Bilateral-Brief-Unclassified-March-2024.
- 471 Rasheed, Athaulla A. Institute of South Asian Studies. National University of Singapore. Implications of Securitising and Desecuritising the Maldives' Partnerships. 23 July 2024. https://www.isas.nus.edu.sg/papers/ implications-of-securitising-and-desecuritising-the-maldives-partnerships/
- 472 Ministry of External Affairs. India-Maldives Bilateral Relations. March 2024. https://www.mea.gov.in/Portal/ ForeignRelation/Bilateral-Brief-Unclassified-March-2024. pdf
- 473 Samaranayake, Nilanthi. United States Institute of Peace. Maldives' President Seeks to Preserve Sovereignty Amid Indian Ocean Competition. 4 December 2023. https://www.usip.org/publications/2023/12/maldives-president-seeks-preserve-sovereignty-amid-indian-ocean-competition
- 474 Dr. Mohamed Muizzu. Manifesto. Accessed 27 August 2024. https://www.dhiveheengeraajje.net/
- 475 Samaranayake, Nilanthi. United States Institute of Peace. As Tensions with India Grow, Maldives Looks to China. 18 January 2024. https://www.usip.org/publications/2024/01/tensions-india-grow-maldives-looks-china
- 476 Republic of Maldives. Ministry of Foreign Affairs. Embassies and Consulates. Accessed 26 August 2024. https://foreign.gov.mv/index.php/en/ministry/embassies-and-consulates
- 477 Republic of Maldives. The President's Office. Key Agreements exchanged between the Maldives and China. 10 January 2024. https://presidency.gov.mv/Press/Article/29600
- 478 Republic of Maldives. Ministry of Foreign Affairs. Maldives and China Holds Official Talks. 22 July 2024. https://foreign.gov.mv/index.php/en/media-center/news/ maldives-and-china-hold-official-talks
- 479 Osmanagic, Ameera. The Edition. China-Maldives FTA will increase bilateral transactions to USD 1 billion: Govt. 17 September 2024. https://edition.mv/travel/36087

- 480 Rehan, Mohamed. Sun. Maldives-China FTA to become effective in Jan 2025, 91 percent tariff cut. 17 September 2024. https://en.sun.mv/92015
- 481 Travel Trade Maldives. Chinese Market Dominates Maldives Tourism, Surpasses 90,000 Arrivals. 14 May 2024. https://www.traveltrademaldives.com/chinese-market-dominates-maldives-tourism-surpasses-90000-arrivals/
- 482 Basarkar, Rhea. Council on Foreign Relations. The Maldives Is Moving Toward China. 2 May 2024. https:// www.cfr.org/in-brief/maldives-moving-toward-china-heres-what-know
- 483 Singh, Shalini. Organisation for Research on China and Asia. Maldives-China Relations. 7 April 2022. https:// orcasia.org/article/202/maldives-china-relations
- 484 Republic of Maldives. Ministry of Foreign Affairs. Embassies and Consulates. Accessed 26 August 2024. https://foreign.gov.mv/index.php/en/ministry/embassies-and-consulates
- 485 U.S. Department of Defense. The Maldives and U.S. Sign Defense Agreement. 11 September 2020. https:// www.defense.gov/Newsroom/Releases/Release/Article/2344512/the-maldives-and-us-sign-defenseagreement/
- 486 Republic of Maldives. Ministry of Foreign Affairs. Bilateral Engagement. United States of America. Accessed 26 August 2024. https://foreign.gov.mv/index.php/en/ bilateral/countries/united-states
- 487 Mitra, Devirupa. Seven Years On, India Now Backs a Defence Pact Between the US and Maldives. The Wire. 13 September 2020. https://thewire.in/south-asia/sevenyears-on-india-now-backs-a-defence-pact-between-theusand-maldives
- 488 Office of Press Relations, USAID, Administrator Samantha Power Attends Maldives Presidential Inauguration and Meets with Dr. Mohamed Muizzu, President of Maldives. 18 November 2023. https://www.usaid.gov/ news-information/press-releases/nov-18-2023-administrator-samantha-power-attends-maldives-presidential-inauguration-and-meets-dr-mohamed-muizzu-president-maldives
- 489 U.S. Department of State. Bureau of South and Central Asian Affairs. U.S. Relations With Maldives. Bilateral Relations Fact Sheet. 13 October 2023. https://www.state. gov/u-s-relations-with-maldives/
- 490 U.S. Department of State. Bureau of South and Central Asian Affairs. U.S. Relations With Maldives. Bilateral Relations Fact Sheet. 13 October 2023. https://www.state. gov/u-s-relations-with-maldives/

- 491 Embassy of the Republic of Maldives in Japan. Maldives-Japan Relations. Accessed 27 August 2024. https:// jp.mdvmission.gov.mv/index.php/ja/bilateral-relations/ maldives-japan-relations
- 492 Ministry of Foreign Affairs of Japan. Outline of Japan's ODA to Maldives. September 2009. https://www. mofa.go.jp/policy/oda/region/sw_asia/maldives_o.pdf
- 493 Embassy of the Republic of Maldives in Japan. Maldives-Japan Relations. Accessed 27 August 2024. https:// jp.mdvmission.gov.mv/index.php/ja/bilateral-relations/ maldives-japan-relations
- 494 Japan International Cooperation Agency. Activities in Maldives. Accessed 15 October 2024. https://www.jica. go.jp/english/overseas/maldives/activities/index.html
- 495 U.S. Department of State. International Travel -Maldives International Travel Information. Accessed 22 August 2024. https://travel.state.gov/content/travel/en/ international-travel/International-Travel-Country-Information-Pages/Maldives.html
- 496 U.S. Centers for Disease Control and Prevention. Travelers' Health - Maldives. Accessed 22 August 2024. https://wwwnc.cdc.gov/travel/destinations/traveler/ none/maldives?s cid=ncezid-dgmq-travel-single-001
- 497 PreventionWeb.net. Chart of the Sendai Framework for Disaster Risk Reduction 2015-2030, http://www.preventionweb.net/files/44983 sendaiframeworkchart.pdf
- 498 UNISDR. Sendai Framework for Disaster Risk Reduction. https://www.unisdr.org/we/coordinate/sendai-framework
- 499 PreventionWeb.net. Chart of the Sendai Framework for Disaster Risk Reduction 2015-2030. http://www.preventionweb.net/files/44983 sendaiframeworkchart.pdf
- 500 UNISDR. Sendai Framework for Disaster Risk Reduction. https://www.unisdr.org/we/coordinate/sendai-framework
- 501 PreventionWeb.net. Chart of the Sendai Framework for Disaster Risk Reduction 2015-2030. http://www.preventionweb.net/files/44983 sendaiframeworkchart.pdf
- 502 World Bank. Crisis preparedness gap analysis: Maldives briefing note. 2023. https://www.preventionweb. net/publication/crisis-preparedness-gap-analysis-maldives-briefing-note
- 503 CIA World Factbook. Maldives. Accessed 22 August 2024. https://www.cia.gov/the-world-factbook/countries/ maldives/
- 504 CIA World Factbook. Maldives Population Pyramid. Accessed 22 August 2024. https://www.cia.gov/the-worldfactbook/countries/maldives/#people-and-society



Center for Excellence in Disaster Management & Humanitarian Assistance
456 Hornet Avenue, Building 76, Joint Base Pearl Harbor - Hickam, Hawaii 96860-3503
Telephone: 808.472.0518 | DSN: 315.472.0518
https://www.cfe-dmha.org