

MALDIVES

Interlinkages of Climate Change and Sexual Reproductive Health and Rights (SRHR) of Women in Maldives

SCOPING STUDY

Building New Constituencies for Women's
Sexual and Reproductive Health and Rights (SRHR):
Climate Change and SRHR



A Scoping Study
Interlinkages of Climate Change and Sexual Reproductive Health and Rights (SRHR) of
Women in Maldives

© 2015

Huvadhoo Aid (HAD)

Asian-Pacific Resource and Research Centre for Women (ARROW)

Any part of this publication may be photocopied, reproduced, stored in a retrieval system of transmitted in any form by any means, or adapted to meet local needs, without prior permission, provided that it is for non-profit purposes and credit is given to ARROW. A copy of the reproduction/translation should be sent to ARROW.

Published by:

Huvadhoo Aid

Malas, Gaaf Dhaal Hoadedhoo

Republic of Maldives

Tel: (960) 7662474

Email: admin@huvadhooaid.org

Website: www.huvadhooaid.org

Facebook: Huvadhoo Aid

Twitter: @HuvadhooAid

Asian-Pacific Resource and Research Centre for Women (ARROW)

1 & 2 Jalan Scott, Brickfields

50470 Kuala Lumpur, Malaysia

Tel: (603) 2273 9913/9914

Fax: (603) 2273 9916

Email: arrow@arrow.org.my

Website: www.arrow.org.my

Facebook: The Asian-Pacific Resource and Research Centre for Women (ARROW)

Twitter: @ARROW_Women

YouTube: youtube.com/user/ARROWomen

Production Team:

Writers: Ms. Aminath Shazly & Mr. Imad Mohamed

National Reviewer: Fathmath Shafeega

Reviewers: Ms. Linda Lee, Ms. Fathmath Afiya

Copy Editor: Ms. Aminath Shazly

Layout: Mr. Abdulla Azmeen

Cover Photo Credit: Mr. Abdulla Azmeen

CONTENTS

CONTENTS.....	3
ACKNOWLEDGEMENTS.....	4
LIST OF ACRONYMS.....	5
EXECUTIVE SUMMARY.....	6
I NTRODUCTION.....	8
Objectives.....	9
Methodology.....	9
UNDERSTANDING INTERLINKAGES	10
Climate Change.....	10
Sexual and Reproductive Health and Rights.....	12
Findings of the study.....	13
Perception about impacts of climate change.....	14
Perception about who is most affected by climate change.....	15
Sea level rise.....	15
Sea level rise and its impact on women and their sexual reproductive health and rights.....	16
Temperature increase.....	18
Extreme weather events.....	19
Temperature increase and its impact on women and their sexual reproductive health and right	20
Changes in precipitation	22
Impact of precipitation on women and their sexual reproductive and health right	22
Consequences of Climate Change.....	24
Policies and Plans.....	26
Women’s participation.....	29
Future actions.....	30
A framework to achieve climate change resiliency	32
CONCLUSION.....	32
RECOMMENDATIONS & ADVOCACY.....	34
Recommendations.....	34
LIST OF REFERENCES.....	38
APPENDICES.....	43
Appendix 1: Focus Group Discussion Questionnaire.....	43
Appendix 2: QUESTIONNAIRE FOR INDIVIDUALS.....	44
Appendix 3: QUESTIONNAIRE FOR IN-DEPTH INTERVIEW OF STAKEHOLDERS AND POLICY/ DECISION MAKERS AT NATIONAL AND LOCAL LEVEL.....	46
Appendix 4: List of agencies/ persons with whom stakeholder Interviews were conducted.....	52

ACKNOWLEDGEMENTS

This report was prepared by the Huvadhoo Aid with financial and technical support provided by the Asian-Pacific Resource & Research Centre for Women (ARROW). We would like to acknowledge and appreciate the contributions from stakeholders and individuals for their willingness and time to participate in the surveys, focus group discussions and interviews for this study, and for their cooperation and support.

The lead authors are Ms. Aminath Shazly, Lecturer at Maldives National University, and Mr. Imad Mohamed, Executive Director of Huvadhoo Aid. Assistance was extended by Ms. Linda Lee, Ms. Fathmath Afiya, Mr. Khalid Brigden and Aminath Kausar who collected and validated statistics for the report.

Special thanks all the women who shared their time, stories and insights unconditionally and the members of the community who were generous in doing what they can to make the discussions possible, even at night.

We are also grateful to Huvadhoo Aid officials and volunteers who assisted the researchers in organising the interviews and reviewing of the draft documents.

LIST OF ACRONYMS

ADB	Asian Development Bank
ADRRN	Asian Disaster Reduction Response Network
ARROW	Asian-Pacific Resource and Research Centre for Women
CEDAW	Committee on the Elimination of Discrimination against Women
CCPF	Climate Change Policy Framework
EU	European Union
ICOMP	International Council on Management of Population Programmes
ICPD	International Conference on Population and Development
IPCC	Intergovernmental Panel on Climate Change
ISDR	International Sustainable Development Research
MDGs	Millennium Development Goals
MHRC	Maldives Human Rights Commission
NAPA	National Adaption Programme of Action
NSPA	National Social Protection Agency
OCHA	Office for Coordination of Humanitarian Aid
SHE	Society for Health Education
SRHR	Sexual and Reproductive Health and Rights
UNDP	United Nations Development Programme
UNCRPD	United Nations Convention on the Rights of People with Disabilities
UNFCCC	United Nations Framework Convention on Climate Change
WEF	World Economic Forum
WHO	World Health Organization

EXECUTIVE SUMMARY

Climate change needs to be a top priority for Maldives as it affects the lives and livelihood of every person in the country, and is a matter of survival. It is anticipated that existing problems such as fresh water supply, sanitation, waste management, food, energy, economic security, and transportation between the islands would worsen with the increasing climate change related impacts.

This report looks into major climate change related issues and its consequences in relation to women's sexual and reproductive health and rights to determine the interlinkages of climate change impacts and sexual and reproductive health and rights of women in Maldives.

Data was collected through a mix of qualitative and quantitative methods; focus group discussions, in-depth interviews with stakeholders and policy makers, a questionnaire survey and ground stories told by individual participants.

The major findings of the study are

1. the perception of main aspects of climate change affecting Maldives are sea level rise, increased temperature, extreme weather events and changes in precipitation.
2. the most vulnerable groups identified with high risk of climate impacts were women in island communities.
3. gender equality is addressed in few policy documents and reference to sexual reproductive health and rights of women are found in present national level policies or plans.
4. SRHR issues are inherent in the situations women find themselves in after climate change events that have negative impacts on their lives.

The study identifies sea level rise, increased temperatures, extreme weather events and changes in precipitation as main issues of concern for Maldives islands in relation to climate change. Study establishes an understanding of the interrelationships of climate change on, poor health, lack of SRHR services, food security, livelihood insecurity and property insecurity.

The following recommendations are put forth.

- 1) Include gender equality, the needs and rights of the vulnerable groups such as poor, elderly, people with disabilities and women during disasters in the implementation plan of the Maldives National Disaster Management Act 201, with appropriate focus on establishment of information and services on sexual and reproductive health and rights.
- 2) Review the thematic areas in Maldives Climate Change Policy Framework 2015, and include gender equality, sexual and reproductive health in addition to identification of

the needs to address the most vulnerable groups such as elderly, people with disabilities, women and the poor.

- 3) Establish a national level forum on climate change and disaster management with representation from the state, CSOs, women and other vulnerable groups to lobby and advocate on relevant national issues.
- 4) Review the Reproductive Health Strategy to ensure that the needs of women, youth and other high-risk groups receive information, education and access to contraceptives that are needed.
- 5) Conduct programs to specifically include women in development and climate change impact at the island, national and international levels. At the island level, Women Development Committees could be the focal point for Disaster Response Management Plans as well as the focal point for other island projects.
- 6) Conduct further research and analysis to better understand the challenges regarding current contraceptive use and trends in the Maldives.
- 7) Provide sexual education and knowledge to married women as well as youth regarding human sexuality and cycles.
- 8) Involve and engage people with disabilities and other vulnerable groups including women in climate change and adaptation policies, plans and disaster response management.
- 9) Conduct empowerment programs for women to enable them to engage in education/training programs to help them to get involved in decision-making and encourage participation in matters that affects all areas of their lives, especially sexual and reproductive health.
- 10) Conduct empowerment programs for women to participate in economic and political activities and create among the families and general public awareness on the importance of participation of half of the population in the economic and political affairs of Maldives.

An advocacy plan based on the findings and recommendations are provided at the end of the report.

INTRODUCTION

Climate change is a major environmental problem human kind is faced with at present. Its effects are numerous, intensified and happening all too quickly. Sea level rise, changes in temperature and precipitation as well as extreme weather events are distressing human populations as well as the earth's environment itself which human populations depend upon (IPCC, 2014). Anthropogenic factors have been identified as the major contributor to these changes in climatic factors (IPCC, 2014). However, people's actions and decisions through changes in behaviour, can provide opportunities to restore impacts of climate change (Kelman, 2011; Kelman, 2010).

The Maldives comprises of 1190 islands out of which only 188 are inhabited. The whole of Maldives is comprised of coastal communities with low lying islands, which are approximately 1m above the sea (Maldives Climate Change Policy Framework, 2015). Hence, majority of the population live less than 1km from the shoreline. For this reason Maldives is classified as one of the most vulnerable countries to the impacts of climate change.

Both short and long term effects of climate change on different populations vary with demographics, geography, socio-economic status, gender, recurrence etc. (Ghina, 2003). Maldives being a coastal country, with the highest elevation of land just around 2m above the sea, each and every island as well as each and every person on these islands are equally subjected to the impacts of climate change. During the Asian Tsunami of December 2004, Maldives islands experienced a huge loss of its natural resources and severe impacts to the people's life (Maldives Climate Change Policy Framework, 2015). The geographic nature of being a small island state makes Maldives more vulnerable to climate related impacts such as sea level rise, increased in temperature, extreme weather events and changes in precipitation (IPCC, 2014; Kelman, 2011). These impacts pose severe threats to the ecosystem functions and services and have devastating effects on the lives of island communities, especially the vulnerable groups; women, youth and people with disabilities (Kelman, 2011; Kelman 2010).

Maldives, as other vulnerable small island nations is trying to find ways to mitigate and adapt to the effects of climate change (Kelman, 2011). An urgent need for decision makers and policy level individuals is to institute policies and actions to address the gaps in actions and policies, especially those including and affecting the vulnerable groups of the society. There are some climate change adaptations plans formulated as means to address the impacts of climate change. But these adaptation plans are sector based and lack a holistic approach of dealing with climate change issues faced across the country (Maldives Climate Change Policy Framework, 2015).

This study investigates the knowledge and awareness level of women, men, fishermen, youth, policy makers and other stakeholders including government officials in some island

communities of Maldives, on linkages between climate change impacts and sexual and reproductive health and rights.

The study is conducted by Huvadhoo Aid, a Non-Governmental Organization (NGO), based in one of the southernmost atolls (Huvadhoo atoll). The NGO has been working on creating awareness on sexual and reproductive health and rights of women since 2010. The Strategic Plan of the NGO has programs identified to work in the area of climate change impacts, as well as working with other NGOs in the same area in the Huvadhoo atoll.

The government of Maldives need to address the impacts of climate change based on vulnerable groups such as women and incorporate appropriate measures into policies and decision making, which is lacking at the moment. This would help governments to provide a more holistic package of support that recognises the linkages of resource conservation, environmental management, health and sexual and reproductive health and rights (SRHR), of island individuals with a better focus on vulnerable groups such as women.

Objectives

The objectives of this scoping study are to determine the interlinkages between climate change impacts and sexual and reproductive health and rights of women. In this regard the paper describes broader impacts of climate change and how it impacts society and women with a focus on sexual and reproductive health and rights of women. Additionally, the study is also intended to highlight climate related policies and level of participation of women in forming these policies.

The findings and recommendations would also provide directions for national and international advocacy for mainstreaming sexual reproductive health and right into climate change negotiations and climate change policies and programs for building resilient communities.

Methodology

Secondary data were collected by reviewing several official documents of the government, UN agencies and other stakeholders to analyse the current situation with respect to climate change in the Maldives.

A mix of quantitative and qualitative methods was used to collect primary data for the study. These included focus group discussions (FGD), in-depth interviews with policy makers and stakeholders and a questionnaire survey conducted with individuals.

The table below gives details of the research site.

Method of data collection	Atoll	Island
FGDs, Survey	Haa Dhaalu	Hanimaadhoo
FGDs, Survey	Lhaviyani	Olhuveli fushi
FGDs, Survey	Laamu	Gemanafuhi
FGDs, Survey	Gaafu Allifu	Kan'duhulhudhoo
FGDs, Survey	Gaafu Dhaalu	Hoadedhoo
FGDs, Survey	Gnaviyani	Fuamulak
FGDs, Survey, Stakeholder interviews	Male'	Male'

FGDs were held in the islands of the seven atolls and in the capital city, Male'. The table below gives the island and respective atolls. FGDs were conducted with a total of 153 participants, between 18 – 65 years, in groups which comprised of women, men, farmers, fishermen and youth. Of the participants, 59% were women, 78% of the participants were married. A structured guide of questions was used to conduct the FGDs.

Using the questionnaire, formulated based on the discussions in FGDs, a survey was conducted with 125 women and 125 men. An additional 20 participants were reached through email.

In-depth interviews were conducted with 7 women, which included survivors of the 2004 Tsunami. In-depth interviews were held with 20 stakeholders, policy makers, including local government officials. Stakeholders were selected based on their focus areas of work in disaster management, sexual and reproductive health and working with vulnerable groups like women and people with disabilities.

Personal information from the participants was not encoded or disclosed in this study to maintain confidentiality. General demographic data of participants have been pooled to maintain anonymity of the study participants.

UNDERSTANDING THE INTERLINKAGES

Climate Change

Climate change is defined by IPCC (Intergovernmental Panel on Climate Change) “as any change in climate over time, whether due to natural variability or as a result of human activity.” It is caused by an increasing amount of greenhouse gases such as carbon dioxide in the earth’s atmosphere. Some key effects of climate change include increased global temperatures, increased frequency and intensity of extreme weather conditions such as precipitation and also natural disasters.

Many small islands including Maldives are particularly vulnerable to climate change impacts such as sea level rise, storm surges, tropical cyclones, drought and flooding. These can have effects on the human health and lives that can be both short and long term, including increased transmission of diseases, drowning, injuries and decreases in agricultural productivity (Hajat et. Al, 2003).



Drought and floods can also have an impact on human health through decreased water quantity and quality. Priority diseases for small islands in relation to climate change impacts include malaria, dengue, diarrhoea, heat stress, diseases of skin and acute respiratory diseases such as asthma. WHO (World Health Organization) identifies dengue and other mosquito related diseases such as malaria to be extremely sensitive to climate changes, with epidemics related to heavy rain and increased temperatures.

Regional projections of climate impacts predicted that Maldives in the northern Indian Ocean would have an increase in annual rainfall (Kelman, 2011). The climate models of IPCC predict a 100% for warm season with less extreme precipitation changes (IPCC, 2014). 2004 Asian Tsunami, caused loss of lives, life savings, and their livelihood sources as well. This can cause post-disaster health issues such as intense fear of ocean, depression, anxiety, loss of sleep and appetite etc (Ministry of Health and Gender, 2014).

The UN Intergovernmental Panel on Climate Change (IPCC, 2014) forecasts that the seas are likely to rise by up to 59 cm by 2100, due to global warming. Most of the islands in the Maldives are just 1.5m, above sea level and are already experiencing impacts such as beach erosion, flooding, water shortages, salt-water intrusion and limited shore defences. One of the most direct impacts of sea level rise for small island states such as Maldives is a reduction in the availability of land area for housing, service infrastructure, sites for economic, political, social and cultural activities. Prior to the devastation of the 2004 Tsunami, the vulnerability

of the Maldives to natural disasters was considered to be moderate (WHO, 2013). However, the 2004 Tsunami showed potential consequences of climate change impacts to people, their livelihoods and homes. As a result of the Tsunami, 12,000 Maldivians had to live in temporary shelters and most were psychologically affected. Of the 14 islands most affected, two thirds of women and more than half were having psychological problems such as sleeping, eating or hope for the future¹.

In addition to rising temperatures and sea levels, increase in extreme weather and wind speeds as well as other climate hazards places the Maldivian people and their livelihoods in danger. Land is scarce and almost half of the population and tourist accommodation are within 100m of coastline (Maldives Climate Change Policy Framework, 2015). Homes are not constructed to withstand flooding. The coral islands that make up the Maldives are morphologically unstable and change on reef platforms over time. The coastlines are naturally unstable and settlements do not have well designed coastal structures.

At the heart of survival for Maldivians is the health of the coral reefs. The economic base, tourism and fisheries, is directly linked to the coral reefs. The reef system is the seventh largest in the world and is rich regarding coral species and marine life. Both the reefs and marine life are highly susceptible to temperature increase. The coral reefs have also been subject to human hazards such as mining, dredging, solid waste and sewage disposal. Environmental protection of the reefs is key to disaster risk reduction in Maldives as tsunami reports indicate that greater damage occurred where there was coral reef deterioration and loss of coastal vegetation (EU, ISDR & ARRN, circa 2008).

Sexual and Reproductive Health and Rights

According to ARROW (2014b), the definitions for reproductive health, reproductive rights sexual health and sexual rights are as follows:

Reproductive Health (definition from WHO): is people being “able to to have a responsible, satisfying and safe sex life, and that they have the capacity to reproduce and the freedom to decide if, when and how often to do so”.

Reproductive Rights (definition from ICPD): “rest on the recognition of the basic right of all couples and individuals to decide freely and responsibly the number, spacing, and timing of their children and to have the information and means to do so, and the right to attain the highest standard of sexual and reproductive health”.

¹ Ministry of Health and Gender. (2014). Maldives Health Profile 2014. Ministry of Planning and National Development. (2005). Republic of Maldives. Tsunami Impact and Assessment 2005. A socio-economic countrywide assessment at household levels six months after the tsunami. Supported by UNDP and UNFPA.

Sexual Health (definition adapted from UN): involves “a positive approach to human sexuality and the purpose of sexual healthcare is the enhancement of life and personal relations as well as counselling and care related to reproduction and sexually transmitted diseases”.

Sexual Rights (WHO working definition): “include the right of all persons, free of coercion, discrimination and violence, to the highest attainable standard of health in relation to sexuality, including access to sexual and reproductive healthcare services; seek, receive, and impart information in relation to sexuality; sexuality education; respect for bodily integrity; choice of partner; decision to be sexually active or not; consensual sexual relations; consensual marriage; decide whether or not, and when to have children; and pursue a satisfying, safe and pleasurable sexual life”.

Sustainable development requires sexual and reproductive health and rights as well as women’s empowerment, safety and gender equality (UNFPA, 2014). Sexual and reproductive health and rights include the right for couples and individuals to decide responsibly the number, timing and spacing of children, information to do so, and the right to make decisions concerning reproductive health, free from discrimination, coercion and violence. Similarly, ICPD Programme for Actions calls for coverage of the following in primary health care such as family planning, antenatal care, safe delivery, and post-natal care, prevention of abortion, appropriate treatment of infertility and treatment of reproductive diseases (ARROW, 2014b).

While Maldives has made commendable progress in achieving the MDGs, with 5 out of 8 achieved, the goal on gender equality has not been achieved. A shift towards more conservative religious practices has resulted in further barriers for women to participate in the public domain. And attitudes persist in both men (23.3% surveyed) and women (14.1%) that women should NOT have equal rights with men regarding holding government and elected positions. Cultural, religious and social norms in Maldives can impede women’s participation as well as lead to isolation and a lack of access to resources and there are indications that these norms may actually be further impeding gender equality rather than decreasing the gap (Ministry of Finance and Treasury & UNDP, 2010 & 2014).

Statistics show that only 15% of legislators and senior officials are women. Government is the largest employer in the Maldives but only employees 62% males to 38% females. The females make up 54% of Government temporary jobs in sectors such as education, health and welfare². Currently in Maldives, Female representation in the Maldivian judiciary is 4 percent. In 2011, 58 out of 1058 (5%) women were elected as local Island councillors. In 2014, 60 women were elected. In the latter election, out of 2,463 candidates, 282 were women. Thus,

² Asian Development Bank (2007), Maldives: Gender and Development Assessment, Strategy & Program Assessment Document Stage: Final, 2007,

a significant portion of women were not elected (ADB, 2007). The lack of political involvement by Maldivian women continues to be extreme (WEF, 2014; Lubna, 2013). In fact, Maldives is one of the countries with the least representation of women involved in critical decision and policy-making roles.

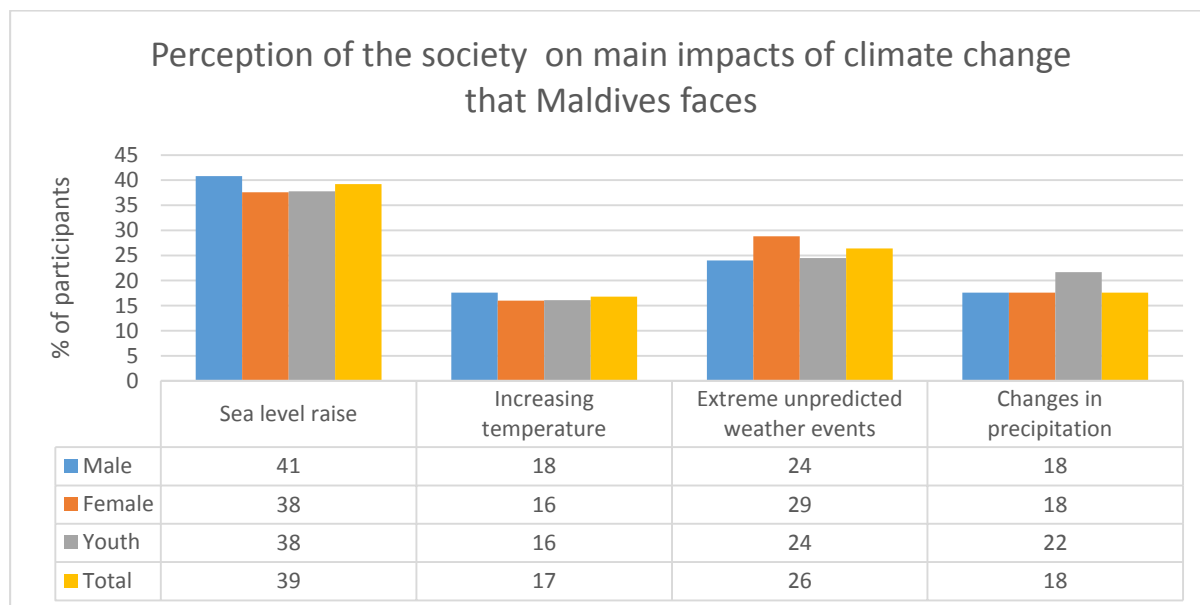
Findings of the Study

All the participants of the study believed that because of global warming serious weather hazards were occurring in the Maldives.



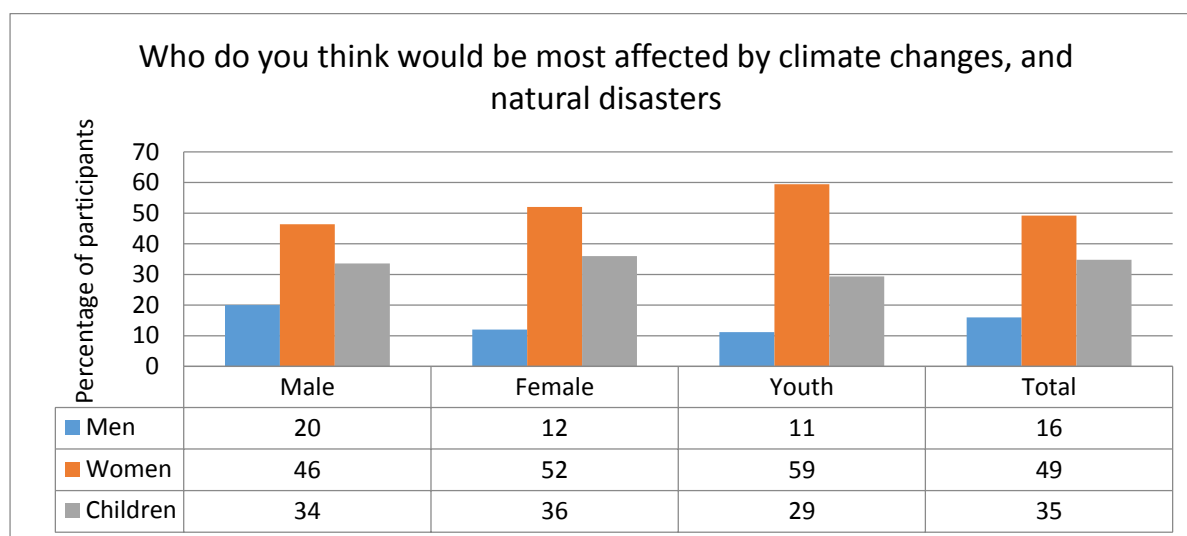
Figure 1 flooded inland of an island (photo credit: Haveeru)

99% of the participants of the FGDs believed that due to climate changes the sea level is rising. 99% believed that there is an increase in temperatures and 98% believed that at present heavy rain falls without much regard to predictions. 99% believed that as a result of climate change heavy flooding is occurring.



59% of participants of FDGs and 52% of stakeholders and policy makers interviewed, 39% of those who participated in the questionnaire survey believed that sea level rising is the biggest challenge or impact to Maldives due to climate change. 32% of participants of FDGs and 26% of the of the participants of the questionnaire survey believed that extreme unpredictable weather events were the highest risk and threat to Maldives due to climate change. Only 9% believed that increasing temperatures is the worst impact of climate change on Maldives. On average the participants of the FDGs accepted that climate change happened in the last 10 years. However few participants stated that no dangerous hazards emerged in the last 10 years.

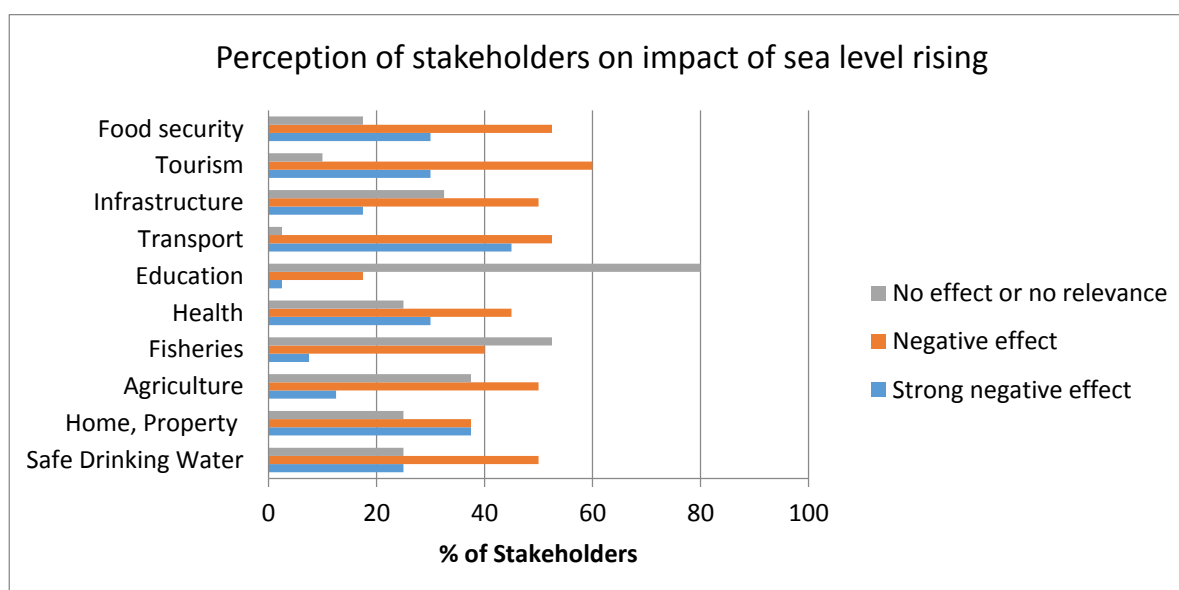
Although swells are common phenomenon in Aminath's (not the real name) island, she had not noticed salt water reaching to her house. However, salt water had affected her taro fields. Since these taro fields are adjacent to mangroves which connects with the sea, the flooding in the mangroves cause salt water intrusion to taros which leads to the damage to the taro fields.



About half (49 %) of participants of the survey felt that women will be most affected by climate change & disasters while 35% of participants believed that children will be most affected. 52% of women, 59% of youth who participated in the survey feel that women will be most affected by climate change and disasters.

SEA LEVEL RISE

Participants of the FGDs highlighted several challenges faced by the communities due to sea level rise. 86% of the participants believed that as a result of the sea level rise, there is an increase in high tidal waves, while 78% thought that the land (soil) is becoming saline and 85% believed that beach erosion is increasing.



45% stakeholders and policy makers from stakeholder interviews believed that there is strong negative effect due to impact of sea level rise while 53% agree that there is negative impact on transport. Majority of stakeholders and policy makers feel that there is either a strong negative or negative effect on safe drinking water, home property, agriculture, health infrastructure, tourism and food security. 53% of policy makers and stakeholders believed that sea level rising would have no effect or has no relevance to fisheries sector. 80 % stakeholders and policy makers believed that there is no impact of sea level rise on education.

62% of the focus group discussions said that as a consequence of the rise of sea level, there are periods when they cannot take a shower, as their access to clean water gets compromised. They also accentuated that the periods when they cannot get clean water due to bad smell or salinity are becoming lengthy. The communities affirmed that there have been instances when their houses and livelihoods were badly damaged and that they had to relocate to other premises. The communities also indicated that during these changes in their lives, people were affected psychologically and had to face health problems too. 64% of the participants of the focus group discussions believed that those living near the beaches or seaside are facing more challenges as their houses and livelihoods are damaged.

The participants of the focus group discussions also detailed that the impact on agriculture had been high as a result of high tidal waves. Communities had been unable to cultivate fruits or vegetables. But they believed, as the agricultural farming is carried out away from the beachside and in land inside the island, the damages are less to agricultural farms compared to the high level of damages to household farms (home gardens). When salinity affects the cultivation of household farming (mostly different types of leaves are cultivated in home gardens), this can affect the health of island communities due to problems with access to healthy food.

SEA LEVEL RISE AND ITS IMPACT ON WOMEN AND THEIR SEXUAL REPRODUCTIVE HEALTH AND RIGHTS

The participants of the FGDs stated that they have no knowledge that tidal waves can have any impact on the reproductive health of women. But they believed that lack of access to clean water (which they knew could be a consequence of tidal waves) could affect the health of women such as increase in infections and spread of viral diseases. 56% participants of the FGDs thought that as a result of not being able to get clean drinking water and clean water to bath, women get infections that could affect their reproductive health.

If households are forced to temporarily move to other premises due to tidal waves, the families move to crowded houses and have no privacy to engage in sexual activities and thus 62% participants believed that this affects their reproductive rights. If a pregnant woman has to be relocated like this than that is a huge burden for the woman.



Figure 2 low lying island beach protected by tripods and sea walls (photo credit: Huvadhoo Aid)

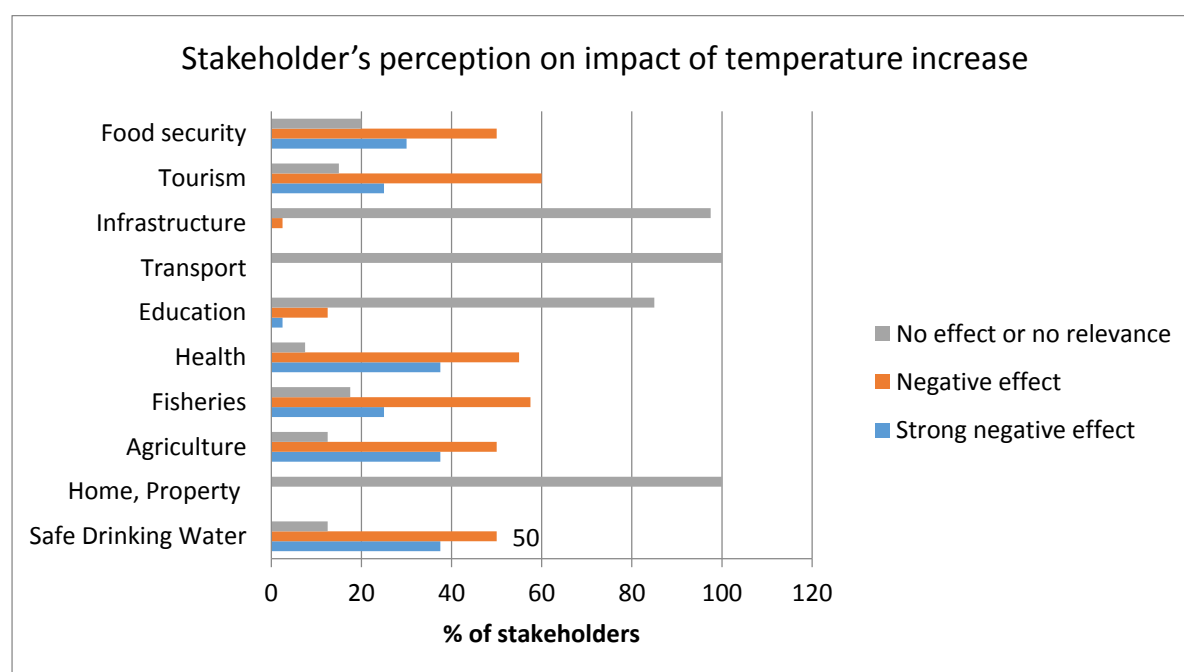
When houses get damaged during extreme weather events, households have to spend on repair and maintenance, which exhausts their finances, subsequently constraining funds. In such cases, expenditure on health care, for instance to purchase healthy food for the pregnant women, are immediate concerns. Not only do finances get constrained, but often, even when required, families cannot leave their houses and go to an island that offers medical care – often gynaecologists are available only in one island of the atoll. This result in health issues for pregnant women and their unborn babies. In addition, during these periods, families undergo psychological trauma and have no time to think of other matters in their lives.

While unexpected expenses are incurred during these events, people whose income is sea based, such as fishermen cannot go fishing, further constraining their income, sometimes leading to dire financial difficulties. As a result of exhausted finances, not only do pregnant women suffer, the whole household suffers in many ways, particularly in not being able to spend on health care and buying nutritious food for the family.

The participants of the FGDs indicated that though they did not have knowledge of any direct correlation between the effect of land erosion impacts and sexual and reproductive health rights of women, they believed that there are implications indirectly that can affect sexual health and reproductive rights of women. Among the factors that can have indirect effects on sexual health and reproductive health rights of women identified include the increase in household expenditure putting a financial burden on the household, leading to women having to work to earn more money to support families. When the double burden of taking care of household chores, families and financial burden increases, women face serious health issues.

A more direct impact on sexual and reproductive health can be that consequence of the beach erosion includes damage to jetties which are usually the means to get on and off the island, for any purposes. Most often the purpose is to go see a doctor.

TEMPERATURE INCREASE



38% of stakeholders believed there is a strong negative effect on safe drinking water effect due to increasing temperature while 50% believed it has negative effect. 37% of stakeholders believed increase temperature has strong negative effect on agriculture, and 25% believed it has strong negative effect on tourism. But no one believed that it has negative effect on transport while very few believed there is negative impact on education and infrastructure due to increase in temperature.

TEMPERATURE INCREASE AND ITS IMPACT ON WOMEN AND THEIR SEXUAL REPRODUCTIVE HEALTH AND RIGHT

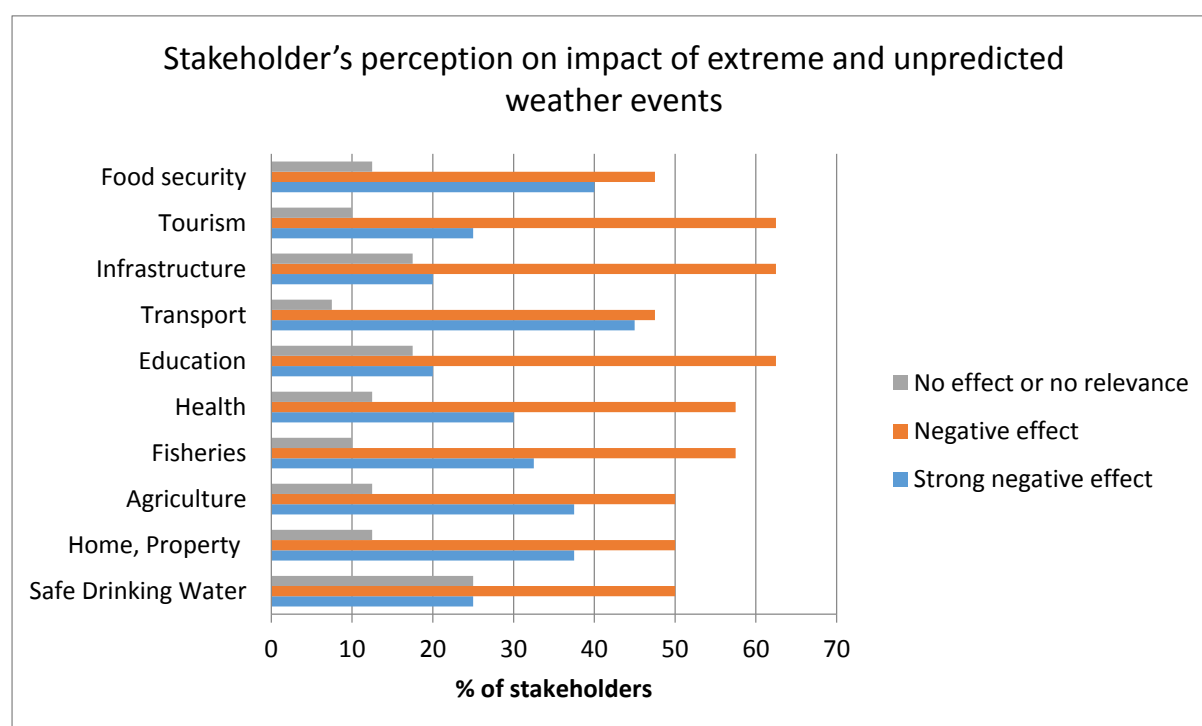
Majority of participants of FGDs highlighted that due to temperature increases flies increase with consequent fly borne diseases. Women who participated in FGDs highlighted that when pregnant women get sick with fly borne diseases it can have effects on the unborn baby and the mother. Sometimes these sicknesses cause delivery of premature babies and in giving birth to children who are sickly.

Fishermen who participated in FGDs have highlighted that due to increased sea temperatures the reefs and corals die. The major type of fishing done in Maldives, Pole and Line fishing requires bait fish which inhabit nearby reefs. When nearby reefs die, fishermen have to travel far to get fish bait fish. Main type of fish caught by local fishermen is skipjack tuna and

yellowfin tuna, both of which are migratory and susceptible to migration to cooler waters. So fishermen have to travel far out for longer periods in search of fish schools. Women are left alone for many days and results in lack of intimacy that affect the sexual reproductive health rights. Also, when husbands have to spend longer periods away from families and wives, women had to face hardships and challenges in life alone without support from husbands. Further, this means that a vast number of women, children, elderly and people with disabilities are left unaided on the islands. Therefore, women will be a key group of first responders at times of disaster and climate change impacts. Another negative aspect is that due to the decrease in fishing, living income has gone down, limiting access to healthy food and proper medical assistance.

Participants of FGDs and stakeholder interviews stated that during longer dry periods, which are becoming more frequent now (as are wet periods), communities' face challenges in getting clean drinking and bathing water. When clean water is insufficient for drinking and other domestic purposes, the women get infections and this affects their reproductive health.

EXTREME WEATHER EVENTS



According to policy makers and other stakeholders who contributed to the scoping study there is either negative or strong negative effect on all the given sectors. Food security and transport is impacted much more negatively as a result of extreme and unpredicted weather events. Additionally this impacts on agriculture and home property equally.

Policy makers and stakeholders highlighted that there is a huge impact on tourism due to climate change and natural disasters. It was highlighted that after 2004 Tsunami occupancy

rates were lower than normally expected and due to direct damages from Tsunami some tourist resorts were closed temporarily. As a result employment in tourism sector dropped and many people lost their jobs.

IMPACT OF EXTREME WEATHER EVENTS ON WOMEN AND THEIR SEXUAL REPRODUCTIVE AND HEALTH RIGHTS

Participants of focus group discussions and stakeholder's interviews highlighted that due to unfavourable weather, families were unable to travel within islands. Although some families had access to family planning such as condoms in their own island, this is not the case in all the islands. Furthermore, all islands do not have specialist medical personnel such as gynaecologists in the island so if their services are required, traveling to another island becomes necessary but during harsh weather condition, sea travel is not safe, and often impossible.

The reproductive health-care services are not available in Mariyam's (not the real name) island. Since she has to travel to another island to see the doctor, she doesn't usually see the doctors. "Since rough seas and heavy rainfall in unpredictable times occur frequently, the flooding of dhoni is a common problem which scares me. Therefore I gave birth to my three children without the help of a doctor, instead with the help of a foolhumaama." (An elderly nurse maid).

Participants of stakeholder interviews and FGDs noted that due to heavy rain, flooding occurs in the island and the collected dirt and garbage gets swept around the island. As a result there is spread of diseases, sometimes with dire consequences to health of the community, including reproductive health of women.

Participants of FGDs also revealed that if flooding occurs, house and other property sometimes get damaged. Sometimes, relocation of people becomes necessary leading to loss of privacy for both host and affected families leading to challenges in having intimacy. In some cases, during these extreme weather events, the damage to houses and properties has to be faced by the women, since they are the ones who remain in the island, while men are away to earn a living.

Also, during temporary relocation, host houses become crowded and crowded homes with a single toilet, which are the case in some islands, can spread diseases. Women in these situations can get affected by many different infections, even to their reproductive organs.



Figure 3 damaged banana plantations (photo credit: Huvadhoo Aid)

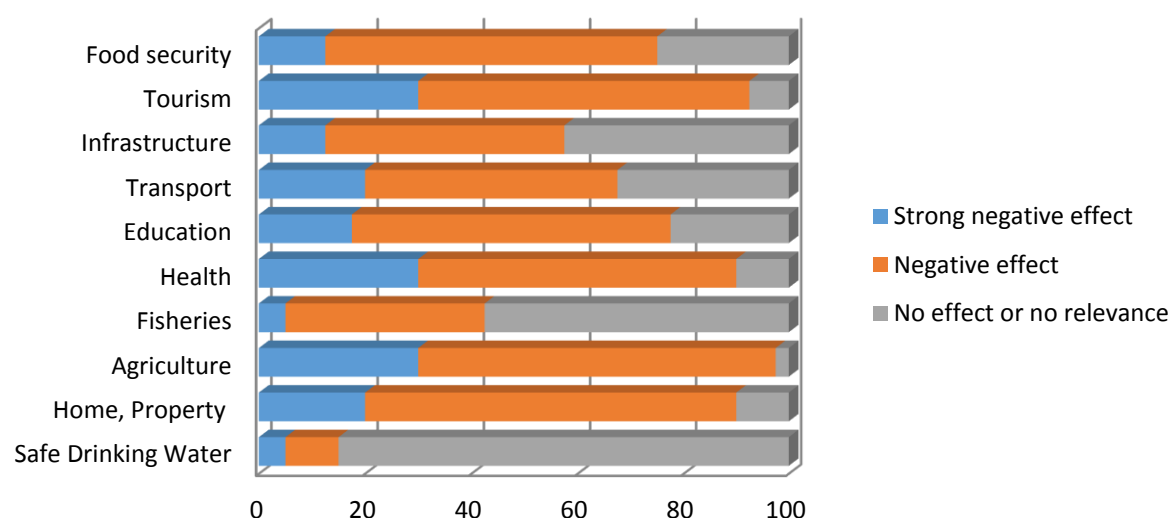
Increased precipitation with flooding causes various difficulties to the inhabitants of Hawwa's (not real name) island. She lives in a house where water enters the house during flooding. Her family had found a solution to this problem and had leveled the land near the house in such a way that water does not enter the house. In contrast to earlier times, predicting rain according to "nakaiey" (constellation) is not possible due to climate change which leads to flooding at unexpected times. Due to storms, the banana trees in the compound of the house fell causing economic and health losses. Hawwa says, "I have to live with fear when my husband is not in the island."

Extreme weather also affects agriculture and fishing. High wind and heavy precipitation can damage agricultural farms, mostly cultivated by women in the island to earn a living. The damage to farms affects the livelihoods of these women and limits their funds to get healthy food and to seek medical assistance to remain healthy.

CHANGES IN PRECIPITATION

Policy makers, stakeholders and participants of the FGDs generally understand that patterns of rainfall are likely to change globally, with both heavy precipitation and drought becoming frequent events. As the climate changes, policy makers believe that heavy precipitation will become more frequent and more common, and so during the wet season in Maldives, more rain is likely to be experienced. 63% of participants of focus group discussions also agreed that now extreme rainfall events are becoming more common and patterns of rainfall have been changing for the last ten years.

Stakeholder's perception on impact of Changes in precipitation, as percentage of stakeholders



Stakeholders' perception on impact of changes in precipitation highlights, agriculture, tourism, home property, health and food security to be the major areas to have a negative impact. No sector has been identified as strongly affected due to changes in precipitation. Education is also one other sector identified under this survey to be negatively impacted by changes in precipitation. This can be attributed to the fact that heavy rain and changes in frequency of precipitation as well as precipitation volume can prevent students from attending the school and so can affect their education.

Flooding due to heavy rain can damage infrastructure as well as agricultural crops and so affect the island communities' food security. Changes in precipitation can also increase the ranges of different vectors responsible for spread of water borne and air borne diseases, and effect the health of people. Rainy season is a time when tourists do not visit Maldives, and so more frequent rain with heavy rainfall would decrease tourist arrivals to Maldives and so affect those families heavy dependent on this sector for their livelihood.

IMPACT OF PRECIPITATION ON WOMEN AND THEIR SEXUAL REPRODUCTIVE AND HEALTH RIGHT

Participants of FGDs reported that they have been experiencing transmission of some communicable diseases due to increase rain fall. The given statement is also supported by stakeholders and policymakers, and also there is evidence from ground stories collected.

Although most precipitation occurred in June and July in the past, now precipitation occurs in varying amounts in different seasons. As a result, water is collected in the vegetation which leads to an increase in the number of mosquitoes and an increase in diseases like dengue fever. Dengue can be fatal especially for children unless treated properly and medical tests to detect dengue fever are not available on the island. Therefore, she has to travel to other islands where adequate facilities are available.

According to policy makers and stakeholders' interviews the lifecycles of some vectors, such as mosquitoes, are affected by changes in precipitation. Participants of FGDs and policy makers and stakeholders stated that the Maldives has experienced an outbreak in dengue of epidemic proportions in recent years. Participants of FGDs, especially women, believed that such diseases would have serious impact on their health , more so on health of pregnant women, and hence the health of the infants.

Participants of FGDs and women who provided ground stories highlighted that increased precipitation with flooding causes various difficulties to island communities. They also highlighted the fact that even though at earlier times they were able to predict rain according to “nakaiey” (constellation), it is impossible to predict rain in the same way. As a result it damages banana trees, and agricultural crops in their home gardens and farmland which has serious impact on their livelihoods, resulting in decreased income to support their family and to spend for health services including improved sexual and reproductive health.

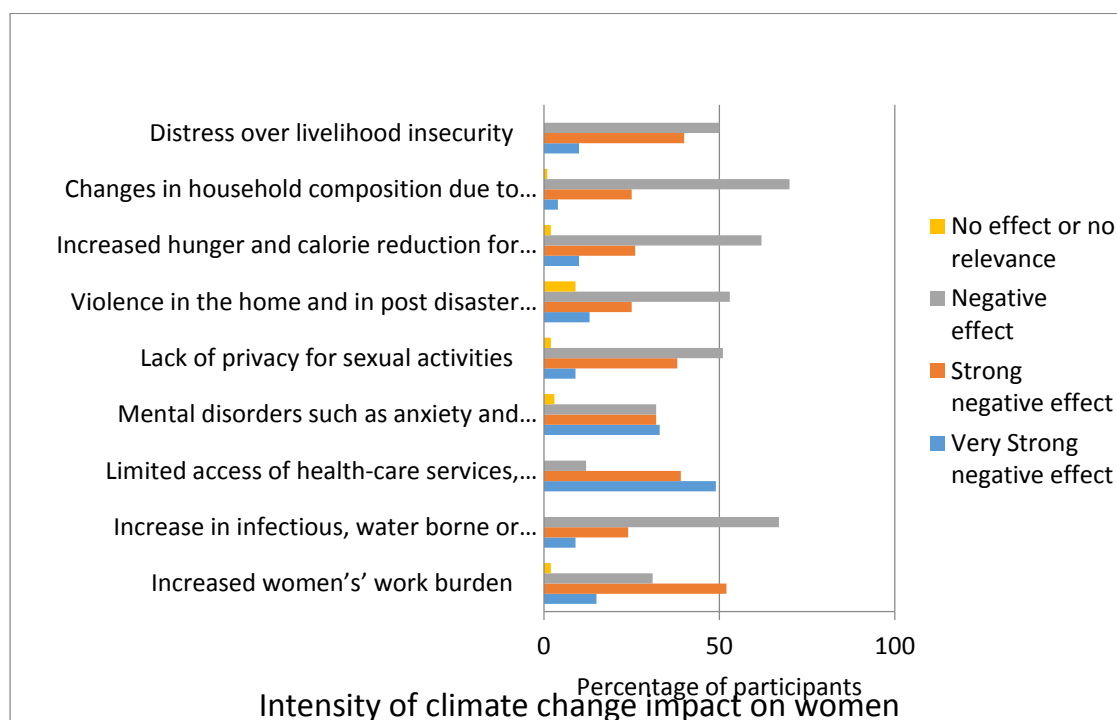
According to stakeholders and policy makers as well, in such a situation women are very vulnerable in the island communities as most of the households are women headed households. It was also highlighted FGDs that heavy rainfall events sometimes displace people temporarily, and there is no privacy for sexual relationships, which is highlighted above too.



Figure 5 damaged farm land (photo credit: Huvadhoo Aid)

Consequences of Climate Change

Climate change has many direct and indirect impacts on women. An understanding of specific climate change impacts on women will help in the development of gender-sensitive policies and programs.



Majority of the participants agreed the following impacts of climate change and disasters have negative effect on women

- Increase in infectious, water borne or vector-borne diseases
- Lack of privacy for sexual activities
- Violence in the home and in post disaster relief shelters
- Increased hunger and calorie reduction for women
- Changes in household composition due to displacement

52% of participants believed that increasing women's work burden would have strong negative effect on women, while 15% of participants believed that it would have very strong negative effect on women. 49 % of participants agreed that limited access of health-care services, immunisation, family planning, reproductive health care services during disasters and events due to climate change would have very strong negative impact on women. 39% agrees there is strong negative effect on women due to such situation. 9% of participants felt that violence at home and in post disaster relief shelters is not relevant or not a significant impact of climate change and disasters relevant to Maldivian island communities.

Providing reproductive health services remains a challenge among the dispersed island communities of the Maldives due to the lack of infrastructure, incomplete supply of health commodities and limited capacity of health personnel during emergency situations.

The following table summarises direct and indirect effects on women with regard to sexual and reproductive health due to impacts of climate change related to different issues, based on focus group, stakeholder interviews, data from published reports and survey findings.

Issue	Impacts of Climate Change	Direct and Indirect Effects on Women
Natural resources Food Water Land	<ul style="list-style-type: none"> • Drought and/or flooding • Changes in precipitation and extreme weather events • Increased soil salinity leading to decreased fertility of the soil - damaging home garden • Decreased/ failure crop yield • Shortage of clean water • Decreased economic activities such as fishing, decreased availability of bait for pole and line fishing - requiring fishermen to travel long distances 	<ul style="list-style-type: none"> • Increased household work burden and time spent on gathering water, food and fuel. • Increased hunger/ calorie reduction in women, due to lack of access to healthy food – lead to malnutrition. • Exposure to contaminated water sources - health problems related to reduced hygiene • Reduced household income decreasing funds for necessary expenditure such as proper health care • Lack of support with household chores, since left alone for long periods of time – also leads to reduced reproductive activities
Natural Disasters	<ul style="list-style-type: none"> • Sea foaming • Land (soil) erosion • Increased tidal waves • Extreme weather events • Flooding 	<ul style="list-style-type: none"> • Economic downturn due to hindrance on livelihood activities such as fishing. • Reduced vegetation such as coconut palms • Increases household expenditure on unexpected matters – increased financial burden. • Multiple roles by women - earn a living and manage household chores leading to health problems • Damage to cultivations reducing access to healthy food with increased malnutrition • Reduced access to transportation - limits access to health specialists such as gynaecologist for regular consultations by pregnant women and advice on family planning. • Damage to properties and agricultural cultivations - reducing farmer incomes funds for proper health services

Health	<ul style="list-style-type: none"> • Increase in infectious diseases, water borne or vector borne diseases • Malnutrition • Island floods moving garbage around due to lack of proper waste management facilities 	<ul style="list-style-type: none"> • Affect immunity and general health of women. • Pregnant women at risks of premature deliveries or infants born to be sickly • Health impacts from diseases such as dengue on women and infants • Increased lack of access to healthy food and health care services, especially for pregnant women • Spread of diseases that could affect women's reproductive health
Migration Displacement	<ul style="list-style-type: none"> • Damage to infrastructure and properties near the shore (close to beach) • Relocation to temporary shelters 	<ul style="list-style-type: none"> • Psychological problems due to displacement • Exhaust of finances for maintenance limits funds for proper health care and purchase of healthy food • Crowded homes limits privacy for reproductive activities that could result in sexual harm to the women • Lack of hygiene could result in spread of infectious diseases, even to reproductive organs
Household composition	<ul style="list-style-type: none"> • Loss of or change in family composition due to migration or displacement and or fatalities from natural disasters 	<ul style="list-style-type: none"> • Increased number of female headed households • Affects women's food and livelihood security • Gendered divisions of labour reinforced • Decreased number of men in some households due to female disaster mortality

Policies and Plans

The participants of the FGDs said they are not aware and do not have any information about climate change policies and programs of the Government. They are only aware about the promises made during the elections. Participants reported that during these times, candidates have talked about the rights of women to a certain extent. Some of the promises include giving benefits to single mothers, insurance to farmers, and subsidy to women business owners. With the support of benefit scheme to single mothers, they believe that the statuses of these families have improved but the discussions about sexual and reproductive rights of women are not prioritised. They believed that the main focus of policy discussions, in terms of climate change adaptation measures has been on sea level rise, solar energy and fixing of solar energy panels.

Though Maldives has experienced natural disaster hazards such as the Tsunami 2004, there are no disaster risk reduction plans formulated at island levels and also women are not involved in policy discussions. **Since women are not involved in policy discussions and in decision making, when a disaster happens, women are not aware of actions to take, how to be safe or where to go and whom to contact.** This fact is noteworthy also because, in many islands, women live alone because their husbands, brothers and/or fathers live elsewhere for work. In these scenarios women would be helpless, not knowing what to do and women may not be in a state to act independently without the assistance of a man.

90% of stakeholders believe that population, health, environment, food security, poverty alleviation and climate change are issues that are interrelated, and therefore it has to be addressed holistically. However 10% of stakeholders are not sure about the interlinkages and the best approach that could be used. The stakeholders also believe that each sector individually is dealing with the issues based on their mandate and but there is no comprehensive and holistic approach to integrate these sectorial policies and plans. Thus, not surprisingly, local councils also do not have sufficient knowledge on mainstreaming climate change and other cross cutting issues into development planning.

It was found that only a few government agencies work to address the issues relating to climate change, and most others believed that Ministry of Environment and Energy (MEE) is the responsible body for addressing climate change impacts. Local councils are unaware of what they can do on this issue, and climate change mitigation and adaptation measures are not mainstreamed into local development plans, due to lack of awareness of issues and measures to take, and lack of capacity for planning and designing development projects.

89% present of the stakeholders believed that there is no disaster risk reduction plans at local island levels. However remaining stakeholders believed there is sectorial disaster risk reduction plans to some extent. But only 5% of stakeholders interviewed said that they addressed the issue in their policies and plans. All agreed that it should be part of their policies and plans.

56% of stakeholders interviewed believed that it is vital for the government to give full commitment to addressing the issues of climate change, and that there is a need to inform policy makers on this issue. Stakeholders also highlighted the need for community awareness and community action, with a need for more involvement of women and local councils to formulate policies and plans to address this issue at all levels of governance. Even though women are one of the most vulnerable groups to climate change, their issues and concerns are poorly represented within climate change policies and plans. However, women have many valuable contributions with regard to solutions and adaptations for issues such as garbage, food security and fresh water.

Mr. Nizam, president of Maldives NGO Federation supported the finding on poor women representation in relation to climate change policies and plans when he remarked that he was unaware of any policies on climate change incorporate gender equality or sexual or reproductive rights. He also highlighted the high level of women involvement in the Maldivian island communities, in managing household's chores such as waste sorting. So he believed women should be involved in discussions of policies and plans, made about waste management.

The Maldives Climate Change Policy Framework 2015, does not specifically include sexual and reproductive health or rights. The impacts of climate change on sexual and reproductive rights and health of women in Maldives is not known at present and can only be surmised. The Climate Change Policy Framework does acknowledge and include human rights, rule of law, gender equality and sensitivity and equity for all population groups. There is a need to conduct further research to put emphasis on the importance of including sexual and reproductive health rights into the climate change and disaster management agendas.

Currently the focus of the MEE for mitigation and adaptation to impacts of climate change is on renewable energy, energy security, low carbon development and policy. The MEE is also working on increasing awareness through programs for children and want to create a future generation that knows and cares about the environment. The focus has shifted from e.g. the Safe Island Program to creating resilient islands. This means a shift from only the physical (environment) vulnerabilities of the island to also include and address social aspects as well.

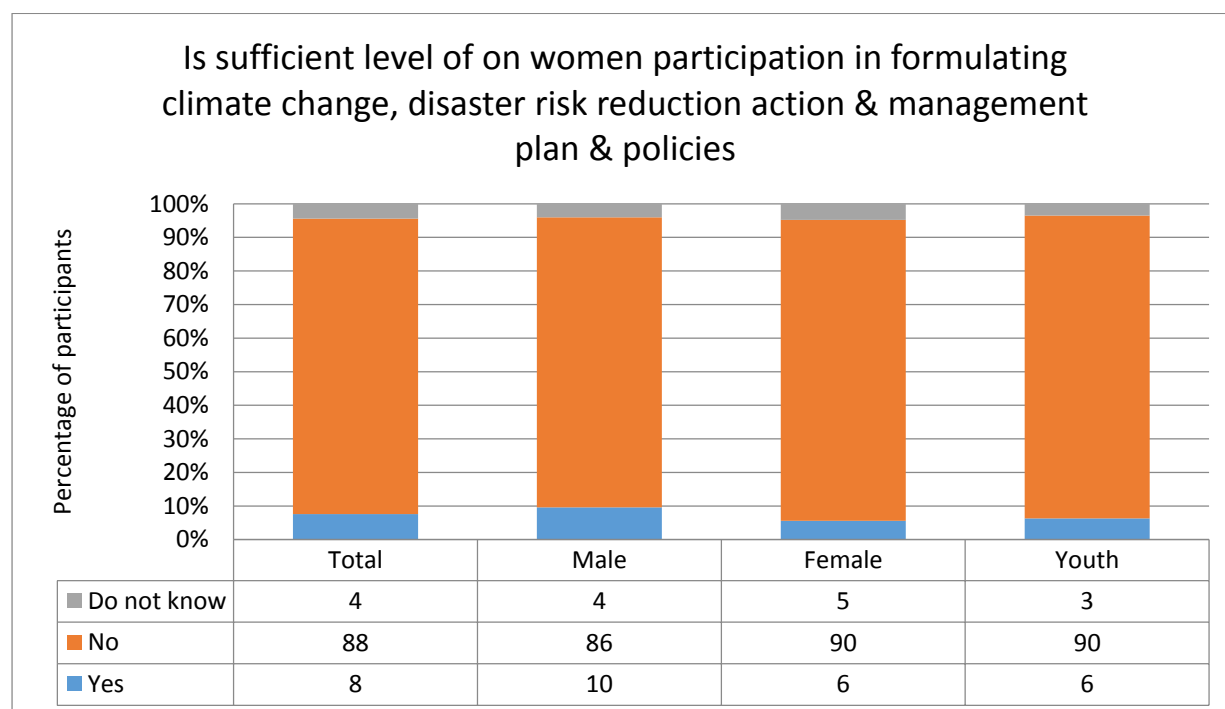
In Maldives, disaster management and climate change mandates are implemented by separate institutions. The former by the National Disaster Management Center (NDMC), who is under the Ministry of Defence and National Security and the latter is under the MEE. NDMC was established in response to the Tsunami in 2004 and response/recovery was their initial mandate. However, Disaster Management Act has come into force in August 2015, However, the Act does not include gender sensitivity and nor is there any mention of sexual and reproductive health separately.

Another area that is not adequately addressed with regards to climate change impacts is disability. Ensuring that people with disabilities have proper support and resources will be especially important, during climate change related disasters or even otherwise. People with disabilities are especially vulnerable at times of disaster and assurances are needed that they will be taken care of in a crisis event, such as impacts related to climate change.

Health, specifically, public health is noted as an important sector to be included in climate change policy. However, this acknowledgement is limited to known diseases increasing due to changes in temperature and increases in rainfall such as vector borne diseases like Dengue. There needs to be acknowledgement of the fact that climate change related health risks

would compound existing problems such as child malnutrition, accessibility to health care, high population congestion and low-income levels. Climate change impacts also threaten food security, which may also impact health.

Women's participation



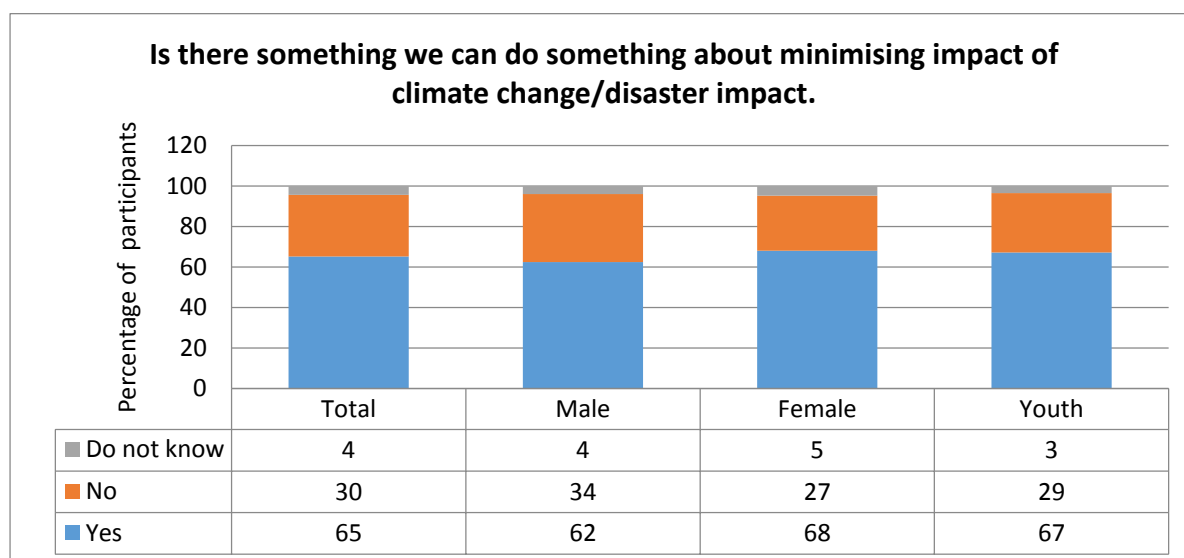
88% participants - 86% of Males, 90 % female, and 90% of youth - believed that there is no significant level of women participation in formulating climate change, disaster risk reduction action & management plan & policies. Only less than 10 % believed that there is significant level of participation of women. Less than 5% said they do not know about it.

All stakeholders agreed that people have an important role in addressing climate change and women's participation in formulating climate change action plans is vital. Stakeholders agreed that women are the primary carer of the households and are aware of the impacts, consequences of existing risks better than men. All agreed that the role of women development committees are important for such activities, but these committees now under local councils are not functioning well due to lack of resources and facilities. All stakeholders agreed that there is insufficient level of women participation in formulating climate change, disaster risk reduction action & management plan & policies. They believed that this is because interlinkages of climate change and its impact on women are not being addressed during formulation of plans.

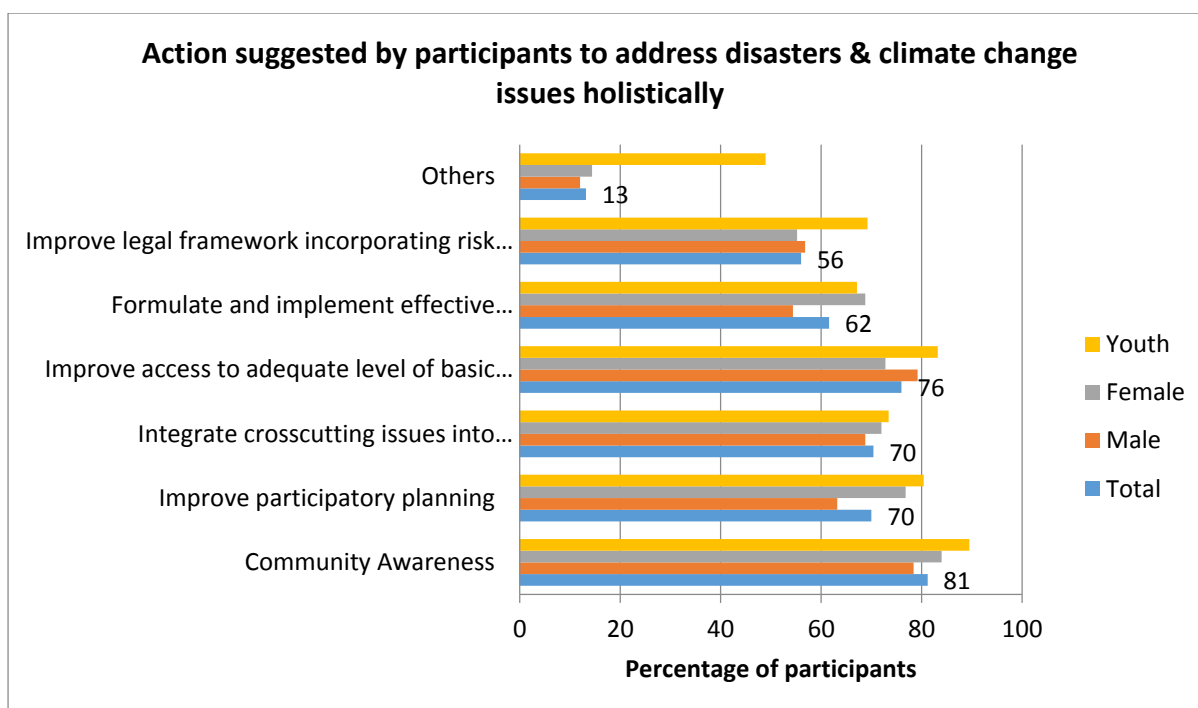
Future Actions

Majority of FGDs have no awareness about what they can do to prevent climate change, and they feel that they cannot do anything much about it. Only thing they believed that they can do is to try to reduce the damages. In this regard the most important thing is to create awareness among the general public - educate about why climate changes are occurring and try to report about them and implement mechanisms to reduce damages. Also when providing resources such as land and formulating legislations, Government should find out about the problems relating to climate change and try to address these.

20% of participants of the FGDs agreed that creating awareness among the public is most crucial to address climate change, 30% believed that Government should formulate policies regarding disaster mitigation, 19% believed that planting trees in the islands is essential as well as doing what is possible locally to combat negative impacts. One percent (1%) believed that we should start using renewable energy, develop health sector, properly use the land use plans, and take actions against those who cause damage to environment and formulate strict legislations against such people. Other suggestions included expanding the power and authority of local councils.



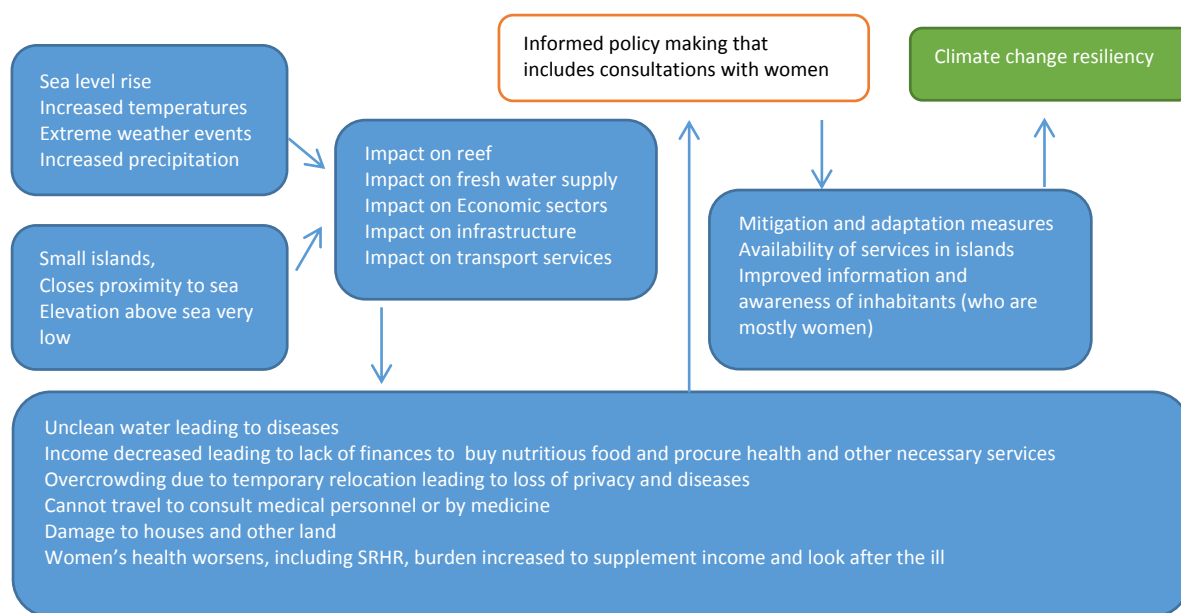
65% of the participants - 62% Male, 68% female and 67% youth - believed there is something they can do to minimise climate change and disaster impact. However 30 % of participants - 35% male, 27%female, and 29% of youth - believed that there is nothing they can do to minimise those impacts.



81% of participants felt that community awareness is required to address disasters & climate change issues holistically. 76 % believed improved access to adequate level of basic services at island level is required. 70% participants believed that it is important to incorporate cross cutting issues into development agenda or plan, while same percentage of participants felt participatory planning is required. 62% believed there is a requirement for formulation and implementation of effective population consolidation programs in order to reduce the number of inhabited islands so that the government would be able to provide better services to all people.

56% believed that improving legal framework by incorporating risk reduction measures in it is required. Only two (2%) of the participants stated that there is nothing much they can do to control the impacts of climate change, and believed that Maldivians are unable to do anything, except lobby for environmental considerations with the polluting world and implement mitigation or adaptation measures.

A framework to achieving climate change resiliency



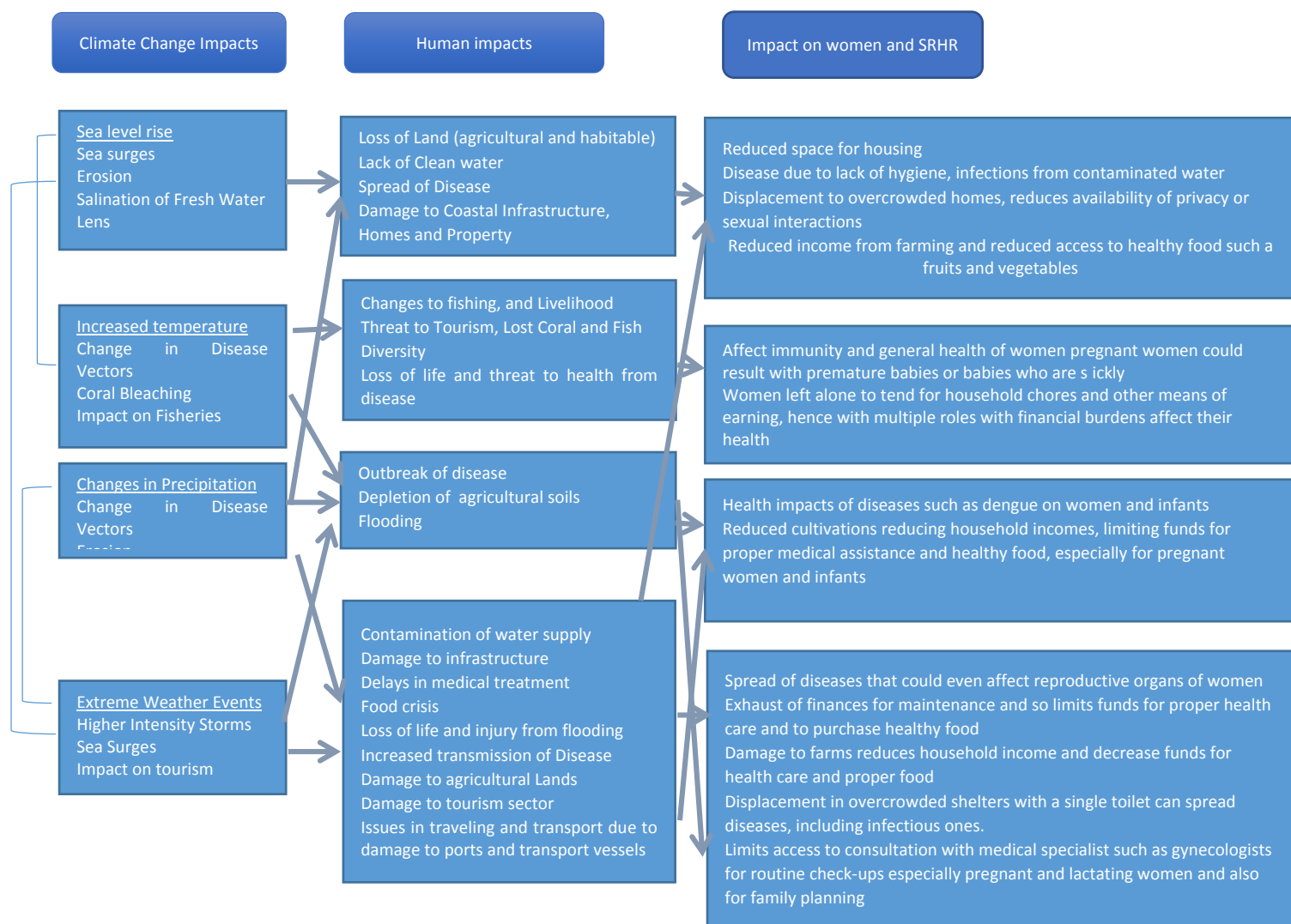
CONCLUSION

The scoping study shows evidence that impacts of climate change is a reality. And these impacts have the potential to worsen the situation of the coastal island communities, especially the disabled, youth and women. While climate change issues have been addressed through past and present initiatives, most of them are sectoral based and lacks a comprehensive holistic approach, and also excludes the vulnerable groups such as women.

The study identifies sea level rise, increased temperatures, extreme weather events and changes in precipitation as main issues of concern for Maldives islands in relation to climate change. Study establishes an understanding of the interrelationships of climate change on, poor health, lack of SRHR services, food security, livelihood insecurity and property insecurity. All of which are important issues for the island communities and also for policymakers to address through appropriate and timely policies and plans.

The study also highlights the important role of the women in managing the households at island community level, since they remain on island most of the time, while the men are away on livelihood activities such as fishing and tourism. Hence, women are the first to be affected by any disaster and most at risk need a proper representation of their concerns and considerations regarding the issues of climate change at policy, planning and decision making levels. This at the moment is not practiced in Maldives. But the study findings indicate that it is necessary to build climate resilient island communities in Maldives.

The diagram below summarizes the climate related impacts on humans, and shows how each of these impacts have a direct and indirect impact on the women.



RECOMMENDATIONS

More information is required to understand the trends emerging in the Maldives regarding sexual and reproductive health. The Society of Health Education (SHE) is presently conducting a study regarding religious fundamentalism and sexual and reproductive health. The results of this study will be highly valuable in further understanding the situation for women in the Maldives regarding their sexual and reproductive health.

1. Include gender equality, the needs and rights of the vulnerable groups such as poor, elderly, people with disabilities and women during disasters in the implementation plan of the Maldives National Disaster Management Act 201, with appropriate focus on establishment of information and services on sexual and reproductive health and rights.

2. Review the thematic areas in Maldives Climate Change Policy Framework 2015, and include gender equality, sexual and reproductive health in addition to identification of the needs to address the most vulnerable groups such as elderly, people with disabilities, women and the poor.
3. Establish a national level forum on climate change and disaster management with representation from the state, CSOs, women and other vulnerable groups to lobby and advocate on relevant national issues.
4. Review the Reproductive Health Strategy to ensure that the needs of women, youth and other high-risk groups receive information, education and access to contraceptives that are needed.
5. Conduct programs to specifically include women in development and climate change impact at the island, national and international levels. At the island level, Women Development Committees could be the focal point for Disaster Response Management Plans as well as the focal point for other island projects.
6. Conduct further research and analysis to better understand the challenges regarding current contraceptive use and trends in the Maldives.
7. Provide sexual education and knowledge to married women as well as youth regarding human sexuality and cycles.
8. Involve and engage people with disabilities and other vulnerable groups including women in climate change and adaptation policies, plans and disaster response management.
9. Conduct empowerment programs for women to enable them to engage in education/ training programs to help them to get involved in decision-making and encourage participation in matters that affects all areas of their lives, especially sexual and reproductive health.
10. Conduct empowerment programs for women to participate in economic and political activities and create among the families and general public awareness on the importance of participation of half of the population in the economic and political affairs of Maldives.

LIST OF REFERENCES

Action Aid International, Violence against Women (VAW) in the post-tsunami Context, People's Report, India, The Maldives, Somaliland, Sri Lanka and Thailand.

Annan, K., Secretary-General of the United Nations. (8 March 1999). 'A World Free of Violence against Women', paper presented at the United Nations Inter-Agency Global Video Conference

Cockcroft, A., Pearson, L., Hamel, C. and Anderson, N. (2011). Reproductive and sexual health in the Maldives: Analysis of data from two cross-sectional surveys. BMC Health Services Research 2011 11(Suppl 2):S6.

Asian Development Bank (2007), Maldives Gender Development Assessment, Section 6, Family Law

Asian-Pacific Resource & Research Centre for Women (ARROW). (2014a). Identifying Opportunities for Action on Climate Change and Sexual and Reproductive Health and Rights in Bangladesh, Indonesia and the Philippines.

Asian-Pacific Resource & Research Centre for Women (ARROW). (2014b). Sexual and reproductive health and rights in the Post-2015 Agenda: Taking their rightful place.

Department of National Planning 2012, International Conference on Population and Development Beyond 2014, Page 39, Maldives Operational Review, 2012, Progress, Challenges and Way Forward

European Commission (EU), UN International Strategy for Disaster Reduction (UN ISDR) and Asian Disaster & Response Network (ADRRN). (n.d. circa 2008). Building resilience to Tsunamis in the Indian Ocean. Baseline Study Report, Shaviyani Atoll, Maldives. Project Selamat.

Ghina, F. (2003). Sustainable Development in Small Island Developing States: The case of the Maldives. *Environment, Development and Sustainability*,(5), 139-165.

Hermann, M.F, Costas, E, S et., al., Maldives field survey of the 2004 Indian Ocean Tsunami, http://faculty.vassar.edu/brmcadoo/EERI_Maldives_FzSyMcCa3.pdf, (accessed May 22/15)

Hope for Women. (2012). Maldives NGO Shadow Report to the Committee on the Elimination of Discrimination against Women, 2012.

Hope for Women. (n.d. circa 2014) The Role of Males and Females in Textbooks.

Human Rights Commission Maldives (HRCM) Submission to the Universal Periodic Review of the Maldives, April-May 2015 (22nd Session) (2014). Retrieved from: <http://www.asiapacificforum.net/members/associate-members/republic-of-the-maldives/downloads/reports-to-un-committees/submission-to-upr-september-2014> (accessed Nov 15/14).

Intergovernmental Panel on Climate Change (IPCC). (2014, March 29). IPCC Fifth Assessment Report, Climate Change 2014: Impacts, Adaptation and Vulnerability. Retrieved from Working Group II IPCC: <http://ipcc-wg2.gov/AR5/report/final-drafts/>

International Council on Management of Population Programmes (ICOMP). (2012). The Status of Family Planning and Reproductive Health in the Republic of Maldives 2010. In Family Planning in Asia and the Pacific: Addressing the Challenges. pp.153-167. Retrieved from [http://site.icomp.org.my/clients/icmp/Downloads/FP in Asia and the Pacific827201222526PM.pdf](http://site.icomp.org.my/clients/icmp/Downloads/FP_in_Asia_and_the_Pacific827201222526PM.pdf) (accessed Nov 3, 2014)

International Services for Human Rights [ISHR] (2014). Maldives: Withdraw charges and end reprisals against national human rights commission. Retrieved from <http://www.ishr.ch/news/maldives-withdraw-charges-and-end-reprisals-against-national-human-rights-commission> (accessed Nov 16, 2014).

Kelman, Ilan.(2010) 'Hearing local voices from Small Island Developing States for climate change', Local. Retrieved from <http://dx.doi.org/10.1080/13549839.2010.498812> (accessed June 14, 2015)

Kelman, Ilan. (2011). Dealing with Climate Change on Small Island Developing States. *Practising Anthropology*,33 (1), 28-32. Retrieved from <http://www.ilankelman.org/articles1/eea2009.pdf> (accessed June 14, 2015)

Lubna, H. (2013, October 27). Maldives failing to close gender gaps, finds World Economic Forum. *Minivan News*. Retrieved from <http://minivannews.com/politics/maldives-failing-to-close-gender-gaps-finds-world-economic-forum-69884> (accessed Nov 14, 2014).

Maldives Independent. Minivan News. (2014, February 4). Flexible working arrangements introduced for mothers in the civil service. Retrieved from <http://devj.maldivesindependent.com/news-in-brief/flexible-working-arrangements-introduced-for-mothers-in-the-civil-service-76866> (accessed Oct 13, 2014)

Maldives Climate Change Policy Framework Draft,
<http://www.preventionweb.net/english/professional/policies/v.php?id=39744> (accessed Maldives 22/15)

Maldives National Disaster Management Centre, Operational Report, October/November 2012,
<https://www.facebook.com/152036604937421/photos/a.157324111075337.33704.152036604937421/163815990426149/?type=1&theater>

Ministry of Environment and Energy. (2014). Draft Maldives Climate Change Policy Framework. Retrieved from
http://www.environment.gov.mv/v1/wpcontent/blogs.dir/1/files/downloads/Maldives_Climate_Change_Policy_Framework_draft_3.pdf (accessed Sept 26, 2014)

Ministry of Environment, Energy and Water. (2007). National Adaptation Plan of Action (NAPA). Chapter 5, page 20, Republic of Maldives.

Ministry of Finance and Treasury. Department of National Planning. (2009). Maldives – 4 Years after the tsunami. Progress and remaining gaps. Republic of Maldives.

Ministry of Finance and Treasury. Department of National Planning. (2012). Household Income & Expenditure Survey. Findings 2009/2010. Republic of Maldives.

Ministry of Finance and Treasury. Department of National Planning. (2010). Millennium Development Goals. Maldives Country Report 2010.

Ministry of Finance and Treasury, Republic of Maldives and UNDP Maldives. (2014). Maldives Human Development Report 2014. Bridging the Divide: Addressing Vulnerability, Reducing Inequality.

Ministry of Gender and Family. (2007). The Maldives Study on Women's Health and Life Experiences. Initial results on prevalence, health outcomes and women's responses to violence. Government of Maldives.

Ministry of Health and Family. (2010). Maldives Demographic and Health Survey 2009.

Ministry of Health and Gender. (2014). Maldives Health Profile 2014.

Ministry of Planning and National Development. (2005). Republic of Maldives. Tsunami Impact and Assessment 2005. A socio-economic countrywide assessment at household levels six months after the tsunami. Supported by UNDP and UNFPA.

National Bureau of Statistics. Ministry of Finance and Treasury. Population and Housing Census 2014. Preliminary Results. 13 November 2014. Republic of Maldives.

Naeem, Shirani. (Oct 23, 2014). Personal communication/Consultative meeting at Ministry of Gender and Law, Shirani Naeem, Director.

Permanent Mission of the Maldives to the United Nations. (2014). Maldives Statement by His Excellency Dr Mohamed Waheed Hassan, Former President and Special Envoy of the President of the Republic of Maldives at the General Debate of the 69th Session of the United Nations General Assembly. New York, 30 September 2014.

Population Action International (PAI) and African Institute for Development Policy. (2013).

Population, Reproductive Health and International Adaptation Finance.

Republic of Maldives. President's Office. (2014). President establishes the Ministry of Law and Gender. <http://presidencymaldives.gov.mv/Index.aspx?lid=11&dcid=14538> (accessed Nov 13, 2014).

Selvam, V. (2007). *Trees and Shrubs of the Maldives*. Bangkok : Thammada Press Co.,Ltd.

Society for Health Education (SHE) and Sexual Rights Initiative (SRI). (n.d. circa 2014). Universal Periodic Review of Maldives 22nd Session May 2015 Joint Submission by SHE and SRI.

The Maldives Islands' Case: Climate Change and Climate Refugees
<http://www1.american.edu/ted/ICE/maldives.html> , (accessed May 22/15)

UN Human Rights (OHCHR). (2014). Current Membership of the Human Rights Council, 1 January 2014 by regional groups.

UN Women. (n.d.). CEDAW. Declarations, Reservations and Objections to CEDAW. Retrieved from: <http://www.un.org/womenwatch/daw/cedaw/reservations-country.htm> Accessed Nov 15/14.

United Nations Development Programme [UNDP] in the Maldives. (2011). Women in Public Life in the Maldives. Situational Analysis.

UNDP and Ministry of Health, 2008. Biological and Behavioral Survey on HIV/AIDS – 2008: Republic of Maldives. The Global Fund supported Programme in the Maldives, 2008.

United Nations Population Fund [UNFPA]. (n.d.). General information and history on sexual and reproductive health and rights. From website <http://www.unfpa.org/rh/index.htm> (accessed Nov 23/14).

United Nations Population Fund [UNFPA] (2008). Making Reproductive rights and Sexual and Reproductive Health a Reality for All, Reproductive Rights & Sexual and Reproductive Health Framework.

UNFPA. (2014). From Dr. Osotimehin speech. UN GA Special Session on the International Conference on Population and Development (ICPD). October, 2014. New York.

UNFPA Maldives (2014). News: Health Minister says young people's reproductive health needs are strategically targeted in National Reproduction Health Strategy. Retrieved from <http://countryoffice.unfpa.org/maldives/2014/07/01/10027/> (accessed Nov 15/14).

UNFPA & WEDO (2009), Making NAPAs Work for Women, Climate Connections, http://www.unfpa.org/sites/default/files/pub-pdf/climateconnections_4_napas.pdf, (accessed May 22/15).

World Bank, Asian Development Bank (ADB) and UN System. (2005). Tsunami: Impact and Recovery. Republic of the Maldives.

World Economic Forum. (2005). Women's Empowerment: Measuring the Global Gender Gap. Geneva.

World Economic Forum. (2014). Global Gender Gap Report. Maldives Country Report. Retrieved from: <http://reports.weforum.org/global-gender-gap-report-2014/> (accessed Nov 14/14).

World Health Organization [WHO] (2013). WHO Country Cooperation Strategy Republic of Maldives 2013-2017. Country office for Maldives.

LIST OF AGENCIES/PERSONS WITH WHOM STAKEHOLDER INTERVIEWS WERE CONDUCTED

National Disaster Management Centre

Ahmed Siyah, Local Consultant, DRR Coordinator, ADPC
Farvasha Ali Naseer, Senior Program Officer, Early Warning and
Emergency Response
Mariyam Shizna, A. Program Coordinator
Aminath Shaufa, A. Project Officer

Ministry of Law and Gender

Fathimath Shafeega, Permanent Secretary
Shirani Naeem, Director, MOLG
Mariyam Sidhmeen, Director, Policy, Planning, Monitoring and Research
Hussain Azzam, A. Planning Officer, Policy, Planning, Monitoring and Research
Shakeeb, Disability Program

Ministry of Environment and Energy

Mareer Mohamed Husny, Assistant Director, Climate Change
Hamdhoon Mohamed, Assistant Director

Human Rights Commission of the Maldives

Aly Shameem, PhD, Member
Ahmed Ameen, Director
Aishath Maurifa Mohamed, Research Officer
Ahmed Yamaany, S. Research Officer
Mohamed Siraj, Advocacy

National Social Protection Agency

Mohamed Ismail Fulhu, Programmes Director
Ismail Azzam Wajuh, Programmes Coordinator
Dr. Faiha Ibrahim, Medical Consultant

NGO Federation of Maldives

Ahmed Nizam, Director

Care Society

Aishath Looba, Director, Programs

Hope for Women

Aneesa Ahmed, Co-founder & Chairperson
Raashida Yoosuf, Co-founder & Vice Chairperson
Aishath Nuzuha, Coordinator

Society for Health Education

Shiyama Anwar, Director, Counselling and Psychosocial Services, Advocacy Focal Point
Aishath Hidayat Efram, Manager, Sexual and Reproductive Health Dept.
Ayesha Junaina Faisal, Programme Officer

This research is an initiative of a regional partnership that are working together on building the interlinkages of climate change and SRHR. The 8 partners are from Bangladesh, Indonesia, Lao PDR, Malaysia, Maldives, Nepal, Pakistan, and the Philippines. The regional partnership generates evidence on the linkages of the issues and advocates for the integration of SRHR in climate change frameworks to advance sustainable development.

Huvadhoo Aid (HAD) exists to enable the rural people to work effectively in promoting and advancing the interests of the rural community of the Maldives to attain basic needs. We work to build a united and strong community for the advancement of the rural community. We base our actions to enable the community and NGOs to effectively promote and advance the interests, well-being of island community, and improve the effectiveness of the NGOs serving the community. Especially we seek to strengthen our actions for sustainable development and poverty alleviation in the community by promoting equity and equality. We do have international volunteer program inviting foreigner to work with the different projects and programs that we conduct. The major focus areas of the HAD are democratic governance, environment and climate change, youth and women empowerment including sexual reproductive health and right of women, drug prevention, and voluntarism.

ARROW is a regional non-profit women's NGO based in Kuala Lumpur, Malaysia, and has consultative status with the Economic and Social Council of the United Nations. Since it was established in 1993, it has been working to advance women's health, affirmative sexuality and rights, and to empower women through information and knowledge, evidence generation, advocacy, capacity building, partnership building and organisational development.

Huvadhoo Aid

Malas, Gaaf Dhaal Hoadedhoo
Republic of Maldives

Telephone (960) 7662474
E-mail admin@huvadhooaid.org
Web www.huvadhooaid.org
Facebook Huvadhoo Aid
Twitter @HuvadhooAid

Asian-Pacific Resource and Research Centre for Women (ARROW)

1 & 2 Jalan Scott, Brickfields 50470, Kuala Lumpur, Malaysia

Telephone (603) 2273 9913/9914/9915
Fax (603) 2273 9916
E-mail arrow@arrow.org.my
Web www.arrow.org.my
Facebook The Asian-Pacific Resource & Research Centre for Women (ARROW)
Twitter @ARROW_Women
Youtube youtube.com/user/ARROWomen
Pinterest arrowomen

