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ASIAN DISASTER REDUCTION CENTER Visiting Researcher Program

COUNTRY REPORT: REPUBLIC OF MALDIVES

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1. General Description

1.1 Geography:

Located south-southwest of India (latitude 70°6' 35" N, crossing the equator

and extending up to 0°42'24" S and between longitudes 72°33'19" E 73°46'13" and E), Maldives or Republic of Maldives as it is officially known, is a group of around 1200 islands grouped into 26 atolls that are scattered from north to south across the Indian



Figure 1: Maldives on the world map

Ocean. Out of the 1200 islands, only 199 islands are inhabited.

Maldives has a land area of 298 square kilometers. The terrain is flat, with white sandy beaches. In fact, Maldives is the flattest country in the world. The highest natural point in the country is merely 2.4 meters high. Even though Maldives has a small land area, the exclusive economic zone (EEZ) of Maldives is 200 nautical miles.

1.2 Climate:

Maldives enjoys a warm and humid tropical climate with two monsoon periods: the southwest monsoon (the wet period from May to November) and the northeast monsoon (the dry period from January to March). The temperature fluctuates between 27°C to 34°C throughout the year.

1.3 Demography:

The estimated population of the Maldives is 339,330. Maldivians are ethnically from South Indians, Sinhalese, and Arabs. Islam is the religion of the State and

| Maldives is a | | |
|--------------------|--------------------|-----------------------------------|
| hundred percent | Age group | Percentage/Population by gender |
| Muslim country. | 0-14 years: | 21.1% (male 42,352/female 40,686) |
| Dhivehi is the | 15-24 years: | 24.2% (male 56,016/female 39,443) |
| national language | 25-54 years: | 46% (male 108,025/female 73,074) |
| and <i>thaana,</i> | 55-64 years: | 4.5% (male 9,379/female 8,431) |
| derived from | 65 years and over: | 4.2% (male 7,961/female 8,621) |
| | | |

the Figure 2: Breakdown of population of the Maldives Arabic is

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.

1.4 Government:

Maldives got her independence from the British on July 26, 1965. It is a unitary republic and has been a multi-party democracy since 2005. Maldives has a unicameral legislature and the Supreme Court is the head of the Judiciary. The President is both the head of state and the head of government. Presidential elections take place every five years, and everyone above the age of eighteen can vote in the referendum. The incumbent President is Dr. Mohamed Waheed Hassan who came to power on 7 February 2013 following the resignation of then President Mohamed Nasheed after weeks of public protest.



Figure 3: National emblem of Maldives displays the colors and the coconut palm

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 4: National flag of the Maldives

The national tree of Maldives is the coconut palm and the national colors are red, green, and white. The national flag of the Maldives is 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 the defence

of their country, the green rectangle represents peace and prosperity, and the white crescent signifies the Islamic faith.

1.5 *Economy:*

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



Figure 5: Maldivian fishermen prefer pole

fishing when it comes to tuna

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 partake in this industry.

Just like fishing, agriculture is one of the main primary industries in the Maldives. Farmers grow various fruits and vegetables and sell it at a good price at the local markets. However, due to the poor quality of soil in the Maldives, farming



Figure 6: Homegrown fruits are for sale at the local market

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 into the country. The Gross Domestic Profit (GDP) is estimated at around 2.05 billion USD with an estimated GDP per capita (PPP) of 9,400 USD. is an incredibly laborious activity and the harvest is not enough to feed the entire population. The majority of food items is therefore imported and is available at a cheaper price than homegrown food.



Figure 7: Maldives' natural beauty is unrivaled

2. Natural Hazards in the Maldives

2.1 Likely hazards in the Maldives:

Maldives faces five types of natural hazards:

- i. Storms;
- ii. Tsunamis;
- iii. Sea level rise;
- iv. Water shortage;
- v. Earthquakes.

i. <u>Storms:</u>

Storms present the most frequent hazard to the Maldives. As sea transportation is the main mode of travel between islands, especially for local merchant vessels, storms and rough seas

could potentially be detrimental to fishing and agriculture in addition to flooding and sea surges. The biggest problem that arises from flooding is sanitation issues and spread of diseases such as cholera and dengue fever. Besides heavy rains and strong winds monsoons, hazardous during weather events which regularly affect Maldives are tropical storms or 'tropical cyclones', and severe local storms (thunder storms/ thunder squalls). The people of Maldives popularly refer to such severe local storms as 'freak storms' (Maniku, 1990).



Figure 8: Cyclonic wind hazard map (Source: UNDP 2006)

Apart from the destruction caused by the (Source: UNDP 2006) wind during tropical cyclones, torrential rain

during the aforementioned 'freak storms' cause severe flooding across the country. Not to mention the increasing gusts during storms could cause a sudden rise in sea level along the coast, leading to storm surges and affect low-lying islands.

ii. <u>Tsunamis:</u>

The Indian Ocean tsunami of 2004 was an eye opener for Maldives. While the damages caused in the Maldives were comparatively minute in relation to the rest of the affected countries, many Maldivians still are recovering from the devastation nine years later. The elevation throughout the Maldives is merely 1.5 metres on average and this makes tsunami a deadly threat if it occurs. However, due to the spread of the atolls and the islands,



Figure 9: Tsunami hazard zones (Source: UNDP 2006)

some islands are at a smaller risk compared to others. Tsunamis would greatly

affect the economy of the country, as the number of tourists who come to Maldives would decrease, cause damage to infrastructure and loss of lives.

iii. <u>Sea level rise:</u>

Sea level rise due to global warming and local trends is one of the biggest long-term hazards faced by the Maldives. As the islands of Maldives are coral based with very low elevation, the beaches erode based on the monsoon and because of man-made causes. When erosion occurs naturally, if one side of the island erodes, the



Figure 10: Beaches that were once wide sandy expanses are now tiny stretches of sand, barely a few feet across (Photo: Reuters)

beach on the other side of the island usually grows. However, when the changing climate and man-made causes disturb the natural process, the erosion is permanent. Many islands have already lost a lot of land due to erosion already. If sea level continues to rise as expected by several studies, majority of the islands in Maldives would be underwater by 2100 (UNFCC 2001).

iv. Water shortage:

Even though not considered a disaster in the conventional sense, shortage of fresh water has been a recurring crisis in the Maldives since the tsunami of 2004. The fresh water lens of many islands turned salty and every year during the dry season, the government provides thousands of tons of freshwater to islands in order for drinking and cooking.



Figure 11: People line up to get freshwater from a supply boat (Photo: UNICEF)

v. Earthquakes:

Earthquakes of large magnitude are not common in the Maldives. However, Maldives lies in the proximity of several faults and ridges. The biggest threat, apart from the earthquake itself, to Maldives from an earthquake is a tsunami. That being said, buildings in the country are not engineered to withstand an earthquake of

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significant magnitude and the effects of an imminent tsunami have not been addressed significantly at the national level.



Figure 12: Seismic hazard zones (Source: UNDP 2006)

2.2 <u>Recent disasters in the Maldives:</u>

i. <u>Storms/flooding/tsunami:</u>

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 | Missin g | Damage |
|----------------------------|---|--|------|-------------|--|
| 2012 (Cyclone Nilam) | Caused flooding in 51 islands, 28 islands severe flooding, 4 islands critical | 33,826 | - | - | 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 |

Figure 13: Source: UNDP



Figure 14: The December 2004 tsunami left the community in shock

ii. Water shortage:

Due to the increased salinity of the fresh water lens following the 2004 tsunami, Maldives faces a shortage of fresh water during the dry season each year. Since the island communities do not have the capacity to provide for themselves, the government sends emergency water supplies to these islands. Once again, it should be noted that water shortage is not considered a disaster in the conventional sense but due to programming issues, Maldives has always had this crisis every year since 2005.

| Year | No. of Islands | Total amount of water | Total amount spent |
|------|----------------|-----------------------------|--------------------|
| | | delivered (in tons) | (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 | Wa | ter provided by province of | ffices |
| 2011 | 108 | 3,920 | 142,178.30 |
| 2012 | 86 | 2,500 | 286,075.80 |
| | | Total: | 1,437,733.00 |

Figure 15: Cost of providing fresh water to the islands (Source: National Disaster Management Centre)

3. Disaster Management System

3.1 Administrative System in the Maldives:

The Decentralization Act of Maldives dictates that the central government is located in the capital (Male' City) and the respective island council governs each island. The atoll councils govern the islands that constitute each atoll. The only exceptions to this rule are the two cities in the Maldives; Addu City and Male' City.

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 of the Ministry of Defence and National Security.

3.2 Legal System and Framework:

A presidential decree established the National Disaster Management Centre (NDMC) soon after the December 2004 tsunami. It was created haphazardly and its mandate was to coordinate the recovery process for the tsunami relief effort. However,

as things progressed, the government handed the



Figure 16: Consultation with stakeholders to finalize the Disaster Bill (Photo: NDMC)

mandate of disaster preparedness and risk reduction as well to NDMC. However, there is no legal framework for a disaster management system in the Maldives. Work is underway to ratify a Disaster Management Act. Currently, the draft of the bill is at the Attorney General's Office for validation, and to be sent to the parliament for ratification.

3.3 <u>Structure of Disaster Management:</u>

National Platform for Disaster Risk Reduction:

Currently under the nomenclature of the Ministry of Defence and National Security, NMDC remains the primary agency for disaster risk reduction (DRR), preparedness, response, and recovery. As the mandate of responding to disasters falls under the Ministry of Defence and National Security, and due to monetary and human resource constraints, the response force during disaster related activities is the armed forces of the Maldives: Maldives National Defence Force.



Figure 17: Structure of the Ministry of Defence and National Security

The current mandates of the National Disaster Management Centre are:

1. Organize and conduct various programs needed to prepare 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 coordinate 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, identify immediate response and relief requirement, and organize and coordinate ways to provide aid and relief in coordination with other concerned authorities;

4. Provide temporary shelter to those whose homes become uninhabitable due to disasters both natural and otherwise;

5. Ensure that basic necessities are provided for those whose homes become uninhabitable 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 local and internal aid in the event of disasters both natural and otherwise; 7. Establish a strong mechanism 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 as well as impact of epidemic and pandemic 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 a project conducted by various government ministries conforms to the national disaster risk reduction standards as much as possible;

10. Enhance and increase the capacity of the early warning systems for natural disasters, potential pandemics and epidemics, and other disasters;

11. Establish and implement a system to coordinate, facilitate, and monitor disaster risk reduction activities in a centralized manner;

12. Establish mechanism in coordination with communities and clubs in the islands to increase the safety of vulnerable groups such as women and people with special needs in the face of disasters;

13. Establish a strong mechanism in which regional and international experience, information and other resources can be utilized, to disaster risk reduction;

14. Conduct awareness programs on disaster risk reduction in all regions of Maldives on a continuous basis;

15. Integrate disaster risk reduction and disaster management into the national education system and school curriculum establish means to deliver it;16. Facilitate training for government employees of relevant sector of disaster risk reduction to enhance their knowledge on disaster management and disaster risk reduction;

17. Establish a disaster information database and making it accessible to public.



Figure 18: Organization structure of National Disaster Management Centre

According to the Decentralization Act of the Maldives, the local councils and the Local Governance 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.

ii National Organizations for Disaster Risk Reduction:

Apart from the NDMC, Maldives have very few national organizations that take part in DRR. Maldivian Red Crescent conducts programs and workshops on DRR with special focus on community based DRR. In addition, the United Nations office in the Maldives provides funding and conducts various programs in coordination with the Maldivian government.



Figure 19: MRC conducts CBDRR program in Gadhoo and Feydhoo islands (Photo: MRC)

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



Figure 20: MNDF Conducts Emergency Management Workshop in Kulhudhuffushi island (Photo: MNDF)

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.

4. Disaster Management Strategy, Policy, and Plan

At present, Maldives lacks a disaster management strategy, policy or a plan. However, work is underway 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 NMDC timely assessments of the crisis. The first phase of this project is to begin this year. The first phase would focus on institutionalizing the tool and establish procedures for communities to send nformation, for NDMC to analyze and share it with other stakeholders, and finally, how NDMC would get the pre-crisis information.

5. Budget Size on National Level

NDMC deals with running the DRR and other such programs and has to apply through the government's budget to get the funding. For the current year, NDMC estimated a budget of around 702,268.93 USD (Ministry of Finance and Treasury, 2013), but received just enough money to cover the salary of the staff and did not include funding for any proposed programs for disaster related activities. That being stated, the government allots a contingency fund each year that will be of use if there is an emergency/disaster. This budget is strictly for the purpose of response and the Ministry of Finance and Treasury controls these emergency funds.

6. 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.

6.1 Outcomes for 2011-2013

i <u>Area 1:</u>

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.

ii <u>Area 2:</u>

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.

iii <u>Area 3:</u>

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 [Standard Operating Procedures] for the health sector while Ministry of National Defence Force, Ministry of Tourism, Arts and Culture SOPs in place for their respective sectors.

6.2 Priority for Action 1

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

| | Level of | | |
|---|----------|--|--|
| Core Indicator | progress | Progress | |
| | achieved | | |
| 1. National policy and legal framework | | Institutional commitment attained, but | |
| for disaster risk reduction exists with | 0 | achievements are neither comprehensive nor | |
| decentralized responsibilities and | 5 | substantial. | |
| capacities at all levels. | | | |
| 2. Dedicated and adequate resources | | Some progress, but without systematic policy | |
| are available to implement disaster risk | C | and/or institutional commitment. | |
| reduction plans and activities at all | 2 | | |
| administrative levels. | | | |
| 3. Community Participation and | | Some progress, but without systematic policy | |
| decentralization is ensured through the | 2 | and/or institutional commitment. | |
| delegation of authority and resources to | | | |
| local levels. | | | |
| 4. A national multi sectoral platform for | | Institutional commitment attained, but | |
| disaster risk reduction is functioning. | 3 | achievements are neither comprehensive nor | |
| | | substantial. | |

The overall challenges towards disaster prevention, mitigation, preparedness and vulnerability reduction includes:

- i Weak institutional establishments to integrate at all levels of government;
- Inadequate awareness and advocacy including gender sensitive policies and plans;
- iii Limited capacity to interpret technical information into analysis to guide development planning and policy design.

6.3 Priority for Action 2

Identify, assess and monitor disaster risks and enhance early warning

| | Level of | |
|---|----------|--|
| Core Indicator | progress | Progress |
| | achieved | |
| 1. National and local risk assessments | | Some progress, but without systematic policy |
| based on hazard data and vulnerability | 0 | and/or institutional commitment. |
| information are available and include | 2 | |
| risk assessments for key sectors. | | |
| 2. Systems are in place to monitor, | | Some progress, but without systematic policy |
| archive and disseminate data on key | 2 | and/or institutional commitment. |
| hazards and vulnerabilities. | | |
| 3. Early warning systems are in place | | Some progress, but without systematic policy |
| for all major hazards, with outreach to | 2 | and/or institutional commitment. |
| communities. | | |
| 4. National and local risk assessments | | Institutional commitment attained, but |
| take account of regional/trans boundary | 2 | achievements are neither comprehensive nor |
| risks, with a view to regional | 3 | substantial. |
| cooperation on risk reduction. | | |

Maldives is at the infant stage of systematically contributing to building resilience to hazards due to various factors and one being Disaster Management was not a top priority until the lessons learnt from the Tsunami in the region. Other challenges include:

- i Weak · No clear mandates for coordination, monitoring and reporting;
- ii Inadequate funding and at times financial restrictions and shortfalls;
- iii Inadequate human capacity in terms of new and emerging disaster preparedness, prevention and response under DRR strategies as well as limited technical expertise available in country;
- iv No legal framework on DRR is a major setback in a lot of the national initiatives on DRR;
- Political instability due to the transition phase of Maldives towards a democratic and decentralized government system with the enabling policy and legislative frameworks.

6.4 Priority for Action 3

Use knowledge, innovation and education to build a culture of safety and resilience at all levels.

| | Level of | |
|--|----------|--|
| Core Indicator | progress | Progress |
| | achieved | |
| 1. Relevant information on disasters is | | Institutional commitment attained, but |
| available and accessible at all levels, to | | achievements are neither comprehensive nor |
| all stakeholders (through networks, | 3 | substantial. |
| development of information sharing | | |
| systems, etc). | | |
| 2. School curricula, education material | | Substantial achievement attained but with |
| and relevant trainings include disaster | Λ | recognized limitations in key aspects, such as |
| risk reduction and recovery concepts | 4 | financial resources and/or operational |
| and practices. | | capacities. |
| 3. Research methods and tools for | | Minor progress with few signs of forward |
| multi-risk assessments and cost benefit | 1 | action in plans or policy. |
| analysis are developed and | I | |
| strengthened. | | |
| 4. Countrywide public awareness | | Institutional commitment attained, but |
| strategy exists to stimulate a culture of | 2 | achievements are neither comprehensive nor |
| disaster resilience, with outreach to | 3 | substantial. |
| urban and rural communities. | | |

Prior to the Tsunami, emergency preparedness and response programs in the reconstruction were quite new in the country and highly likely to gain momentum however the main challenge is remains in the different sectoral codes of practices, guidelines and standards as there is no formal mechanism for tracking and reporting.

6.5 Priority for Action 4

Reduce the underlying risk factors.

| Core Indicator | Level of progress achieved | Progress |
|---|----------------------------------|--|
| 1. Disaster risk reduction is an integral objective of environment related policies and plans, including for land use natural resource management and adaptation to climate change. | 4 | Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/or operational capacities. |
| 2. Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk. | 3 | Institutional commitment attained, but achievements are neither comprehensive nor substantial. |
| 3. Economic and productive sectoral policies and plans have been implemented to reduce the vulnerability of economic activities. | 3 | Institutional commitment attained, but achievements are neither comprehensive nor substantial. |
| 4. Planning and management of human settlements incorporate disaster risk reduction elements, including enforcement of building codes. | 3 | Institutional commitment attained, but achievements are neither comprehensive nor substantial. |
| 5. Disaster risk reduction measures are integrated into post disaster recovery and rehabilitation processes. | 4 | Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/or operational capacities. |
| 6. Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure. | 2 | Some progress, but without systematic policy and/ or institutional commitment. |

The government's suggestions for consideration are:

- i Enhance capacity on Climate Change Adaptation and Disaster Risk Reduction and perhaps merge intervention where necessary;
- ii Increase financing for specific DRR inventions at the national level;
- iii Improvements in technology and/or equipment for DRR outreach including alternative Early Warning Systems.

6.6 Priority for Action 5

Strengthen disaster preparedness for effective response at all levels

| Core Indicator | Level of progress achieved | Progress | | |
|--|----------------------------------|--|--|--|
| 1. Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective are in place. | 3 | Institutional commitment attained, but achievements are neither comprehensive nor substantial. | | |
| 2. Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programs. | 2 | Some progress, but without systematic policy and/ or institutional commitment. | | |
| 3. Financial reserves and contingency mechanisms are in place to support effective response and recovery when required. | 3 | Institutional commitment attained, but achievements are neither comprehensive nor substantial. | | |
| 4. Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews. | 3 | Institutional commitment attained, but achievements are neither comprehensive nor substantial. | | |

7. Recent Major Projects on Disaster Risk Reduction in the Maldives

7.1 <u>Enhance National Capacity for Disaster Risk Reduction and Management in</u> <u>Maldives:</u>

The Decentralization Act of Maldives dictates that the central government is located Major projects on DRR have been few in the Maldives. Most of the projects thus far have been small programs conducted by the NDMC and the Maldivian Red Crescent with a focus on DRR at the island level. However, NDMC recently started a two-year program with UNDP: Enhance National Capacity for Disaster Risk Reduction and Management in Maldives. This project is worth 400,000 USD and is geared towards helping the Government of Maldives to strengthen its Disaster Risk Reduction and Management capacity, enhance national and local preparedness and reduce risks, and achieve its global commitment to the Hyogo Framework for Action (HFA) and the

Millennium Development Goals (MDGs). According to UNDP Maldives, this project will support:

- i The establishment of the institutional and legal systems for DRR and effective DRR organizations/institutions;
- ii The strengthening of the end-to-end early warning systems and facilitate implementation of public awareness campaigns and knowledge building on DRR and climate change adaptation.
- iii In increasing community capacities for disaster preparedness for effective response, and will entail a multi-hazard approach involving a multi-stakeholder engagement.
- iv 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.

7.2 Volunteer Firefighting Program:

The fire stations within the atolls are located in central locations as compared to every island. Therefore, there is a delay when firefighters have to attend to an incident in another island. MNDF Fire and Rescue Service started training volunteer firefighters in remote islands in order to integrate the community into firefighting as first responders until MNDF firefighters could get to the site.

| Year | Island | Number of participants |
|------|-----------------|------------------------|
| 2012 | Sh. Feevaku | 20 |
| 2013 | HDh. Makunudhoo | 20 |
| 2013 | HA. Dhidhoo | 40 |

Figure 21: Source: MNDF Fire and Rescue Service

Thus far, MNDF has conducted the programs for three islands already and the nearby resorts along with work from MNDF, donated firefighting equipment to the volunteer firefighters in Sh. Feevaku.



Figure 22: Ceremony to hand over the firefighting equipment to volunteer firefighters at Faavaku Island

8. ADRC Counterpart in the Maldives

National Disaster Management Centre, Ministry of Defence and National Security

Address: H. Rihijehi Koshi, Ameenee Magu, Male' / Republic of Maldives Website: <u>www.ndmc.gov.mv</u> Email: info@ndmc.gov.mv

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