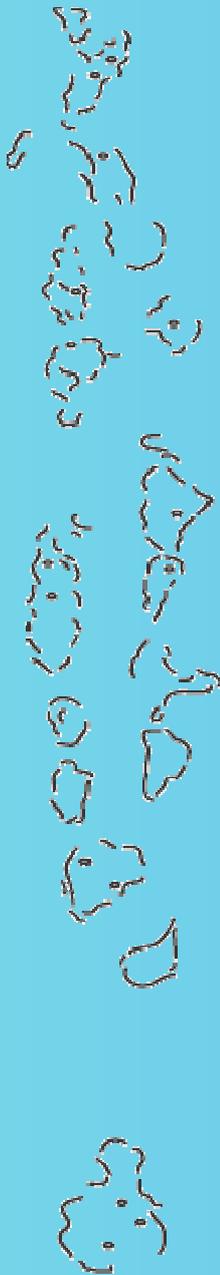


ASIAN DISASTER REDUCTION CENTRE

Visiting Researcher Program – FY2014B

COUNTRY REPORT: REPUBLIC OF MALDIVES



Fathmath Saushan Moosa

Senior Administrative Officer
National Disaster Management Center



CONTENTS

General Description	4
Geography	5
Climate	6
Demography	6
Government	7
Economy	8
Natural Hazards in the Maldives	9
Storms / Cyclones	9
Sea level rise.....	10
Water shortage.....	11
Tsunami	12
Earthquake.....	13
Recent Major Disasters in Maldives	14
Water Shortages	14
Storms / flood / Tsunami.....	15
Disaster Management System	16
Administrative system in Maldives.....	16
Legal system and framework.....	18
Structure of Disaster Management	18
National platform for Disaster Risk Reduction.....	20
National Organizations for Disaster Risk Reduction.....	21
Local Organizations for Disaster Risk Reduction	22
Disaster Management Strategy, Policy, and Plan	22
Budget Size on National Level	22
Progress of the Implementation of Hyogo Framework for Action (HFA) in the Maldives	23



Area 1:	23
Area 2:	24
Area 3:	24
Recent Major Projects on Disaster Risk Reduction in the Maldives.....	26
UNDP Project.....	26
ADPC Project	27
UNICEF PROJECT	27
Resort program	28
ADRC Counterpart in the Maldives	29



Disclaimer

This report was compiled by an ADRC visiting researcher (VR) from ADRC member countries.

The views expressed in the report do not necessarily reflect the views of the ADRC. The boundaries and names shown and the designations used on the maps in the report also do not imply official endorsement or acceptance by the ADRC.

GENERAL DESCRIPTION

Maldives, officially the Republic of the Maldives, is an island nation in the Indian Ocean–Arabian Sea area, consisting of a double chain of twenty-six atolls, oriented north-south.

The Maldives atolls



Figure1: Maldives on the world map

encompass a territory spread over roughly 90,000 square kilometers (35,000 sq mi), making the country one of the world's most geographically dispersed. Its population of 328,536 (2012) inhabits 200 of its 1,190 islands – which increases and decreases as the tide change. In 2006, Maldives' capital and largest city Malé, located at the southern edge of North Malé Atoll, had a population of 103,693. Malé is one of divisions and, traditionally, it was the "King's Island" where the ancient Maldives royal dynasties were enthroned.

The Maldives is the smallest Asian country in both population and land area. With an average ground level elevation of 1.5 metres (4 ft 11 in) above sea level, it is the planet's lowest country. It is also the country with the lowest natural highest point in the world, at 2.4 metres (7 ft 10 in).

GEOGRAPHY

The Maldives is a chain of 1,190 small islands stretching across the equator to the south west of Sri Lanka. The 1,190 islands – of which only 200 are inhabited – form an archipelago of 26 natural atolls (groups of neighbouring coral islands). Each of the 26 atolls that make up the Maldives is enclosed by a coral reef cut by several deep, natural channels and a lagoon.



Figure 2: Geographical feature of Maldives (Atolls)

The Maldives archipelago stretches 823 km north to south and 130 km east to west. Over 99% of the Maldives is made up of the sea: only 0.331% (115 square miles) of its 35,000 square mile surface area is dry land.



Figure 3: A typical island of Maldives

How the islands actually formed is something of a mystery. The theory that has most support was first suggested by Charles Darwin in 1842 (after he had studied similar atolls in the Pacific and Atlantic Oceans). Darwin's theory suggests that the islands were formed when volcanoes rose from the sea and coral reefs grew around their edges. The volcanoes subsequently sank back into the sea leaving the coral reefs to circle a shallow water-filled lagoon. Islands then formed when currents and tides swept dead coral and other organic debris into the lagoons which in turn became filled-in and were eventually colonised by plants and trees.

The islands that make up the Maldives are very small (most can be walked across in 10 minutes; only a few are longer than 2 kilometres) and low-lying (they rarely reach more than six feet above sea-level). This makes them particularly vulnerable to sea erosion. In 1812 and again in 1955, devastating gales destroyed many northern islands, while in 1987 the capital, Male, was flooded by a severe storm. If, as some scientists predict, global sea levels continue to rise as a consequence of global warming, it will pose a particular risk to the Maldives.

CLIMATE

The Maldives has a tropical climate with warm temperatures throughout the year and many hours of sunshine. With an average temperature of 33°C and an average minimum temperature of 26°C there are only minor variations in daily temperature throughout the year. There are two



Figure 4: south west monsoon (rainy season)

monsoon periods: the southwest monsoon (the wet period from May to November) and the northeast monsoon (the dry period from January to March).



Figure 5: North east monsoon (Dry season)

DEMOGRAPHY

The estimated population of the Maldives is 345,000. Maldivians are ethnically from South Indians, Sinhalese, and Arabs. Islam is the religion of the State and Maldives is a hundred percent Muslim country. Dhivehi is the national language and *thaana*, derived from Arabic is the script used in Maldives. Even though not officially quoted, English is the second language of the Maldives and the majority of the populace can speak and write in English.



Figure 6: Islamic Centre- the biggest mosque in Maldives

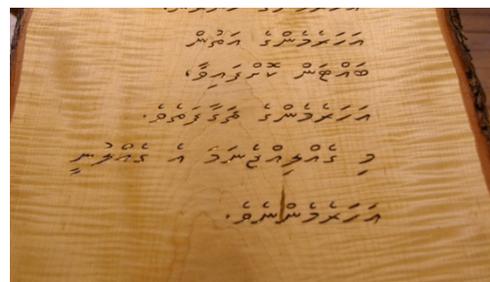


Figure 7: Thaana– the script used in Maldives

GOVERNMENT

Maldives is a presidential republic, with the President as head of government and head of state. The President heads the executive branch and appoints the cabinet which is approved by the People's Majlis (Parliament). Following the introduction of a new constitution in 2008, direct elections for the President take place every five years, with a limit of two terms in office for any individual. The current President is Abdulla Yameen. Members of the unicameral Majlis serve five-year terms, with the total number of members determined by atoll populations. At the 2009 election, 77 members were elected. The People's Majlis, located in Male, houses members from all over the country.

Maldives is divided into 20 administrative divisions (atolls), each headed by an atoll council with the exception of Addu Atoll (Seenu Atoll) which, along with the capital Male' has been declared as a city. Addu and Male' city has a city council. Every other island has an island council and operates under a decentralized system. All the councilors are elected after a referendum at the respective levels.



Figure 8: President Abdullah Yamin Abdul Gayyom



Figure 9: The people's majlis - Parliament

ECONOMY

The currency of the Maldives is *Rufiyaa* (MVR) at an exchange rate of 15.42 MVR for 1 USD. Maldives consisting of ninety-nine percent water, the main source of food is from the sea. Tuna is a significant source of income in the island



Figure 10: Canned tuna – main export

nation. Canned tuna, dried tuna, salted tuna, and various products made from tuna are exported to Asian and European countries. There are companies, private and government-owned that takes part in this industry.

Maldives is famous for her natural beauty and remains an attractive destination for vacationers. Tourism began in the Maldives in 1972 and to this day, there are more than hundred resorts in the Maldives. Maldives is heavily dependent on the import of goods and tourism is the main source of foreign income



Figure 11: Beach side of a tourist resort

into the country. The Gross Domestic Profit (GDP) is estimated at around 2.3 billion USD with an estimated GDP per capita (PPP) of 9,100 USD.

NATURAL HAZARDS IN THE MALDIVES

- Storms / Cyclones
- Sea level rise
- Flood / sea swell
- Water shortage
- Tsunami
- Earthquake

STORMS / CYCLONES

At times, tropical cyclones hitting Maldives are destructive due to associated strong winds that exceed speeds of 150 km per hour, rainfall above 30 to 40 cm in 24 hours and storm tides that often exceed 4 or 5 m. The combined effect of surge and tide is known as 'storm tide'. Storm tides can cause catastrophe in low-lying areas, flat coasts and islands such as Maldives.



Figure 12: A storm

The islands of Maldives are less prone to tropical cyclones. The northern islands of the country were affected by weak cyclones that formed in the southern part of the Bay of Bengal and the Arabian Sea. The number of cyclones directly crossing Maldives is small. Only 11 cyclones, which were formed during the months of October to January, crossed the islands over 128 years.



Figure 13: Cyclone Nilaam - 2013

The vulnerability of the islands in the northern atolls is heightened due to their poor accessibility compared to other parts of the country. In a post cyclone situation, affected areas are inaccessible for several days due to poor weather and rough sea conditions. In cyclones, risk to livelihoods in the primary sectors such as agriculture and fishing, and in the service sectors is high.

SEA LEVEL RISE

Sea level rise due to climate change threatens the entire country. Estimations are that the projected sea level rise of 0.09 m to 0.88 m is going to take place between 1990 - 2100. As three quarters of the land area of Maldives is less than a meter above mean sea level, the slightest rise in sea level will prove extremely threatening. As per an estimate, 15 % land area of Male will be inundated by 2025 and 50% by 2100. For people living on low-lying islands, a rise in sea levels by 50 cm could see significant portions of the islands being inundated or washed away by erosion.

As a result of the rise in sea level, a variety of impacts may be expected in Maldives. These include loss of land, flooding of low lying coastal areas, displacement of population, loss of crop yield, impacts on coastal aquaculture, and erosion of sandy beaches.

As most of the economic activities in Maldives are heavily dependent on the coastal ecosystem, sea level rise will impact the social and economic development of the country. Residential areas, industry and vital infrastructure of the country lie close to the shoreline, within 0.8 to 2 m of mean sea level. Even now some islands are seriously affected by loss not only of shoreline but also of houses, schools and other infrastructure, compelling the government to initiate urgent coastal protection measures.

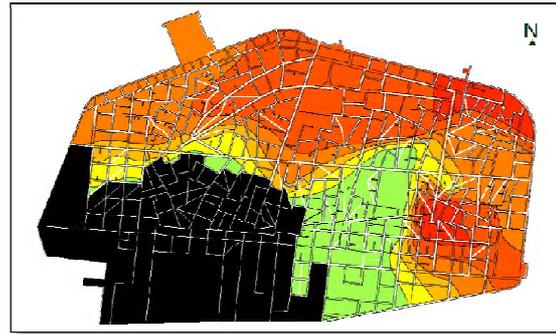


Figure 14: Male' in the year 2050 - 31% of Male' inundated under IPCC worst case scenario (IS92e)



Figure 15: Damages caused to the beach due to sea level rise



Figure 16: Damages caused to livelihood of people due to sea level rise

WATER SHORTAGE

Freshwater is in short supply in the Maldives, where the traditional reliance on groundwater supplies for both potable and non-potable uses has recently been brought into question - particularly on densely populated islands - as a result of:

- Over-extraction of groundwater by growing populations
- Contamination of groundwater, with toxins reaching the aquifer as a result of poor sanitation
- Salinisation of aquifers during storm

surges, and especially as a result of the 2004 tsunami, which seriously damaged public perceptions of groundwater quality and led to calls for sewerage systems and the provision of other sources of freshwater.

Although not considered as a disaster, but due to the programming and logistical costs, the government faces every year it is considered as a crisis.

The government provides thousands of tons of freshwater to islands in order for drinking and cooking.

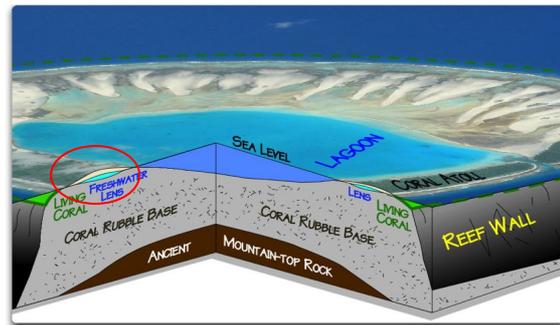


Figure 17: Diagram showing a fresh water lens of an island



Figure 18: Dhonies carrying water to islands



Figure 19: Re filling the water containers during dry seasons in islands



Figure 20: Distribution of water with the help of MNDF-
Water crisis in Male' – December 2014

TSUNAMI

In Maldives, islands along the east are more prone to tsunami hazard than those along the north, south and west ones, where the threat is considered low. As such, the islands with lower elevation and higher population are at greater risk.

The Indian Ocean Tsunami in 2004 was the first Tsunami to hit Maldives. It caused great damage to the delicate islands as well as the economy of the country and the livelihood of its people.

And it is possible that a tsunami to be generated from the active seismic zones around Sumatra, Western India and in the waters west and south west of Maldives. The Waters of ocean lying south of Maldives and the Carlsberg oceanic ridge zone, which has a high level of seismic activity.



Figure 21: Damages caused due to tsunami - 2004



Figure 22: Damages caused due to tsunami - 2004



Figure 23: Damages caused due to tsunami - 2004



Figure 24: International Airport on tsunami - 2004

EARTHQUAKE

Situated on the Indo-Australian plate, the Maldives is tectonically very stable and aseismic. It is located far away from high-seismicity regions. But traumas have been felt by people across a wide area and on many islands. These traumas are said that, were not caused by nearby seismic events, but by the relatively large events that have occurred in the western Indian and Sumatra region. But it is possible that a major earthquake to suddenly occur in a region that has not been seismically active in the past. And attention is given to the possibility of a tsunami generated from the active seismic zones around Sumatra, Western India and in the waters west and south west of Maldives. The Waters of ocean lying south of Maldives and the Carlsberg oceanic ridge zone, which has a high level of seismic activity.

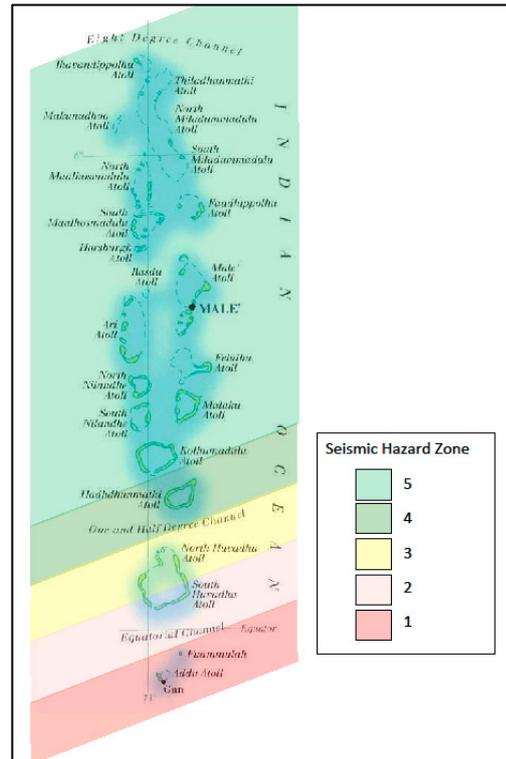


Figure 25: Seismic hazard map

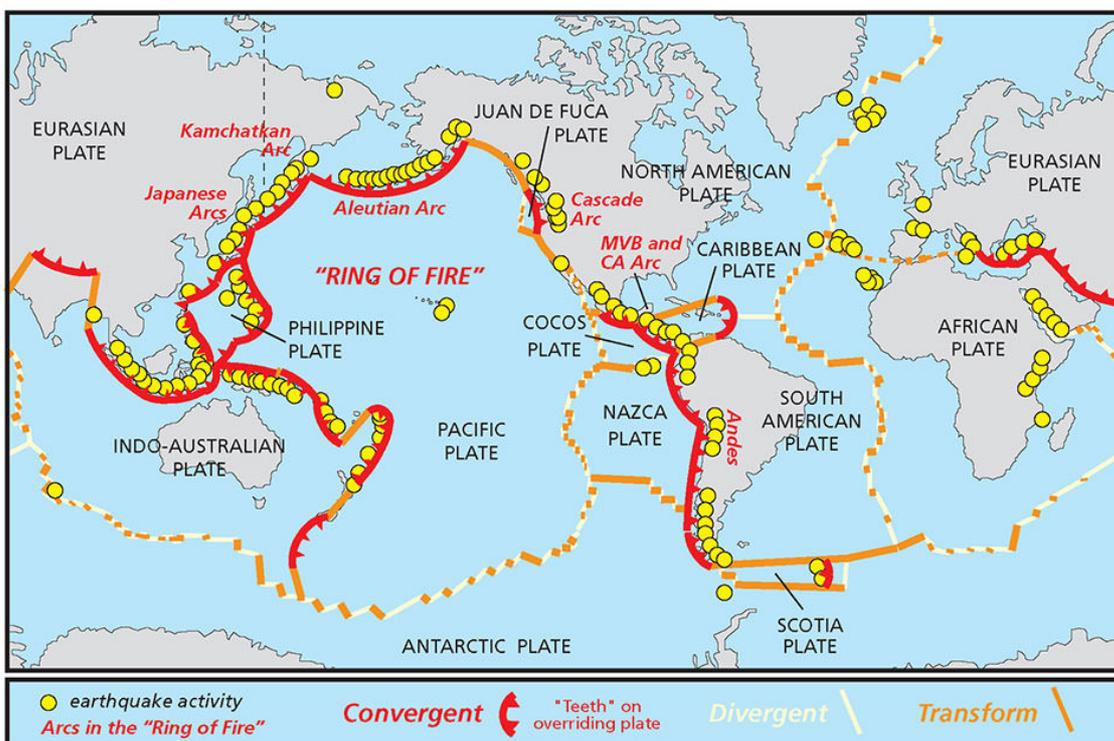


Figure 26: Map of world seismic activity and tectonic plates

RECENT MAJOR DISASTERS IN MALDIVES

WATER SHORTAGES

Due to over- extraction, contamination and as a result of Salinisation of aquifers during storm surges, and especially as a result of the 2004 tsunami, the fresh water lens of Maldives is almost destroyed. And now the only source of fresh water to the country is rain water. But the amount of rain water that is collected during the rainy season is not enough to cover the whole year's consumption. As a result there is a shortage of fresh water during the dry season of each year. Since the island communities do not have the capacity to provide for themselves, the government sends emergency water supplies to these islands.

Year	No. of Islands	Total amount of water delivered (in tons)	Total amount spent (in USD)
2005	91	2,728	159,221.80
2006	86	2,905	145,525.30
2007	82	2,694	131,031.10
2008	74	2,088	101,556.40
2009	117	7,469	472,144.70
2010	<i>Water provided by province offices</i>		
2011	108	3,920	142,178.30
2012	86	2,500	286,075.80
2013	28	1,225	537,363.60
2014	77	2,909	349,691.75

Table 1: water provided to islands during water shortages

STORMS / FLOOD / TSUNAMI

Floods are annual occurrences in the Maldives and records are not usually maintained unless it is a national level crisis.

Year/Storm	Islands affected	People affected	Dead	Missing	Damage
2012 (Cyclone Nilam)	Caused flooding in 51 islands, 28 islands severe flooding, 4 islands critical	3,826	-	-	133,090.60 USD
2004 (Tsunami)	53 were severely damaged	Nearly 12,000 displaced. 1,200 IDPs still live in 6 islands	88	20	470 million USD Estimated cost of reconstruction is 406 million USD

Table 2: Recent disasters and there effects



DISASTER MANAGEMENT SYSTEM

ADMINISTRATIVE SYSTEM IN MALDIVES

Structure of local government in Maldives

- Local government within the country

Local government is two-tier, comprising island councils and city councils, all of which are accountable to an atoll council.

- Ministerial oversight

The Local Government Authority (LGA) has responsibility for local government and advises atoll councils on the formulation of regulations and by-laws.

- Atoll councils:

These are mandated to oversee administrative and development work and to coordinate and monitor the activities and functioning of the island councils. The atoll council comprises members elected for a three year term from the electoral constituencies of the administrative divisions within its boundaries.

- City councils:

City councils must have a population of more than 25,000, the necessary capacity to deliver the appropriate services and a minimum level of gross productivity as specified by central government from time to time. There are two city councils, with between them a total of 17 councilors.

- Island councils:

Every inhabited island in the Maldives, except islands where city councils are established, is governed by an elected island council which prepares island development plans in consultation with the community, and submits them to the atoll council. They are also mandated to take all necessary measures to establish a safe and peaceful environment on the island in collaboration with the police. Island councils comprise elected members from that particular island

The Constitution of the Maldives dictates that all disaster management activities to include response and recovery fall on the state. Disaster management is currently under the mandate Nation Disaster Management Center, and the Maldives National Defense Force (MNDF) and Maldives Police Service are the first responders in a disaster. The main works of NDMC includes relief, disaster risk reduction and preparedness,



advocacy and awareness, emergency response. And there are activities and programmes conducted to strengthen the post disaster and assessment and relief works. Some of them includes :

- **Forms**

1. Situation report: This form is intended for use by the atoll or island council in order to log details about the disaster i.e. The type of disaster, affected area, casualties, displaced people and information of their temporary shelters.
2. Immediate relief aid requisition form: This form is intended for use by the atoll or island council in order to request for an immediate relief (usually in a disaster the request is sent directly via telephone – the form is sent afterwards)
3. Rapid Impact Assessment form: This form is intended for use by the atoll or island council in order to record details of damage to infrastructure, households, livelihoods, casualties and death in the island or atoll. The form is requested to be sent after 24 hours after the disaster.
4. Damage and loss assessment form: This form is intended for use by the atoll or island council in order to log the damage caused to the island and economic and financial loss is identified by the form.

- **Relief Guideline**

In the aim to improve the quality of assistance provided to people affected by disasters, and to enhance the accountability of the humanitarian system in disaster response the Maldives is developing a relief guideline based on Sphere standards, which covers basic items for immediate relief and compensation for loss.

LEGAL SYSTEM AND FRAMEWORK

Soon after the Indian Ocean Tsunami that hit Maldives in 2004, the Government of Maldives acted swiftly and set up a Ministerial Committee and Task Force and the National Disaster Management Center (NDMC) was established by a presidential decree to facilitate response and coordination. At that time the Center has been the focal point for all response, relief and recovery activities.

As things progressed the disaster preparedness and risk reduction was included in the mandate of NDMC. However, there is no legal framework for a disaster management system in the Maldives.

Work is in progress to endorse a Disaster Management Act. Currently, the draft of the bill is at the Attorney General's Office for legalization, and is to be sent to the parliament for endorsement.

STRUCTURE OF DISASTER MANAGEMENT

National Disaster Management Centre (NDMC) is under the organizational structure of Ministry of Defence and National Security. And it is the primary agency for response, recovery, disaster risk reduction (DRR), preparedness and as a coordinating body at a time of disaster. While Maldives National Defence Force and Maldives Police Service are the first responders in a disaster.

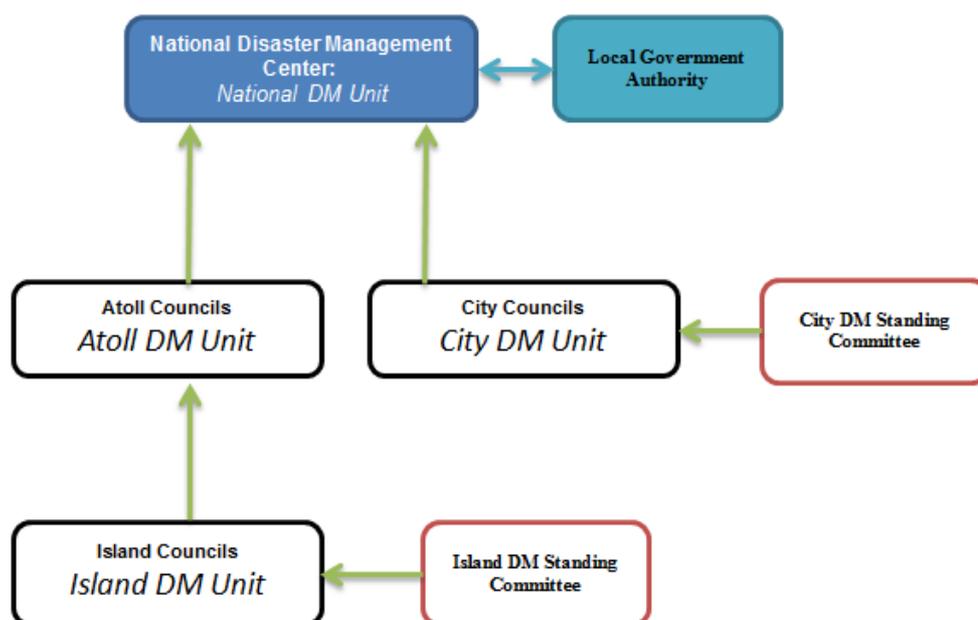


Figure 27: Island disaster management structure



The current mandates of the National Disaster Management Centre are:

1. Organizing and conducting various programs needed to alert the public in the event of disasters both natural and otherwise, and raising government and public awareness of such events.
2. Establish and coordinate the legal and administrative system required to have government ministries, private sector, groups and organizations and individual citizens all working together for any work that needs to be carried out in a centralized manner due to disasters natural or otherwise.
3. In the event of disasters natural and otherwise, decide who needs immediate response and relief, and organize and coordinate ways to send aid to them in conjunction with other authorities concerned.
4. Provide temporary shelter to those whose homes are damaged beyond use due to disasters both natural and otherwise.
5. Oversee that the basic necessities are provided for those whose homes are damaged beyond use due to disasters both natural and otherwise, until temporary shelter can be arranged.
6. Organize and coordinate with concerned government authorities the actions needed to be taken to acquire both foreign and internal aid in the event of disasters both natural and otherwise.
7. Establish a stable system of working in association with concerned government and non-government authorities in order to ensure that disaster risk reduction remains a top priority.
8. Conduct researches on the devastation caused by natural disasters and dangerous illnesses in a small country like Maldives, and using the outcomes of the research, compile and publish a set of rules and regulations to be followed for any actions taken.
9. Ensure that any developmental programs or projects being conducted by various government ministries are done within the rules and regulations to reduce the damage caused by disasters as much as possible.
10. Enhance and increase the capacity of the early warning systems for natural disasters, dangerous illnesses and other disasters.
11. Establish and conform a secure system to conduct the actions taken to reduce the damage caused by disasters in a de-centralized manner.



12. Schedule and conduct any arrangements necessary to increase the safety of groups and organizations, women and people with special needs in islands during disaster risk reduction.
13. Establish a system in which regional and international experience, information and other resources can be utilized, to reduce damage caused by disasters.
14. Conduct awareness programs on disaster risk reduction in all regions of Maldives on a permanent basis.
15. Incorporate disaster risk reduction and disaster management into the national education system, compile an appropriate curriculum and, in association with concerned authorities, decide on ways to teach it.
16. Facilitate training for government employees who would be initiating the disaster risk reduction works, in collaboration with them.
17. Collect information on disaster risk management on a wide scale and making it accessible to public.

According to the Decentralization Act of the Maldives, the local councils and the Local Government Authority have a big stake in disaster management. Local councils are responsible to undertake, upon appointment by the President, the task of planning and carrying out search and rescue, or provide temporary relief or restore normalcy to the area during times of natural calamity, disaster, state of emergency, famine, or an epidemic in any island, or administrative division. Furthermore, the local councils have the responsibility to allocate funds for losses incurred during natural disasters in their budgets. It is also up to the local councils to coordinate with NDMC to provide aid and relief from the central government in case the situation worsens.

NATIONAL PLATFORM FOR DISASTER RISK REDUCTION

There is no National platform for DRR in Maldives. There is a multi-sectorial Technical Working Group that provides technical input to projects. It has representatives from all developmental sectors and stakeholders in disaster management. Mainstreaming DRR into development is a priority among sectors but is not implemented at an adequate level.

NATIONAL ORGANIZATIONS FOR DISASTER RISK REDUCTION

Apart from the NDMC, Maldives have very few national organizations that undertake the DRR process. Maldivian Red Crescent conducts programs and workshops mainly focusing on disaster management as a core strategic area. And the United Nations office in the Maldives provides funding and conducts various programs in coordination with the Maldivian government. And National Disaster Management Centre conducts workshops and awareness programs in atoll and in islands, in collaboration with Maldives National Defence Force to rise disaster risk reduction capabilities at the island and atoll level.



Figure 28: MRC - emergency first response service



Figure 29: MNDF Conducting CBDRR workshops in island communities

Maldives National Defence Force also conducts annual emergency management workshops in different areas of the country aimed at local councilors and staff who work at schools, health sector, Maldives Police Service, and other government agencies. These workshops introduce them to the concept of managing a crisis before help could arrive, how to deal with evacuations, and to raise awareness about the importance of being prepared.



LOCAL ORGANIZATIONS FOR DISASTER RISK REDUCTION

Non-governmental Organizations such as CARE Society, Maldives Youth Climate Network etc have a focus on DRR and Climate Change.

Other thematic NGOs working in areas such as women, children, people with disabilities, autism, heart disease etc advocate for mainstreaming DRR into development and the planning processes that cater to the needs of the most vulnerable people.

DISASTER MANAGEMENT STRATEGY, POLICY, AND PLAN

At present, Maldives lacks a disaster management strategy, policy or a plan. However, work is ongoing to formulate a National Emergency Operation Plan (NEOP) to define the roles, responsibilities, the standard operating procedures, and the framework required to manage disasters at every level. NDMC will publish the NEOP by the time Parliament ratifies the Disaster Management Act. Furthermore, NDMC is currently in the process of introducing a damage assessments toolkit in order for island communities to report the damages they face due to hazards. This process would introduce a tool to collect damage and needs information, and provide NDMC timely assessments of the crisis. The first phase of this project began at 2014. The first phase focused on institutionalizing the tool and establishes procedures for communities to send information, for NDMC to analyze and share it with other stakeholders, and finally, how NDMC would get the pre-crisis information.

BUDGET SIZE ON NATIONAL LEVEL

NDMC deals with running the DRR and awareness programs and the funding is to be through the government budget. But there is no state budget for preparedness and awareness. NDMC budget only covers administrative costs and staff salaries and did not receive funding for any proposed programs for disaster related activities. Mostly the DRR activities are run by partnership projects from international organizations. But usually partnership projects do not allow for investment in infrastructure and equipment. A separate fund for response is allocated at the Ministry of Finance and Treasury.



PROGRESS OF THE IMPLEMENTATION OF HYOGO FRAMEWORK FOR ACTION (HFA) IN THE MALDIVES

The progress of implementation of Hyogo Framework for Action (HFA) 2005-2015: Building the resilience of nations and communities to disasters, has been going on in the Maldives since the time of its inception. In order to achieve the goals outlined by the HFA, the Government of the Maldives committed to HFA's five priority for action. Following is a summary of the National Progress Report on the implementation of HFA in the Maldives from 2011-2013, reported by the National Disaster Management Centre.

AREA 1:

The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

Outcome:

Disaster risks consideration has been integrated in the Government's National Development Plan. Specifically, 2011 Strategic National Action Plan on Climate Change Adaptation and Disaster Risk Reduction for 2010-2020 was designed to promote collaboration among policymakers, experts and practitioners of DRR and climate change adaptation in the country for the development of a comprehensive risk management approach. It aims to build resilience of the nation and the island communities to disasters by sustaining the progress made by consolidating learned best practices and by incorporating risk reduction into the strategy for decentralization. Once harmonized with the policies, plans and sustainable development strategy, it will identify a consolidated set of programs and projects that can be undertaken with Government budget and considered for donor assistance. Few government agencies' programs have already integrated disaster considerations such as the Safe Island program, a new proposal for mosques as safe shelters has been developed. These mosques will act as a base for food and water storage, and communication equipment, acting as a stronghold in each island in case of disaster.



AREA 2:

The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards

Outcome:

Established government institutions lack adequate capacity and resources thus have limitations in implementing DRR initiatives at all levels including interventions for communities. The pending Disaster Management Bill delayed initiatives to strengthen certain institutional mechanisms for effective coordination and enforcement of laws, guidelines and standards that incorporated disaster risk considerations. Further the implementation of Decentralization Act hindered by the lack of sufficient capacity and resources all national, atolls and islands levels including communities. In the absence of a legal DRR framework and insufficient funding, government agencies have collaborated on ad hoc basis to implement programs. The approach has mobilized trained staff from different Ministries and institutions at the national and international level in disaster management, risk reduction and other related fields with many yet to be fully utilized. The civil society organizations have made good progress in conducting trainings to strengthen capacities of government agencies, private sectors and communities.

AREA 3:

The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

Outcome:

The government agencies, private sector and civil society organization have supported key sectors and several communities on emergency preparedness, response and recovery. This includes development of Community-based Disaster Preparedness Plans for affected communities with guidance on preparedness, response and recovery based on Vulnerability and Capacity Assessments (VCA). During the process, trainings for response including trainings for 1st Aid, search and rescue, psycho-social support



and early warning were provided as well as simulation exercises conducted for some islands. School level Standard Operating Procedures (SOPs) were completed for most schools in the country with staff being trained on emergency preparedness and decentralized management including regular mock drills being conducted within the school as well as activities carried out for community awareness with the involvement of parents in DRR. Ministry of Health and Family have specific SOP for the health sector while Ministry of National Defence Force, Ministry of Tourism, Arts and Culture SOPs in place for their respective sectors.



RECENT MAJOR PROJECTS ON DISASTER RISK REDUCTION IN THE MALDIVES

Major projects on DRR are few in the Maldives. Most of the projects thus far have been small programs conducted by the NDMC, MNDF and the Maldivian Red Crescent with a focus on DRR at the island level. DRR is implemented mainly through partnership projects. The ongoing projects include.

1. UNDP
2. ADPC
3. UNICEF
4. Resort programmers

But these partnership projects do not allow for investment in infrastructure and equipment.

UNDP PROJECT

Enhance National Capacity for Disaster Risk Reduction and Management in Maldives:

1. The establishment of the institutional and legal systems for DRR and effective DRR organizations/institutions;
2. The strengthening of the end-to-end early warning systems and facilitates implementation of public awareness campaigns and knowledge building on DRR and climate change adaptation.
3. In increasing community capacities for disaster preparedness for effective response, and will entail a multi-hazard approach involving a multi-stakeholder engagement.
4. The National Disaster Management Centre to be engaged as the primary implementing partner for the project to ensure sustainability and ownership. Assessing and strengthening the capacities of the NDMC as the lead national institution on disaster risk reduction/disaster risk management coordination, will also be a key component of this project.



ADPC PROJECT

Mainstreaming Local Level DRR and CCA into Local Development Programmes

1. National templates on preparedness and response plans
2. National guideline on integrating CBDRR activities into local government authorities programs
3. Training package modules
4. Jointly organize workshop on National ToT
5. Organize orientation workshop for key stakeholders to finalize National Community based DRR framework

UNICEF PROJECT

Development of standards and protocols to strengthen NDMC's coordination role with island communities pre and post emergencies

1. Develop an organizational five year action plan for emergency operations functions in Disaster Management Center
2. Develop roles and responsibilities, institutional arrangements and set-ups, capacity building strategies, tools for stakeholder capacity building, resource allocation and utilization mechanisms
3. Develop SOP's to strengthen NDMC's coordination role with atoll / island councils and other relevant authorities and Sectors to prepare, plan and response to emergencies
4. Develop Regulatory framework for National Emergency fund
5. Develop Strategies for Voluntary Response force
6. Develop a Relief Distribution Mechanism

Develop Emergency Operations Set-up/internal Operational area design/layouts and communication set-ups



RESORT PROGRAM

- Public-Private Partnership model
- NDMC gives technical support to resorts to develop DM Plans and build capacity
- Resort makes in-kind contribution to NDMC and at risk communities to strengthen DRR and Response capacities
- NDMC gives official Disaster Resilient Resort badge to resorts who take part in the programme

The program is conducted by trained and experienced facilitators from the Maldives National Defense Force and the National Disaster Management Centre of the Maldives. The program is designed to include both technical training and hands on exercises to ensure that resort management and staff would develop an understanding and knowledge of coordinating and controlling chaotic emergency situations due to natural and manmade hazards.

The objectives of the program are as follows:

- Understand disaster risk management concepts
- Undertake vulnerability capacity assessments for effective disaster preparedness and disaster risk reduction
- Establishment of an Incident Command System
- Develop basic understanding of fire awareness
- Development of a fire fighting squad
- Build awareness on maritime safety
- Understand and develop maritime safety skills such as search and rescue, swimming rescue, seamanship, etc
- Support develop multi-hazard Emergency operations Plan



ADRC COUNTERPART IN THE MALDIVES

Name of Focal Point: Ms. Fathimath Thasneem

Position: Deputy Minister of Defence and National Security
National Disaster Management Centre
H. Rihijehi Koshi, Ameenee Magu, Male' / Republic of Maldives

Website: www.ndmc.gov.mv

Email: info@ndmc.gov.mv

Telephone: (+960) 3333437, (+960) 3333470

Fax: (+960) 3333443

