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Identifying Opportunities for Action on Climate Change and Sexual and Reproductive Health and Rights in Bangladesh, Indonesia, and the Philippines

championing
women's sexual and
reproductive rights



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About ARROW

ARROW is a non-profit women's nongovernment organisation with a consultative status with the UN Economic and Social Council. Based in Kuala Lumpur, Malaysia, ARROW has been working since 1993 to champion women's sexual and reproductive health and rights. It aims to achieve this through interlinked strategies of information and communications, knowledge exchange and transfer, evidence generation for advocacy, consistent monitoring of progress towards relevant international commitments made vis-à-vis health, capacity building, partnership building for advocacy, engagement at international and regional forums, and enhancing the organisational strength of ARROW and partners. ARROW works with a core set of national partners across Asia and the Pacific, as well as with regional partners from Africa, Middle East and North Africa, Eastern Europe, and Latin America and the Caribbean, and with allied international organisations. Through information and communications and advocacy programmes, ARROW is able to reach key stakeholders in more than 120 countries worldwide.

Identifying Opportunities for Action on Climate Change and Sexual and Reproductive Health and Rights in Bangladesh, Indonesia and the Philippines.

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

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List of Abbreviations

ARROW	Asian-Pacific Resource and Research Centre for Women
BAP	Bali Action Plan
BPFA	Beijing Platform for Action
COP	Conference of the Parties
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
GGCA	Global Gender and Climate Alliance
GHG	greenhouse gas
ICPD	International Conference on Population and Development
IPCC	Intergovernmental Panel on Climate Change
NDE	National Designated Entity
NCCC	National Climate Change Commission
REDD	Reduced Emissions from Deforestation and Degradation
SRHR	sexual and reproductive health and rights
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
UN Women	United Nations Entity for Gender Equality and the Empowerment of Women
WEDO	Women's Environmental Development Organization

Introduction

Today more than ever, there is growing evidence that the world is experiencing climate change, which will have a profound impact on people and the planet. Adaptation and mitigation strategies to address global climate change will also need to address deep-seated inequities and inequalities to be effective and meet the needs of those most at risk from climate change's negative impact. Currently, there exists very limited evidence and studies on the critical relationship between sexual and reproductive health and rights (SRHR) and climate change. The relationship may seem indirect, but as the impacts of climate change are more regularly and intensely felt, the lack of attention to SRHR in the context of climate change may present greater challenges to poor and marginalised people in the Asia-Pacific region.

The aim of this scoping study is provide an important basis and guidance for addressing gender equality and SRHR in the context of climate change. The findings of this scoping study reveal that gender equality objectives are being mainstreamed and incorporated in national level adaptation plans and policies, particularly in Bangladesh, Indonesia, and the Philippines. However, the degree to which these gender equality objectives are being operationalised, through appropriate and sustained allocation of human and financial resources along with political leadership and commitment, remains uncertain.

In our study, we recommend the following:

- Continue building the evidence and collect necessary data to inform and improve policy making and programs aimed at addressing the challenges to women's universal access to SRHR in the context of climate change;
- Build on the progress that has been made to date and deliver on existing gender equality and sexual and reproductive health commitments, as a measure to support the resilience and adaptive capacity of women and girls; and
- Support and engage women and organisations seeking sexual and reproductive health and equality in climate change adaptation and mitigation at the national, regional, and international levels.

Purpose of the Study

ARROW works in the Asia-Pacific region, in an environment where climate change is already negatively affecting the region and the lives of women and girls, including their SRHR. While our work has always understood SRHR to be firmly placed within the sustainable development agenda, ARROW began its focus on Climate Change in 2009.

This paper serves to inform the basis for ARROW's continued engagement with how climate change affects SRHR to flesh out a better understand of the relationship between the two. ARROW believes that without decisive action to address gender inequality, climate change will reproduce and exacerbate structural inequalities that impede the advancement of SRHR, as well as other important development goals. We believe that women are positive agents in responding to the climate crises and must play an important part of their national climate change processes. Their knowledge, skills, and participation are fundamental to developing effective responses to climate change at the community, national, and international levels. We also believe that women's organisations play a pivotal role in maintaining the momentum for the advancement of SRHR and, through their advocacy and activism, can ensure that these rights are not precluded from national policies and action plans that address climate change.

The purpose of this scoping study is to identify the interlinkages between climate change and SRHR. We examined three country-level responses to climate change and how they consider SRHR, and present some of the climate related vulnerabilities faced by women and girls. The countries that we examined are Bangladesh, Indonesia, and the Philippines. The study also considers gaps in policies, laws and national plans on climate change with regards to gender equality and SRHR. It also identifies possible entry points for effective engagement on the interlinkages between climate change and SRHR and necessary action by governments, civil society, the international community, and donors. It makes recommendations on opportunities to incorporate SRHR issues into national level action around climate change, including existing

climate change processes on adaptation and mitigation, as a pathway to build resilient communities, especially of women and girls, to adapt to climate change.

Methodology

This scoping study of the interlinkages between climate change and SRHR in, Bangladesh, Indonesia, and the Philippines is informed by a desk review of key documents and individual interviews with ARROW partners. Key informant interviews involved a wide pool of expertise in the fields of gender equality, SRHR, climate change adaptation, climate finance, and public health.

The lack of available literature on the relationship between climate change and SRHR was a major limitation of this study, and what little information that is available needed to be synthesised systematically. While the relationship between SRHR and climate change is just beginning to be understood, we hope that this paper will serve as a point of departure for others working to examine these interlinkages from a rights-based perspective.

Glossary of Terms Used

Adaptation: Actions by individuals or systems to avoid, withstand, alleviate adverse impacts, or take advantage of current and projected climate changes and impacts. Adaptation decreases vulnerability or increases resilience to impacts. It includes building the adaptive capacity of people and communities to climate change, including communicating climate change information, building awareness of potential impacts, maintaining well-being, protecting property or land (Adger, Arnell, & Tomkins, 2005), among others. Adaptation planning at the local, state, and national levels can limit the damage caused by climate change, as well as the long-term costs of responding to climate-related impacts that are expected to grow in number and intensity in the decades to come (The Pew Charitable Trusts, 2008).

Climate change: The Intergovernmental Panel on Climate Change (IPCC) defines climate change as any change in climate over time, whether due to natural variability or as a result of human activity. Climate change results in temperature increases that is attributed to the rise of greenhouse gas (GHG) emissions (Spratt & Sutton, 2008) and is causing severe instabilities in the earth's biosphere. The effects include higher global temperatures, an increase in frequency and intensity of extreme weather events and related natural disasters, and severe impacts to the sustainability of ecosystems (UNFPA; WEDO, 2009).

Disaster risk reduction: The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events (UNISDR, 2009).

Gender mainstreaming: Gender mainstreaming as an approach to achieve gender equality was formally adopted by the international community at 1995 Fourth World Conference on Women. It is a concept further defined by the UN Economic and Social Council as a strategy for making women's concerns an integral dimension of the design, implementation, monitoring, and evaluation of the policies and programmes in all political, economic, and societal spheres so that women and men benefit equally and inequality is not perpetrated. This includes efforts to identify gaps through the use of sex-disaggregated data, developing strategies to close those gaps, allocating the necessary human and financial resources towards the implementation of gender equality strategies and monitoring, measuring, and evaluating resorts are all part of mainstreaming activities (United Nations Development Programme (UNDP), 2007).

Gender: Socially constructed norms, roles, and relations that are considered appropriate for women and men. Gender determines what is expected, permitted, and valued in women or a man in a determined context.

Impacts: The effects on natural and human systems of extreme weather and climate events and of climate change. Impacts generally refer to effects on lives, livelihoods, health, ecosystems, economies,

societies, cultures, services, and infrastructure due to the interaction of climate changes or hazardous climate events occurring within a specific time period and the vulnerability of an exposed society or system. Impacts are also referred to as “consequences” and “outcomes” (IPCC).

Mitigation: Migration refers to actions to reduce or prevent GHG emissions. Mitigation efforts range from the use of new and renewable technologies, developing energy efficient technologies, or changing management practices or consumer behaviour. Mitigation actions can take place at many levels, from costly to less expensive interventions and include the protection of coastal areas, developing better urban infrastructure, protection of forests and ecosystems, to improving cook stove design.

Reproductive health: Defined at the International Conference on Population and Development (ICPD) as a “state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes”¹ (United Nations Population Fund, 2004).

Reproductive rights: Defined at ICPD as “certain human rights that are already recognised in national laws, international human rights documents and other consensus documents. These rights 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. It also includes their right to make decisions concerning reproduction free of discrimination, coercion and violence, as expressed in human rights documents”² (United Nations Population Fund, 2004).

Resilience: The capacity of social, economic, and environmental systems to cope with a hazardous event or trend or disturbance, responding, or reorganising in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation (IPCC).

Sex: The biological and physiological characteristics of women and men (WHO). Sexual and reproductive health and rights. SRHR is generally understood to include reproductive health, rights and access to services, including access to adequate contraceptive information and supplies, full antenatal care and trained attendants, as well as emergency obstetric services in pregnancy and childbirth and access to safe and legal abortion and post abortion care. They also include access to good quality, affordable health care, especially preventive care, and to treatment, prevention and palliative care and essential lifesaving medicines for those suffering from or at risk of HIV and other preventable and infectious diseases. Rights of sexual expression, enjoyment, and well-being without discrimination based on sexual or gender orientation, age, race, ethnicity, marital or HIV status, including respect for the dignity, humanity, and full citizenship of sex workers (Petchesky, 2010).

Vulnerability: The propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and limited capacity to cope and adapt (IPCC).³ It is determined by physical, social, economic, and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards (UN/ISRD, 2004). It is also a human condition or process resulting from physical, social, economic factors which determine the likelihood and scale of damage from the impact of a given hazard (UNDP).

¹ Paragraph 7.2 of the ICPD Programme of Action.

² Paragraph 7.3 of the ICPD Programme of Action.

³ There is a range of definitions of vulnerability and no agreement on a universal definition. For the purpose of this paper, all three definitions are useful, with the UNDP definition being more relevant to women and girls as it is more human centered.

Climate Change, Gender Equality, and Sexual and Reproductive Health and Rights in the Asia-Pacific Region

The realisation and advancement of gender equality and SRHR in the Asia-Pacific is critical in responding to climate change and in building the resilience of communities to adapt to climate change. Bangladesh, Indonesia, and the Philippines have developed ambitious National Adaptation Plans of Action (NAPS). However, gender equality interventions in these plans do not address the SRHR of women and girls adequately. All three countries are at the frontline of climate change in the region and predicted to be the worst affected by climate change.⁴ While Bangladesh and the Philippines are low GHG emitting countries, they have the opportunity to lead in mitigation and adaptation strategies that incorporate broader development objectives aimed at building greater resilience among women and girls, and SRHR is an essential component of this approach.

The Asia-Pacific region is home to 60% of the world's population and one of the most vulnerable to climate change.⁵ More than 100 million people are affected annually by climate related events that include typhoons, droughts, and cyclones. By global comparison, people in the region constitute 83% of all those affected by droughts, 97% of all those affected by floods, and 92% of those affected by storms.⁶ Over the last forty years, the annual average number of people affected by flooding alone has increased from 29.5 to 63.8 million and an estimated 120.7 million people are living in cyclone prone areas.⁷

The Asia-Pacific is also a region with fast growing cities, high rates of deforestation, and loss of agricultural land, increasing water scarcity, and stressed coastal and marine systems. Among the 20 cities at high risk of floods and most likely to be affected by climate change, 15 are in the Asia-Pacific region, including Dhaka, Jakarta, and Manila.⁸ Despite the region's largely rural population distribution, rapid and widespread urbanisation presents many challenges for national and local governments in the region. The Economic and Social Commission for the Asia-Pacific (ESCAP) estimates that more than 33% of urban dwellers live in slums; and it is projected that this number will continue to increase.⁹ Rural to urban migration places demands on infrastructure, services and the environment. People living in slums in Asia often lack essential services such as water and sanitation; live in areas that are most at risk of floods and storm surges; have little or no access to health services and education; lack decent work and are employed in the informal sector. Many of the fast growing economies in the region are also becoming a significant source of GHG emissions.

Rising air pollution in China, India, and other countries is responsible for increased fatalities due to pollution-related causes, and 12 of the 15 most polluted cities in the world are in Asia. China is the largest global emitter of carbon dioxide (CO₂) after the United States. However, their per capita CO₂ emissions are 6 and 18 tons per person respectively.¹⁰ Indonesia is the sixth largest emitter of GHGs. According to the World Health Organization (WHO), over 7 million people died as a result of air pollution in 2012 with more than 1/3 of deaths occurring in Asia, many of them linked to indoor smoke from cook stoves.¹¹

While no one can escape the negative impacts of climate change, the most vulnerable groups such as children, young people, women, the poor and the marginalised in developing countries will be impacted the most. In the developed world, those who will bear the most impact are the poor, those belonging to racial minorities, and the marginalised, including women and the elderly. The effect of climate change further threatens to erode human freedoms and limit choices.¹²

The effects of climate change go far beyond the environment, and have a wide-range of socio-economic and political consequences, exacerbating existing issues of poverty, livelihoods, and inequities, and having profound implications for social justice and gender equality.¹³ ADB estimates that there are 1.7 billion poor people in Asia and the Pacific who are living on less than \$2 a day.¹⁴

Despite continued economic growth, poverty and income inequality remains, and benefits of growth have not translated to a better quality of life for the poor and the marginalised, whose lives will be increasingly stressed and disproportionately affected by climate change.¹⁵ Governments already struggling to meet the needs for health services and education, water and sanitation, employment and improvements on social protection, to name a few, will be further challenged. For example, the Philippines lost an estimated 5% of its 2012 GDP following super typhoon Haiyan in November 2013, while according the World Bank, the country spent 4.6% of its GDP on health services, which include sexual and reproductive health, in 2012.¹⁶ Similarly, 3.6% of Bangladesh's GDP is spent on health, and in 2007, lost US \$1.158 million to cyclone Sidr.¹⁷

IPCC Fifth Assessment Report: Findings for Asia

- Warming trends and increasing temperature extremes have been observed across most of the Asian Region over the past century.
- Water scarcity is expected to be a major challenge for most of the region due to increased water demand and lack of good management.
- The impacts of climate change on food production and food security in Asia will vary by region with many regions to experience decline in productivity.
- Coastal and marine systems are under increasing stress from both climatic and non-climatic drivers.
- Multiple stresses caused by rapid urbanisation, industrialisation, and economic development will be compounded by climate change.
- Extreme climate events will have an increasing impact on human health, security, livelihoods, and poverty, with the type and magnitude of impact varying across Asia.

Source: IPCC WGII AR5 Chapter 24

4 The Maplecroft Climate Change and Risk Atlas 2014 classifies Bangladesh (1st and most at risk), the Philippines (9th) and Indonesia (38th) as all "high risk" countries. Their 2013 report highlighted 10 cities which are most at risk, including Dhaka (ranked 1st), Manila (2nd), and Jakarta (5th).

5 The Intergovernmental Panel on Climate Change (IPCC) defines climate change as a "change in the state of the climate that can be identified by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer" (IPCC, 2007: VIII)

6 Asian Development Bank (ADB). (2011) Accounting for health impacts of climate change. ADB.

7 Economic and Social Commission for the Asia-Pacific (ESCAP); UNISDR. (2012). Reducing Vulnerability and Exposure to Disasters: The Asia Pacific Disaster Report 2012. Bangkok: ESCAP;UNISDR.

8 Maplecroft. (2012, November). Maplecroft: Climate change vulnerability index 2013 - Most at risk cities. Retrieved from Prevention Web: <http://www.preventionweb.net/english/professional/maps/v.php?id=29649>

9 Economic and Social Commission for Asia Pacific (ESCAP); UNISDR. (2012). Reducing Vulnerability and Exposure to Disasters: The Asia Pacific Disaster Report 2012. Bangkok: ESCAP;UNISDR.

10 United States Environmental Protection Agency. (2014, 03). Global Green House Emissions Data. Retrieved from EPA United States Environmental Data <http://www.epa.gov/climatechange/ghgemissions/global.htm>.

11 World Health Organization (WHO). (2013). Gender, Climate Change and Health. Geneva: WHO.

12 UN Development Programme (UNDP). (2013). Gender and Climate Change- Asia Pacific Policy Brief. New York: UNDP.

13 Mearns, R & Norton, A. (2010). "Equity and Vulnerability in a Warming World: Introduction and Overview", in Mearns, R & Norton, A (Eds.). (2010), Social Dimensions of Climate Change: Equity and Vulnerability in a Warming World, Washington, D.C: The World Bank.

14 Asian Development Bank (ADB). (2012, December 20). 12 things to know about poverty reduction in Asia Pacific. Retrieved from: <http://www.adb.org/features/12-things-know-2012-poverty-reduction-asia-and-pacific>.

15 The National Statistical Coordination Board in the Philippines found no statistical change on poverty levels in the last six years, with 28 out of 100 Filipinos living in poverty, despite the country being the fastest growing economy in Asia.

16 The World Bank, Health expenditure, total (% of GDP). Available from, <http://data.worldbank.org/indicator/SH.XPD.TOTL.ZS>, Accessed 04 April 2014

17 Ibid.

Integrating Women's Human Rights Global Commitments to Climate Change Frameworks

The Asia-Pacific Region has seen some advances in women's and girls' access to education, SRHR, political participation and in changes in legislation, either in amending laws that are discriminatory against women and girls, or introducing laws to protect women's human rights.¹⁸ Many countries have legislation on gender equality, women's participation including the establishment of electoral quotas, and have mainstreamed gender equality in national and economic planning. Despite progress, inequality in education and life expectancy remain and are on the rise.

Furthermore, regional and national data can conceal inequalities within and among countries, including those related to race, ethnicity, geographic location, income, age, disability, HIV status, sexual orientation and gender identity. Notwithstanding commitments to gender equality, execution is weak due to a variety of factors, from limited resources, lack of internal capacity and resources, to inconsistencies in upholding laws to disruption from natural disasters and conflict. Women in the region continue to face structural inequalities and discrimination and are still denied their full rights to health, education, and have limited access to power and decision-making.

Even with economic progress, women and girls still make up the majority of people living in poverty, perform 60 % of agricultural work, and are responsible for the majority of tasks related to household management including food security, obtaining water, and caring for children, the sick, and elderly members of the family.¹⁹ Aside from the social costs of wasting women's potential contribution, limits to women's participation in the workforce cost the economy an estimated \$89 billion annually (World Bank, 2011).

More than 60 % of the women with an unmet need for family planning are in the region, approximately 140 million. Fertility rates have declined progressively and the region has reached the population replacement level of 2.1 births per woman.²⁰ In many countries, socio-cultural factors, limited physical access, financial barriers, and humanitarian and environmental crises all limit women's access to sexual and reproductive health services. In addition, the existing weaknesses in health systems hinder women's universal access to these services and are often related to inadequate resources including financial and human resources in terms of quality, numbers and distribution, infrastructure breakdown during crisis, and inefficient health systems. More women die in childbirth in South Asia than any other region, and in Bangladesh only 18 % of all births are attended by skilled birth attendants.²¹

Contraceptives are often out of stock at health facilities, especially in rural and remote areas, or only limited options are available. Discriminatory gender stereotypes and norms regarding sexuality and reproduction remain entrenched in state policies, laws and practices, and in attitudes and norms in societies (United Nations Development Programme (UNDP), 2013). In South Asia, countries that have a prevalence of child marriage of 30% or more are Bangladesh (66 %), India (47 %), Nepal (41 %), and Afghanistan (39 %).²² We foresee that child marriage and early motherhood, in some cases used as a coping strategy to climate change, can severely curtail educational and employment opportunities. Child marriage and early motherhood are also likely to have a long-term, adverse impact on young women's and their children's health, well-being, and survival.

Women work more in agriculture in the region than any other sector. In South Asia, women constitute over 60% of agricultural workers.²³ They are also engaged in aquaculture, agroforestry, watershed management, and forest protection and conservation.²⁴ Despite these roles, women own significantly less land than men, have limited access to agricultural extension services, and have difficulty accessing credit despite being responsible for growing over 57% of the food in the region. In many countries, women continue to be denied their rights to inheritance and property. The World Bank has confirmed that women

make up a significant proportion of the labour force in the forestry sector, although their contribution is largely not recognised, and are poorly paid.²⁵

According to WHO, women 15 years or older in Southeast Asia have a 40.2 lifetime prevalence of sexual and/or physical violence.²⁶ Failure to address structural causes of inequality, discrimination, and violence against women and girls impedes women from realising their rights to equal participation, voice and access, and control over resources. Despite progress in establishing policies, programmes, and national efforts to address violence against women, widespread forms of violence including domestic violence and marital rape, child marriages, and trafficking in women and girls remain. Challenges to addressing violence against women and girls include weakness and /or insensitivity in security and legal institutions; lack of support, resources, and competencies in relevant government ministries; and significant socio-cultural barriers to addressing women's and girls' rights.

In humanitarian emergencies and post-conflict settings that destabilise social infrastructure, many women and young girls are left vulnerable to sexual violence, exploitative labour, and trafficking. During and after disasters and conflict situations, women and girls often lack access to emergency contraception to prevent pregnancy, post-exposure prophylaxis to minimise HIV infections, treatment of STIs, counselling and other psychosocial support, including collection of forensic evidence, and referral to legal and social support services within the community. Disaster risk reduction initiatives must also tackle the root causes of gender-based violence.

The link between climate change and gender inequality is undeniable, and if recognised and acted upon, can have far-reaching consequences for climate change mitigation and adaptation as well as dealing with its effects. Climate change will affect women and men differently given existing social and economic inequalities and deepen these inequalities at the same time. When natural disasters strike, women are most likely to lose their lives. Women's work, performed on a daily basis and arising from their socially prescribed roles, increases sharply after every disaster, particularly their caring functions. In some cases women may also lack the conditions and resources to enable them to quickly recover in the aftermath of disasters, but they also have different abilities that enable them to face the challenges presented by climate change. While sex-disaggregated data is not regularly collected, studies show that more women than men die during disasters.²⁷

Neumayer and Plumper (2007) find that natural disasters lower the life expectancy of women than men: the stronger the disaster, the stronger its effect on the gender gap in life expectancy. They conclude that socially constructed gender-specific vulnerabilities of women together with everyday socio-economic patterns lead to higher female disaster mortality rates.²⁸

Following disasters, women and girls are also often overlooked in relief efforts or may be not be able to reach places where relief is distributed due to social norms that restrict women and girls mobility. Women

IPCC Fifth Assessment: Findings on Gender and Climate Change

- Gender along with socio-demographic factors of age, wealth, class, is critical to the ways in which climate change is experienced.
- Gender dimensions of vulnerability derive from differential access to the social and environmental resources required for adaptation.
- Further drivers of gender inequality stem from social exclusion from decision-making processes and labour markets, making women less able to cope with and adapt to climate change impacts.
- Women and men experience increases in productive roles but only women experience increased reproductive roles.
- Socially constructed gender differences affect exposure to extreme events, leading to differential patterns of mortality for women and men.
- Violence against women increases, particularly when living in emergency accommodations.
- Heat stress exhibits gender differences, reflecting physiological and social factors.
- Evaluations of adaptation investments show that approaches that are not gender-sensitive and other drivers of inequality risk reinforcing inequalities.

Source: IPCC WGII AR5 Chapter 12

also are more likely to suffer hunger and malnutrition in the aftermath of disasters, even more critical given that women and girls already have disproportionate rates of malnutrition and micronutrient deficiency. In the Philippines, 87% of households faced food insecurity and 75% were limiting their meal sizes²⁹. Furthermore, the proportion of micronutrient deficiency among pregnant women is 50.7% and lactating women 45.7%. In post-disaster situations, women may not be able to return to work, education becomes a lesser priority for girls, and women and girls' nutritional levels and health deteriorate further. The dropout rates for girls in school increases, and violence against women soars under the stresses of disasters in many countries. This includes early and forced marriages, trafficking, migration, insecure employment, and increased poverty.³⁰ Despite increased awareness of violence against women after disasters, studies and data collection remains limited. A combination of factors affect this lack of data including, that violence against women goes largely underreported, the lack of support mechanisms when violence is reported, and social norms preventing women and girls from reporting violence,³¹ making assessments of violence against women after disasters difficult to conduct due to limited baseline data.

In addressing women's vulnerability to climate change, it is critical that multiple or compounded vulnerability is also understood and taken into account. Many socio-economic characteristics will impact how women are able to adapt to climate change, for example, a female-headed household in an indigenous community; a pregnant migrant woman in an urban slum; an elderly woman farmer caring for grandchildren whose parents have migrated. They may be more vulnerable because of economic, social, and cultural factors and may face different and greater challenges compared to other women in the community who lack financial resources but have other types of community support. Addressing climate change impacts, mitigation and adaptation should consider this angle. In its most recent report, the IPPC identified that "heightened vulnerability is rarely due to a single cause. Rather, it is the product of intersecting social processes that result in inequalities in socioeconomic status and income, as well as in exposure. Such social processes include, for example, discrimination on the basis of gender, class, ethnicity, age, and (dis) ability."³²

Despite the fact that climate change can intensify the challenges that women and girls face, they have the knowledge and skills to contribute to adaptation strategies opportunity to challenge and change their

How the Indian Tsunami Affected Reproductive Health

- While the Indian Tsunami was not a climate change related, it is used as an example to illustrate gender disparities in post-disaster situations. It is well documented that the ratio of female to male deaths was 3:1. In some communities, only women were reported to have been killed. Because of social norms, women and girls were not taught how to swim or climb trees; knowing how to do either or both would have saved them. There are also restrictions on their mobility that dictate that they be accompanied by a male relative. In trying to escape from the tsunami, many of them died searching for their children. Those who survived became more vulnerable to poverty and sexual violence.
- An estimated 150,000 women in countries hardest hit by the tsunami were pregnant and in Indonesia over 11 thousand pregnant women were displaced in Banda Aceh Besar.
- Before the tsunami, maternal deaths in Southeast Asia accounted for one third of all maternal deaths worldwide. Following the tsunami, there was a breakdown in health services and women suffering from pregnancy related complications had greater difficulties accessing services.
- Already precarious health services were affected, clinics were destroyed, and service providers were killed. In Sri Lanka, 100 medical personnel were killed. In Indonesia, 1650 midwives died.
- An increase in sexual violence was documented in Sri Lanka and Indonesia.
- Contraception and family planning services and commodities were lost and services interrupted. Emergency contraception and HIV-post exposure prophylaxis were not available.
- Life-saving HIV treatment was lost and treatment was interrupted.

Sources: Oxfam, WHO, Journal of the Royal Society of Medicine 2005

gendered status in society. Women have been willing and able to take an active role in what are traditionally considered “male” tasks in responding to disasters and challenge existing gender roles.³³ Women have also adopted coping strategies and mechanisms that not only benefit them, but also their communities, in terms of construction of shelters, seed storage, adapting their diet to more locally sourced food, and food preservation. They are also adopting new technologies such as solar and biogas and improved cook stoves.³⁴ Nevertheless, some coping strategies add to the burdens endured by women and are unsustainable in the long term, such as diet adaptation, using social networks for borrowing money, and temporary migration.

There are several institutional challenges for women in times of crisis or humanitarian emergencies: the emergency response systems remain dominated by men; few standard operating protocols for early warning, evacuation, search and rescue operations adequately consider women and girls and their special physical, health, psychosocial needs or capacities; and few countries and agencies are collecting the sex-disaggregated data needed for better planning and post-disaster recovery responses. Rather than recognising women’s agency in recovery efforts, they are often seen as passive victims of disaster rather than potential community leaders who can help build more resilient communities.

Current scenarios on the impact of climate change in the region maintain that urban settings will be particularly impacted from extreme weather events, and low-income communities will bear the brunt of these disasters.³⁵ To date, evidence from richer nations and developing countries³⁴ indicates that in facing natural disasters, the poor lack insurance and other resources such as access to healthcare, communications, and food and water to mitigate the impact of natural disasters. They may not be able to continue to pay for their children’s education, meet their basic needs for food and shelter, and without adequate social protection and access to universal health care and services, fall deeper into debt and poverty. For women and girls, research shows that they suffer malnutrition and hunger as in many countries social norms prescribe that they are the last ones to eat in the family.³⁶

Beyond causing immediate death and injuries, floods and storms can cause long-term damage to facilities that provide health-related services. Power outages can disrupt hospital services. Likewise, clean water provision can be compromised if treatment facilities are structurally damaged or lack power. Physical climate changes including temperature, precipitation, humidity and sea-level rise can alter the range, life cycle and rate of transmission of certain infectious diseases. Flooding can introduce contaminants and diseases into water supplies and can increase the incidence of diarrhoeal and respiratory illnesses in both developed and developing countries.³⁷

The three countries examined in this study have developed ambitious National Adaptation Plans (NAPs). However, gender equality interventions are limited and they currently do not address all SRHR of women and girls. Inevitably, the increasing costs dealing with the effects of climate change such as extreme weather and disasters will put greater pressure on governments and their development priorities, potentially negatively affecting social spending including reproductive health.³⁸ This is particularly worrying since the reproductive health needs of women are far from being fully met, in particular for young unmarried women and adolescent girls, and people of all sexual orientations and gender identities.

Climate change poses significant impacts on human health and will increasingly present new health challenges. The table below presents just some of the ways in which climate change will affect women and girls and their sexual and reproductive health:

Some Examples On How Climate Change Impacts Women And Sexual And Reproductive Health And Rights		
Climate Change Impact	Gender Equality	Sexual And Reproductive Health
Extreme weather events	Lack of access to education and information about extreme weather events Restricted ability to respond due to restrictions on women's mobility Lack of survival skills, such as swimming and tree climbing, often taught to boys and men, not girls and women. Women's exclusion from planning and disaster recovery decision-making. Increase in household expenses	Access to SRH services constrained SRH services excluded as priorities from disaster recovery Increased health risks with pregnancy and childbirth Gynaecological problems due to unhygienic water use
Drought	Increased women and girls work burden and time spent gathering water, food and fuel due to availability of water and other resources For girls, increasing task may affect their capacity to attend school is at risk Loss of land tenure for women with restricted access to land	With women traveling further distances to collect fuel and water, increased risk of sexual violence Water-logging prevents women from accessing sexual and reproductive health care and services
Food security	Increased hunger and calorie reduction for women Malnutrition and micronutrient deficiencies Compromised food safety	Low weights births, increase in miscarriage, perinatal mortality

Health	Increased burdened of care for women caregivers, both in households and as care workers Limited access to health services Increase in infectious, water borne or vector-borne diseases	Maternal malaria increases the risk to spontaneous abortion, premature delivery, stillbirth and low birth weight Some evidence of relationship between pre-eclampsia and increased incidence during climatic conditions Saline contamination of drinking water linked to pre-eclampsia, eclampsia and hypertension among women
Migration	The priorities of migrant and displaced women are not prioritised Increased violence at the fastest growing economy in Asia at the household level	Trafficking and exploitation Loss of access to services due to migrant status
Conflict	Internal displacement due to conflict over resources Violence against women	Limited access to sexual and reproductive health services and supplies Limited access to post-exposure prophylaxis, counselling and STD and STI testing, abortion services in cases of sexual violence
Economic impacts	Loss and reduction of livelihoods and assets Limited resilience and coping mechanisms Feminisation of Poverty especially in urban and peri-urban areas	

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- 28 This study covered 1981 to 2002; no similar, more recent studies were found.
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International Frameworks Relevant to Gender and Climate Change

The demand by gender equality advocates and women's groups to address gender inequality and women's empowerment as a fundamental aspect of facing the challenges posed by climate change is founded on 35 years of government commitments to gender equality.³⁸ The Convention On The Elimination of All Forms of Discrimination Against Women (CEDAW), adopted in 1979 and entered into force in 1981, sets out state obligations to eliminate the different forms of discrimination against women, guarantees women and men equal opportunities in economic, social, cultural, and civil and political rights. It also commits states to take all appropriate measures to ensure the full development of women so that they can exercise and enjoy all of their human rights and fundamental freedoms. CEDAW also calls on states to incorporate the principle of equality in national constitutions and legislation and ensure its practical realisation. It also commits states to ensure women's participation in decision-making, in accessing services and technology, and to participate in the work of international organisations. The majority of the 195 countries signatories to the UN Framework Convention on Climate Change (UNFCCC) have signed CEDAW.

The Rio Declaration Agenda 21 adopted at the UN Conference on Environment and Development in Rio in 1992, includes an article and a chapter on women. Article 20 of the Rio Declaration, signed by heads of state, affirms that women have a vital role in environmental management and development and that their full participation is therefore essential to achieve sustainable development. Many other chapters in Agenda 21 also recognise the importance of gender equality in achieving sustainable development.

At the International Conference on Population and Development (ICPD) in 1994 in Cairo, total of 179 governments signed up to the ICPD Program of Action, agreeing to:

- Provide universal access to family planning and sexual and reproductive health services and reproductive rights;
- Deliver gender equality, empowerment of women and equal access to education for girls;
- Address the individual, social, and economic impact of urbanisation and migration;
- Support sustainable development and address environmental issues associated with population changes.

ICPD also recognised the need to ensure the health of growing population and manage such stress on the environment by implementing environmentally sustainable practices and eliminating wasteful consumption. In particular, the ICPD Programme of Action, urges governments to:

1. integrate demographic factors into environmental impact assessments and other planning and decision-making processes aimed at achieving sustainable development;
2. take measures aimed at eradicating poverty, giving special attention to income-generation and employment strategies directed at the rural poor and those living within or on the edge of fragile ecosystems;
3. use demographic data to promote sustainable resource management, especially of ecologically fragile systems;
4. modify unsustainable consumption and production patterns through economic, legislative and administrative measures aimed at fostering sustainable resource use and preventing environmental degradation; and
5. implement policies to address the ecological implications of inevitable future increases in population numbers and changes in population concentration and distribution, particularly in ecologically vulnerable areas and urban agglomerations.³⁹

The Beijing Platform for Action (BPFA) adopted by UN member states in 1995 includes the involvement of women in environmental decision-making as a strategic objective and includes relevant text to climate change on sustainable development, participation, gender mainstreaming, rural and indigenous women, health and the economy. It also reaffirms government commitments to SRHR and women's participation in

decision-making, among others. The BPFA also points to a critical gap in women's participation in policy processes where natural resource management and the protection of the environment are concerned.

The Millennium Declaration and Millennium Development Goals (MDGs), adopted in 2000, commits countries to guaranteeing equal rights and opportunities to women and men, promoting gender equality and the empowerment of women, in addition to all the goals where gender equality is an essential component to their achievement. Although the post-MDG framework is still being debated at the time of writing, it is likely that the next framework will include sustainable development and development goals under one umbrella and that addressing inequalities, including gender, will be a major component of this new framework.⁴⁰

There is also a long-standing commitment, backed by a large body of work and expertise on gender mainstreaming. The UN resolution on "Mainstreaming a Gender Perspective into All policies and Programmes in the Systems"⁴¹ adopted by ECOSOC in 2005, calls on all entities of the UN to intensify efforts to integrate gender perspectives in policies and programmes. Governments have agreed to gender mainstreaming in a number of UN resolutions, at the Commission on the Status of Women, through regional bodies including the Economic and Social Commission for Asia Pacific (ESCAP) and at the national level through their national level planning processes.

The Hyogo Framework for Action (HFA) resulting from the World Conference on Disaster Reduction in Kobe, Japan in 2005 and adopted by 168 countries includes a mandate on gender equality and the empowerment of women in the context of disaster risk reduction. It also calls for a gender perspective to be integrated into all disaster risk management policies, plans, and decision-making processes.⁴² In 2012, the Commission on the Status of Women adopted resolution 56/2 titled "Gender equality and the empowerment of women in natural disasters," which requests all relevant UN entities to ensure that a gender perspective continues to be mainstreamed into all aspects of disaster risk reduction, response and recovery. It also points to the need to recognise the many roles of women; highlights protection and rights, capacities, leadership, livelihoods, and the need to for gender balance in the humanitarian professions.⁴³

The current global policy discussions and outcomes of consultations around the ICPD+20, Beijing+20, and the post 2015 development framework, including the development of sustainable development goals, has provided an opportunity to clearly present the links between gender equality and climate change. The international communities understanding of climate change impacts is very different today than 20 years ago when these global goals and commitments were agreed, however some of the challenges remain and there is an unfinished agenda on SRHR. Civil society and some government's demands include a call for sustainable development goals and post-2015 development framework that has gender equality and SRHR at its core.

Timeline: Gender in Global Climate Change Processes

1988 Intergovernmental Panel on Climate Change (IPCC) established with mission to assess the scientific, technical and socio-economic information relevant of human-induced climate change.

1990 UN Framework Convention on Climate Change (UNFCCC) negotiations launched. IPCC report notes the need for action to address likelihood of irreversible climate change.

1992 UNFCCC adopted through the Rio/Earth Summit process and is the only one of the three Rio Conventions that does not include gender.

1992 Agenda 21 and Rio Declaration adopted, both containing specific references to women and the importance of gender equality and women's participation as a pre-requisite for achieving sustainable development; the UNFCCC did not have specific reference to gender. Following Rio, Commission on Sustainable Development was established, with women participating in this process as an officially recognised stakeholder group.

1994 UN Convention to Combat Desertification recognises the role of women in rural livelihoods and encourages their participation in its implementation, combat desertification, and mitigate its effects, calls for national action programs to provide for effective participation of women, and expand educational opportunities for women.

1995 First UNFCCC Conference of the Parties (COP) held in Berlin. First IPCC report notes that climate change is human-induced.

1997 Kyoto Protocol adopted, signatories agreed to work to develop binding targets for reduction of greenhouse gases (GHGs). Solidarity in the Greenhouse, a women's forum held at this meeting, calls on the UNFCCC to recognise gender in the negotiations. Kyoto Protocol includes language on gender.

2001 Third IPCC report notes that climate change is contributing to sea level rises and melting of the polar ice caps.

2002 Marrakesh COP includes a decision on "Improving the participation of women in the representation of Parties in bodies established under the UN Framework Convention on Climate Change or the Kyoto Protocol" calling on parties to take the measures necessary to enable women to participate fully in all levels of decision-making relevant to climate change.

2003 COP 9 in Milan, beginning informal network concerned about lack of gender in IPCC process launched, later to become Gender CC- Women for Climate Justice.

2007 Fourth Report noted that the earth is warming, air and ocean temperatures are rising, and melting of the ice-caps is widespread.

2007 Bali Action Plan adopted at COP 13 Adaptation. Decision to operationalise the Adaptation Fund under Kyoto. Gender CC produces several position papers is recognised for its leadership on gender issues.

2009 Copenhagen fails to achieve binding targets to reduce GHG emissions.

2010 Green Fund established in Cancun and expected to be operational by late 2014. The objective of the fund is to support programs, policies, and other activities of states parties to the UNCCC. Expected budget once fully operational will be 100 billion per year by 2020.

2012 COP 18 adopts decision aimed at "promoting gender balance and improving the participation of women in UNFCCC negotiations and in the representation of Parties in bodies established pursuant to the Convention or the Kyoto Protocol." The decision includes calls for women to be represented in all aspects of the UNFCCC process and links the UNFCCC to CEDAW and the Beijing Platform for Women as it adopts a goal of gender balance to inform a "more effective climate change policy that addresses the needs of women and men" while adding the issue of gender as a standing item on the agenda of future sessions of the COP.

2014 Fifth IPCC report includes chapter on gender equality and reproductive health.

2014 Options for a Fund wide Gender sensitive Approach paper presented at the meeting of the Climate Change board with follow up in 2014.

Since the Earth Summit in 1992 and the negotiations that led to the UNFCCC women's movements and gender equality advocates have played an important and critical role in drawing attention to women and environmental justice issues and more recently how climate change impacts on women and girls. The

Women's Caucus at the Earth Summit became a strong constituency organising under the slogan "Women for a just and Healthy Planet" and succeeded in not only obtaining a strong chapter on women in Agenda 21 but also influencing other key stakeholders in recognising the vital role women play in sustainable development.

Chapter 24 of Agenda 21 is entirely dedicated to the role of women in the management of sustainable resources and development. The chapter commits governments to increase the proportion of women in decision-making processes, and in the fields of science and education. It calls for the collection of data to assess the impact of environmental stress to women and women's contribution in averting such stress as collectively experienced by communities.⁴⁴ Agenda 21 also includes gender equality issues in the chapters on dealing with poverty, health, demographics, agriculture, forestry, oceans, water, toxic wastes and considerable emphasis has been placed on women's access to health.⁴⁵ Follow up processes to the Earth Summit, including the Commission on Sustainable Development, the World Summit on Sustainable Development (WSSD 2002), and Rio +20 all have outcome documents that reaffirm not only these commitments, but make the links to other global commitments to women's rights including Beijing and ICPD.

The UN Convention to Combat Desertification is the only Rio Convention that includes gender in the text of the convention itself and stresses "the important role played by women in regions affected by desertification and drought, particularly in rural areas of developing countries, and the importance of ensuring the full participation of both men and women at all levels in programmes to combat desertification and mitigate the effects of drought." The UNCCD also calls for the participation of women in efforts to combat desertification, and calls for building the capacity of different actors to combat desertification, including women. The UNCCD has adopted a number of decisions on gender issues and has developed an Advocacy Policy Framework on gender, which sets out time bound action oriented targets for mainstreaming gender in policy, organisational, constituency, and delivery. The UNCCD is also working with the International Union for Conservation (IUCN) to harmonise gender mainstreaming across all three Rio Conventions. In 2011 the UN Convention on Biological Diversity also adopted a Gender Plan of Action along with the adoption of its Strategic Plan for Diversity.

The UNFCCC and its binding 1997 Kyoto Protocol, primarily focused on emissions reductions, with the social aspects of climate change impacts often overlooked. While the UNFCCC failed to recognise women and their role in climate change, the UNFCCC came out of a process and related negotiations that not only recognised women's role but also committed to taking measures to eliminate barriers and support measures to achieve gender equality and women's empowerment.

Over the years there has been incremental process in bringing gender issues to the forefront of climate change negotiations and processes. Women's rights advocates and their allies have used a multi-pronged approach that aims to influence the evidence base, the institutional arrangements, including financial resources, and decision-making processes to transform the global and national processes, policies and programs dealing with climate change. This work has included strategic interventions that will lead to far reaching changes such as using the achievement of gender balance as a way to redefine the content, approach, and ultimately the response to climate change.

While experience shows that it is critical that once women reach a critical mass in decision-making, and when they are represented different priorities arise, it is also critical that increased participation of women happens alongside a concerted effort of raising awareness of gender equality issues in the context of climate change. This is being done through the organising of gender days, the production of position papers, outreach to delegations and working alongside other civil society actors engaged in the climate change negotiations at the global level. At the national level, women's movements, women's organisations, and gender equality advocates also working towards gender-sensitive approaches to climate change, while at the same time working to address the structural inequalities that increase women's vulnerability to climate change.

In 2007, the UNFCCC 13th Conference of Parties (COP) produced the Bali Action Plan (BAP), a two-year process by which every major component including both the social and human aspects of climate change

were to be addressed.⁴⁶ A shared vision for long-term cooperative action as well as enhanced action on mitigation, adaptation, technology development and transfer, capacity building, and finance was tabled at the Bali conference. The comprehensive Bali Action Plan was a paradigm shift for bringing social and human aspects of climate change to the forefront of the international climate change negotiating process.⁴⁷

Feminist advocates engaged in the IPCC process, within civil society, UN bodies, government delegations, and the secretariat have worked to ensure that the principles of gender balance and women's empowerment are central to all international climate change policy process.⁴⁸ At the 18th Conference of the Parties (COP) in Doha, in 2012, the UNFCCC agreed to strengthen women's representation and participation in UNFCCC proceedings. This was however limited to an objective that envisaged the expansion of women's participation in the climate change negotiating process and did not include other important gender considerations. Subsequently, parties to the UNFCCC adopted a landmark decision on "promoting gender balance and improving the participation of women in UNFCCC negotiations and in the representation of Parties in bodies established pursuant to the Convention or the Kyoto Protocol."⁴⁹

During the climate change negotiating process in Warsaw 2013, governments agreed to a number of decisions in the final outcome document that take into account gender equality. These included but were not limited to: financial mechanisms that must consider and include gender-sensitive approaches; development of technology that must consider gender-sensitive approaches and climate resilient programmes that include gender provisions; and national adaptation plans that place gender balance and women's empowerment at the centre of any national climate change process (UNFCCC, 2013).

However, progress on commitments to gender equality must be examined in the context of how the overall international climate change process is delivering on pledges for financial and technical resources, especially for adaptation and mitigation. Developing countries have produced national adaptation programme of action (NAPAs) as well as proposals on mitigating GHG emissions. Both NAPAs and Nationally Appropriate Mitigation Actions (NAMAs) must be informed by a country's national climate change frameworks, plans, and strategies.

The fifth assessment of the IPCC released in March 2014 argues that provision of reproductive health may have important health co-benefits, reduce the risk of climate change and have positive effect on health. Programmes that provide reproductive health for all women are seen as a way to slow population growth and its associated energy demands, with the co-benefit of reducing the number of maternal deaths. The assessment asserts that providing the unmet need for contraception in the Sahel region in Africa, with high fertility rates and vulnerability to climate change would reduce human suffering as climate change proceeds. It also argues that there is also an unmet need for contraception in the US, a country that has the second highest GHG emissions in the world. While this is a far more nuanced and balanced approach, it may fall into the arguments by population control advocates who argue that access to family planning will help "stabilise populations and contribute to comprehensive strategies to reduce CO₂ emission."⁵⁰ It is also far more complex, and ICPD was unequivocal in affirming that if needs for planning and reproductive health care are met, then population stabilisation will occur naturally, not as a matter of coercion and control.

Malthusian approaches to climate change and population do not take into consideration key issues related to unsustainable production and consumption patterns.⁵¹ In her landmark piece: “10 reasons why population control is not the solution to global warming,” Betsy Hartmann (2009) contends that population control targets the poor and promotes a eugenic form of environmentalism which states that economic resources scarcities are attributed to too many people instead of highly inequitable and environmentally damaging processes of production, consumption, and distribution which places the blame on the world’s poor.⁵⁰ It is indeed severely problematic to position population growth as the main driver behind the climate change crises as this evades a discussion around our energy consumption patterns and habits. A 2009 “ARROW for Change” bulletin entitled “In Search of Climate Justice: Refuting Dubious Linkages, Affirming Rights” contended that population control interventions undermine efforts by country’s affected by climate change to ensure robust policies towards family planning and reproductive rights.⁵² To succeed in promoting an integrated population and climate change agenda as a legitimate part of a global response to climate change, the ICPD must remain the compass that guides climate change interventions.

- 38 There are 188 countries party to CEDAW, 179 countries signed to ICPD and 189 to the Beijing Platform for Action
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- 40 Regardless of what post-2015 development agenda includes, climate change presents barriers to the achievement of the current and future development goals. For example, meeting the current goal of eradicating extreme hunger and poverty will remain a challenge with the reduction of agricultural production and climate related food security threats. Goals on education will be threatened as girls are pulled out of school to take on household tasks to enable families to cope with climate change impacts such as decreased access to water and fuel.
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National Responses to Climate Change and the Integration of Gender and Sexual and Reproductive Health and Rights

Bangladesh

Bangladesh is a low-lying country, considered as one of the most climate-vulnerable country in the world. Two thirds of country's territory is barely 5 meters above sea level. It is also one of the most densely populated, with majority of its population living along the coastal areas. Most of the poor lack access to land and are forced to live on and cultivate land that regularly floods during the rainy season. Approximately 75% of the population and 85% of the poor live in rural areas.⁵⁴ Increases in populations living in urban areas are predicted due to economic migration and displacement as a result of climate change, placing heavy demands for urban infrastructure and services, with only 25% of urban dwellers living in permanent structures, 70% have no access to tap water for drinking, and 40% of urban households have only open spaces and hanging latrines available as sanitation facilities.⁵⁵ Aside from the health risks for the general population, Bangladesh is particularly affected due to increased work burdens and gendered impact to their health, with household responsibilities for water, cooking, hygiene, and caring for children, the sick and elderly.

Bangladeshi women have unequal access and control over productive resources, including land, trees, housing and agricultural extension support.⁵⁶ An ADB study found that 30% of urban households were poor, but the rates were significantly higher for female headed households at 44% and even worse at 64% for slum dwellers.⁵⁵ They have limitations on their mobility, which compounded with other social factors place them at risk of disasters. Despite the existence of quotas for women, effective participation by women in local decision-making is limited and there is a lack of gender awareness to gender issues among decision-makers and service providers.⁵⁷ An estimated 14% of maternal deaths in Bangladesh are caused by violence against women and 15,000 women die each year because of maternal health complications.⁵⁸

Water pollution, especially of fishing areas, and fish and shrimp farming, salination, ground water contamination by naturally occurring arsenic; water shortages because of falling water tables in the northern and central parts of the country; soil degradation and erosion; and deforestation are critical environmental issues facing the country. With climate change, Bangladesh will experience more and more frequent flooding, severe tropical cyclones, and storm surges that will negatively impact all aspects of social and economic development in the country.⁵⁹ The Government of Bangladesh has worked to reduce the impact of disasters and some of its success can be attributed to its Cyclone Preparedness Program (CPP) which engages volunteers and provides shelters, resulting in a significant reduction of casualties from natural disasters. However, reducing structural inequalities and addressing development challenges that make people, and women and girls in particular, more vulnerable and less able to cope with climate change, remains an enormous challenge for the country.

The Bangladesh Climate Change Strategy and Action Plan 2009 identifies women as an important group for the protection of livelihoods and achieve equitable and sustainable growth. The Government of Bangladesh also recognises that, with the threat of climate change, it is estimated that eight to ten million people will be displaced by 2050 and will need to be relocated.⁶⁰ The Bangladesh Climate Change Strategy and Action Plan emphasises the government's commitment to strengthen the country's coastal plodders as a strategy to avoid a mass exodus of environmental refugees. Its central theme is to prepare to face the threats of climate change by building the resilience of the people to safeguard the country's economic success and future.⁶¹

Bangladesh is uniquely positioned as a promising example of climate change resilience primarily because the Government of Bangladesh has recognised and prioritised climate change as a pressing developmental priority (Government of Bangladesh, 2009). Over the past 30 years, the Government of Bangladesh has invested US\$10 billion to address the impacts of climate change.⁶² The current Climate Change Strategy and Action Plan builds on the country's previous National Adaptation Programme of Action. In the preface of

Bangladesh's Climate Change Strategy and Action Plan 2009, the Minister of Environment and Forest Hasan Mahmud asserts that "the thrust of the strategy is on sustainable development, poverty eradication and increased well-being of all vulnerable groups in society with special emphasis on gender sensitivity."⁶³ For Bangladesh, there are six critical areas where interventions are focused on addressing climate change and in particular climate change adaptation:

- food security,
 - comprehensive disaster management,
 - infrastructure,
 - research and knowledge management,
 - mitigation and carbon development, and
 - capacity building and institutional strengthening.
- The first three priorities reflect Bangladesh's prioritisation of adaptation mechanisms, given the country's exposure to increasing weather disturbances and loss of land area due to the constant sea-level rise.

The Strategy and Action Plan explicitly states its commitment to focusing on the most vulnerable segments of Bangladesh, including women and children. The Plan mainstreams gender issues within the sections dealing with access to food, health services, social protection and safe housing. The plan also points out that shortage of safe drinking water "will impose hardship on women and children, who are responsible for collecting drinking water for their families" while the "increasing saline drinking water may also result in health hazards, especially for pregnant women."⁶⁴ Comprehensive disaster management deals with strengthening systems in anticipating and managing natural calamities. The third area focuses on critical infrastructure that can protect communities such as raising the level of railroad tracks, coastal and river embankments, and cyclone shelters, especially as the country is situated where major river systems such as the Brahmaputra, the Ganges, and the Meghna meet.⁶⁵ Mitigation and low carbon development covers guarantee of energy sources to sustain growth. Bangladesh is also engaging in the Reducing Emissions from Deforestation and Forest Degradation (REDD) Plus and participating in the carbon market. Rather than focusing on clean energy sources, the plan also includes coal technology which has been rejected globally by the scientific community as a sustainable source of energy.⁶⁶ With Bangladesh already suffering climate change impacts, there is a concern expressed by Bangladeshi activists that resources for health systems will be further compromised, leading to even more vulnerable conditions for the poor and marginalised.

The work on climate change is handled at a ministerial level, through the Ministry on Environment and Forests. The government has set up a Climate Change Unit as the central point that coordinates any climate related-policy interventions among government agencies.⁶⁷ The unit is not under the auspices of the Ministry alone and is also being guided by the National Environment Committee under the Office of the Prime Minister.⁶⁸ The Climate Change Trust Act of 2010 provides for the creation and operationalisation of the Climate Change Trust Fund, a block government allocation that is meant for projects that can last for up to 2 years.⁶⁹ It also reaffirms the creation of the Climate Change Unit within the Ministry of the Environment and Forest and the formulation of a national climate change plan. In line with the 2009 Climate Change Strategy, the Action Plan calls for a consideration of the gendered impact of climate change. Most prominently the Health Pillar of the Action Plan considers the health aspects of women and girls more prominently. However, there is still much work to be done to integrate the SRHR of women and girls into the climate change strategy.⁷⁰

As pointed out in the country's National Climate Change Plan, the most complex repercussions of climate change impacts women and their capacities around social reproduction. Water scarcity results in women and girls having to walk long distances to obtain water. This situation is quite acute in several regions where water-logging occurs. Water-logging is almost synonymous with land grabbing in the sense that water is deliberately controlled through formal and permanent infrastructures like dams, without regard to the diminishing flow of water downstream. It is also contributing to the water salination in Bangladesh.

Water-logging has had negative impacts on women and girls, who not only suffer from the deprivation of water resources but may be exposed to gender-based violence as a result of having to travel great distances to obtain water. The main source of livelihood for women and girls in Bangladesh is in the agricultural

industry, which is also adversely by water shortages and increasing salinity, resulting in the planting of fewer crops and having lower yields. Floods, waterlogging, and salination have injurious impact on Bangladeshi women's lives and health. They suffer from waterborne diseases, lack of access or difficulty reaching medical facilities, and malnutrition. The destruction of sanitation systems results in women refraining from using the toilet during the day and as a result suffering from urinary tract infections. Mobility becomes a huge challenge for women after cyclone, particularly pregnant women, lactating mothers, and older and differently abled women.⁷¹

Violence against women in Bangladesh increases during disasters, both the in the private and public sphere. Male relatives have been reported to abuse women, particularly around management of resources and provision of food. Women may avoid going to shelters for fear of sharing a room with men, the collection of relief takes may take place far from home and among men, and they may be harassed if traveling to collect relief unaccompanied. (Women's Environment and Development Organization (WEDO); ABANTU for Development; Action Aid Bangladesh; ENDA Senegal, 2008).

The disproportionate impact of disaster on women and girls is evident where fatalities among women following cyclones and floods are five times higher than those of men.⁷² Causes for higher death rates include systemic gender inequalities and lack of access to resources and power. Women were not provided with the tools to enable them to cope with the flood response as information was not adequately disseminated and conveyed to women and girls. Early warning information was transmitted by men to men in public spaces and rarely communicated to the rest of the family. Set social norms preventing women and girls from leaving their homes unaccompanied by a male relative, they therefore perished waiting for their relatives to return home and take them to a safe place.⁷³ Social norms prevent women and girls from being taught how to swim and they were not able to save themselves when the floods came.⁷⁴

While the Bangladesh Climate Change Strategy and Action Plan contains many important elements that if implemented could have a positive impact on the lives of women and girls, including actions to provide water, improve sanitation, training of communities in shelter management, among others, women are not specifically targeted in these commitments.

Indonesia

Indonesia is the fifth most populous country in the world with 253 million people and a population growth rate of 95%⁷⁵. It is diverse in culture, ethnicity, language, and geography. With 17,000 islands, Indonesia is the world's largest archipelago, requiring the management of the longest coastline in the world. Current environmental challenges include deforestation; water pollution from industrial wastes, sewage; air pollution in urban areas; smoke and haze from forest fires. While Indonesia has made significant progress in reducing the number of people living below the poverty line, studies suggest that the poor are worse off, and that the severity of poverty has increased.⁷⁶ While child malnutrition has decreased, the proportion of people without sufficient food remains high and malnutrition is high among women. Underlying causes of malnutrition include household food insecurity, lack or limited access to clean water and sanitation, and poor food intake during pregnancy and lactation.⁷⁷ In 2006, there were more than six million female-headed households, many of them living in poverty and ostracized by social attitudes towards women having families without male heads, regardless of the circumstances that led to this situation. Access to justice for women survivors of gender-based violence, including sexual violence, and according to the World Bank "women are disempowered in fighting against values applied by local culture, social norms, and religious dogma; while the state system does not side with them."⁷⁸

Women working in the formal sector are often engaged in low-paying, low-skilled jobs. Women are underrepresented in among civil servants and women in rural areas find few options in the formal sector. Only 41% of women versus 73% of men are either working or looking for work⁷⁹ and many Indonesians migrate for work, often to enter the service sector in neighbouring countries and in the Middle East. In 2006, out of 680,000 registered overseas Indonesian migrants, more than 79% were women and approximately 88% of these women work in the informal sector mostly as domestic helpers. Indonesia has been successful in efforts to offer family planning programs, with a declining fertility rate currently at 2.18, a reduction

of over 60% since 1990. Since 2009, Indonesia introduced a maternal health policy making institutional delivery free of charge.⁸⁰ The age of first marriage is increasing, and the Marriage Law establishes legal age of marriage at 21. The UN Committee on the Elimination of Discrimination against Women (CEDAW Committee) expressed concern in its 2012 Concluding Observations about a range of areas where Indonesia is failing to meet its obligations under the Convention. However many of the recommendations have to date been largely ignored leaving women and girls at risk of human rights abuses. The CEDAW committee also expressed concerns with a number of discriminatory laws, the practice of female genital mutilation (FGM), currently allowing certain medical practitioners to carry out FGM. It also highlighted the lack of protection and labour regulations for domestic workers and the abuses and exploitation faced by Indonesian migrant workers in host countries.⁸¹

Despite progress towards meeting development goals, inequalities between women and men, boys and girls remain deeply entrenched. Climate change will continue to add to the existing obstacles and without concerted action on the part of the Indonesia government; it may threatened some of the progress achieved, not only for women but for all of its citizens.

Climate variability poses extreme threats to Indonesia where increases in temperatures have resulted in severe disasters, floods, and droughts. It is also predicted that if sea levels continue to rise, Indonesia will lose as many as 2,000 islands by 2030, and to date it has lost over 24 small islands (Climate Change and Environmental Risk Atlas 2014, 2013).

In Indonesia, the Ministry of the Environment is the lead institution for Multilateral Environmental Agreements, including those related to climate change. The country signed the UNFCCC in 1992 and ratified it in 1998. It signed the Kyoto protocol in 1998 and ratified it in 2004. Indonesia's 2007 National Action Plan Addressing Climate Change begins with an affirmation on how climate change can alter "social relationships" and "social and cultural patterns," and presents the plan as a "triple track strategy of tackling poverty, job creation and protection of the environment."⁸² The Government of Indonesia has identified that a key area of concern is the issue of adaptation to climate change and links this priority to national development plans. Indonesia's adaptation strategies are based on a sense of urgency to respond to grave threats posed by climate change. The government recognises that it must address disaster risk reduction; reforestation and afforestation in critical geographical areas; mainstreaming of climate change information especially in the context of disasters; enhancing scientific studies on climate change necessary for future planning; reviewing core policies which will be influenced by climate change; adjusting infrastructure planning and design, conflict management, and ground water distribution; developing climate change curriculum for high school and university students; and strengthening the capacity of Indonesia's Meteorological and Geophysical Agency.⁸³

Being the host of some of the world's remaining tropical forests, Indonesia has been actively participating in the REDD Plus and making it a prominent feature of its mitigation plans. REDD Plus is the UN Programme to promote reduced emissions from deforestation and forest degradation.⁸⁴ As a mitigation measure, it aims at providing an incentive for state and non-state actors to plant trees, instead of cutting trees down, promoting deforestation. To date, the REDD Plus process has been controversial, where critics argue that it has become a mechanism for developed countries to avoid being held accountable for their large GHG emissions by shifting programmes to cut emissions to developing countries. There have also been numerous questions raised about the protection of livelihoods and indigenous peoples. In September 2013, Indonesia established the Managing Agency for the Reduction of Emission from Deforestation and Degradation of Forest and Peat lands, which is expected to facilitate partnership agreements with REDD Plus.⁸⁵ Despite these efforts, current rates of logging activities and the conversion of forests into oil palm and acacia plantations, both in Kalimantan and Sumatra, may invalidate any possible benefits of the Redd Plus initiative in Indonesia.⁸⁵

Within the Indonesian Action Plan on Climate Change, the health pillar is harmonised with Health Ministry's vision, "Healthy Indonesia 2010."⁸⁶ There is a gap in how gender and climate change are being addressed in the Action Plan, however, if mainstreamed into the National Planning Process, its integration would be far-reaching. In 2000, the Ministry for Women's Empowerment drafted a presidential instruction

aimed at mainstreaming gender equality. It stipulates that all government institutions must carry out gender mainstreaming in all policy, program planning, implementation, monitoring and evaluation processes. It calls for human resources to implement these tasks; demands that sex-disaggregated data be collected; requires that gender-based analysis of all policies and programs, acts, regulations and budgets be conducted. However, Indonesian advocates critique that documents produced in relation to climate change are mainly gender-neutral, and institutional structures and mechanisms to address climate change are being developed without adequate inputs from women. In their assessment, policy and legal barriers to gender equality such as the Indonesian Marriage Law, and inheritance regulations, must be addressed to promote gender mainstreaming, including those related to climate change.⁸⁷

In Indonesia, Law No. 32 Year 2009 on Environmental Protection and Management, also referred to as EMA 2009 (An earlier version is EMA 2007), is the main law that governs the Ministry of Environment's mandate to ensure environmental protection. Law No. 24, 2007 on Disaster Management Provides for leadership through the National Disaster Management Agency and resources in managing natural, non-natural and social disasters and protecting lives and livelihood. Psychosocial services are part of the basic aid necessities (Article. 53) and rehabilitation (Article. 58) and the National Disaster Management Agency explicitly refers to pregnant women and nursing mothers as vulnerable groups.⁸⁸

While population growth is recognised as a concern in the National Adaptation Plan, there are no references to SRHR. Informants have identified cultural barriers as an inhibiting factor in any discussion around how climate change is connected to SRHR.⁸⁹ Experts note that it will become more feasible to address SRHR concerns into disaster-related events if they are automatically linked to programmes related to education and economic empowerment.⁹⁰

Philippines

Climate change is already affecting the Philippines and all predictions point to deteriorating environments for the country and its citizens as a result of climate change. One of the most hazard prone countries in the world, located in what is known as the Pacific Ring of Fire, the country is exposed to floods, typhoons, drought, earthquakes, and volcanic eruptions. On average, 20 tropical cyclones enter the Philippine area of responsibility and 9 make landfall each year. In November 2013, Typhoon Haiyan struck the Philippines and became the strongest typhoon ever to make landfall. With unprecedented strength and impact, it killed over 6 thousand people and almost one million people were affected.⁹¹ Over the last decade, almost 80% of the disasters occurring in the country have been weather-related. Uncontrolled urbanisation and environmental degradation including deforestation, soil erosion, air and water pollution in major urban centres, and coral reef degradation, among others, will exacerbate the situation.⁹² The four primary climate change hazards in the Philippines will be temperature increase, rainfall, extreme weather events, and sea level rise. The rise in sea level has already contributed to loss of arable lands and intensified salt-water intrusion in groundwater resources.

Climate change is real in the Philippines. Over the last two decades, there have been rising temperatures and prolonged dry and wet seasons; rising sea levels are putting coastal economic activities and infrastructure at risk; an estimated 5-10 percent of the country's mangroves and coral reefs are in good condition, and further habitat destruction will have adverse consequences for fish catches. Every year water supply for agriculture is limited as water shortages occur during the summer months, limiting agricultural activities and presenting a risk to food security. In some communities along the coastline, tidal variations increase the salinity of water, making it not potable.

With a population of 107 million, 52% of which are under 24 years old, the Philippines faces numerous challenges in meeting the needs of its population. Approximately 49 % of the population live in urban areas, a figure that is likely to increase as the rate of urbanisation increasing at an average of 2% per year. The maternal mortality rate in 2010 was 99 deaths/100,000 live births and the total fertility rate is 3.06, with a contraceptive prevalence rate of 48.9%.⁹³ Access to sexual and reproductive healthcare and services is a precondition to women's empowerment, a right that has been severely curtailed for Filipino women. Despite having the strongest rates of economic growth in the region, more than a quarter of the population

lives below the poverty line. Weak social services for the poor, including health systems, are further compromised by migration of qualified service providers, including health workers. Since the 1970s, the Philippine government has promoted migration of Filipino workers resulting in 1 out of every 10 Filipinos working abroad. As a result, remittances account for 10% of GDP and consumerism is a major driver in the economy.⁹⁴

The Philippines is a signatory to CEDAW, ICPD, and the BPFA. It has a robust set of legal and policy frameworks on gender equality, including the Government's Framework Plan for Women. The Framework emphasises women's economic empowerment, women's human rights and gender-responsive governance as keys to gender equality and women's empowerment. Despite this, implementation has been slow and under-resourced. An average of eight women die every day of pregnancy and child birth related causes, the female labour force participation rate lags behind the rate for men, 12% of men surveyed in 2003 admitted to having physically harmed women. According to an ADB assessment of gender in the Philippines, education indicators for girls are worsening; reproductive health needs and rights are fundamentally unmet; migration for women comes at a cost; and effective disaster risk assessment in the country requires a gendered lens. (Asian Development Bank, 2008).

In 1991, the Philippines adopted the Philippine Strategy for Sustainable Development (PSSD), the Philippine Agenda 21 and created the Inter-Agency Committee on Climate Change (IACCC). The country became a signatory to the UNFCCC on June 1992 and ratified it in 2003. The Climate Change was enacted in 2009 and climate change was mainstreamed in the Philippine Development Plan (PDP) 2011-2016. A National Climate Change Action Plan (NCCAP) was signed in 2011.

Following the passage of the Climate Change Act in 2009, which provides for the establishment of the Climate Change Commission (CCC), the Philippines developed its National Climate Action Plan 2011-2028. The plan has seven major areas: food security; water sufficiency; ecological and environmental stability; human security; climate-smart industries and services; sustainable energy; and knowledge management.⁹⁵ The Philippines National Climate Change Commission recognises that climate change is a cross-sectoral issue and has agreed that the priorities around climate change should be framed in the context of climate change adaptation. The Climate Change Action Plan supports climate financing for local governments and communities. Albeit that the Philippines is not a major emitter of GHGs, the government recognises green growth as an approach to sustainable economic growth and more so as a part of its long term goal to transition to a greener growth path.⁹⁶ With its strategic priorities around climate change adaptation, the government has committed to build the adaptive capacity of women and men in their communities with the support of key sectors.⁹⁷ The longer term goal as explained in the National Climate Change Action Plan seeks to reduce the risks of women and men and other vulnerable groups from climate related disasters.

In the action plan, food security covers enhanced resilience of agriculture and fisheries communities and production in order to "ensure availability, stability, accessibility, and affordability of safe and healthy food amidst climate change."⁹⁸ This, through the conduct of vulnerability and risk assessments in provinces and other related studies; gender-responsive, climate-smart policies, plans and budgets, including national land-use law; building adaptive capacity among farming and fishing communities as well as updating the necessary scientific information and databases. Similarly, water sufficiency focuses on a climate and gender-responsive water governance; sustainability of water supply that is accessible and affordable; and enriching the knowledge and capacity of the water sector.⁹⁹

The pillar on human security covers a gender-responsive disaster risk reduction strategy and the protection of women and other vulnerable groups such as children, elderly and persons with disability. This can be carried out through "provincial level gendered vulnerability and risk assessments"¹⁰⁰ which include implementation of gender-responsive climate change adaptation and disaster risk reduction and management in local plans; development of gender-based knowledge products; organising networks of climate change practitioners and resources; training of health professionals and community workers; implementation of community-based monitoring; improving national and local emergency response and post-disaster management systems; and intensify gender-sensitive information and educational campaigns.¹⁰¹ The action plan requires a more comprehensive gender-based analysis of the impacts of climate change-related

disasters, women's vulnerability and agency. Women's organisations mobilised during the drafting stages of the plan to have SRHR included in the plan, however, their views are not reflected in the final Plan.

In the Philippines, the Climate Change Act (Republic Act 9729), provides for the mainstreaming of climate change into policies, the formulation of a framework strategy and program on climate change and the creation of the Climate Change Commission. The policy explicitly commits to the incorporation of "gender-sensitive, pro-children, and pro-poor perspective in all climate change and renewable energy efforts, plans and programs."¹⁰² The National Climate Change Action Plan is a landmark initiative as it explicitly commits to gender-responsive approaches to addressing climate change.

The non-inclusion of sexual and reproductive health in the National Climate Change Action Plan is an example of the challenge faced by many countries when it comes to policy coherence and implementation of gender equality commitments. The Philippines is a signatory to numerous international human rights instruments and agreements, including CEDAW, BPFA, and ICPD. There is a Philippine Plan on Gender, a Framework Plan for Women, both linked to the national Medium Term Development Plan. The Framework Plan for Women focuses on three themes: women's economic empowerment, women's human rights, and gender-responsive governance. Despite this favourable policy environment, the government is failing to implement its own policies and laws. The lack of coherence when it comes to climate change, gender equality, and SRHR is part of a larger problem of governance and coordination.

The provision of sexual and reproductive health services has always been a controversial issue in the Philippines, where religious constituencies influence government policy on issues it considers part of its moral domain, including women's rights. Catholic conservatives are engaged in a battle with health, women's rights, reproductive health advocates, and social movements in blocking efforts towards the passing of the Reproductive Health Bill. Although the Reproductive Health Bill was approved as law in 2013, it was challenged as unconstitutional in the Supreme Court through an injunction, primarily by the Catholic Church and other religious groups. The Court declared the Reproductive Health Law as constitutional in April 2014, but voted to strike eight provisions partially or in full. The law requires government health centres to hand out free condoms and birth control pills, as well as mandating that sex education be taught in schools. It also requires that public health workers receive family planning training, while post-abortion medical care is also legalised. The Reproductive Health Law is crucial to ensuring that women have adequate access to SRHR information and services, including in emergencies and climate change adaptation strategies.

The response to Typhoon Haiyan not only highlighted major issues and failings that need to inform future disaster responses in the Philippines. Fatality numbers were not sex or age-disaggregated, making it extremely difficult to understand the gendered impacts of the Typhoon. Currently in the Philippines, 3 million men and women are relying on some form of food assistance, however, sex-disaggregated data is also not available for this.¹⁰³ The lack of data has created enormous challenges for women's rights advocates engaged in the Damage and Loss Assessment (DALA) process post Haiyan and will likely result in a gender blind outcome. Oxfam reported that Typhoon Haiyan exposed women and girls to sexual and gender-based violence. The absence of female police officials and the scarcity of women only spaces in evacuation centres also posed grave risks for access to SRHR services.¹⁰⁴ WHO estimates that more than 200,000 pregnant women and 130,000 breastfeeding women in all disaster-hit areas in different provinces need specialised prenatal, postnatal, child health, health promotion, and family planning services.¹⁰⁵

The lack of access to sustainable economic livelihoods has also exacerbated the vulnerability of women in post-disaster Typhoon Haiyan. Many of the 28 million who were employed in the service sector and who lost their livelihoods were women.¹⁰⁶ In the affected areas of Tacloban and Visayas, Oxfam reported that because of lack of access to land and credit, women were forced to look for informal terms of employment that offered very little benefit.¹⁰⁷

Access to commodities for SRHR remains one part of services that need to be provided during emergencies.¹⁰⁸ The Family Planning Organization of the Philippines (FPOP) has been implementing the Minimum Initial Service Package (MISP) for Reproductive Health during emergencies,¹⁰⁹ which includes the deployment of medical professionals, medical equipment, and supplies in a place where emergency treatments can be done and prevent maternal and infant mortality and mitigate traumas. As Nanda Senoc (2013) describes, “The immediate people who are affected are women and children. MISP is designed to mitigate the impact of this displacement to women and children.”¹¹⁰ As in other places, women and girls experience difficulty in evacuation centres especially with limited toilets and baths that do not always have running water.

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- 65 Government of Bangladesh. (2009). Bangladesh Climate Change Strategy and Action Plan. Ministry of Environment and Forests. Dhaka (p.3). Retrieved from, http://www.moef.gov.bd/climate_change_strategy2009.pdf.
- 66 As former executive director of the NGO Forum on the ADB Renato Redentor Constantino explained, “Clean coal’ power plants can only accomplish today at best up to 50 per cent thermal efficiency. This means that half the blight still goes out the smokestack. And if any of the coal plants try to employ that that other fantasy called “carbon capture” or “carbon sequestration,” the efficiency of the power station plunges, which means that more coal will have to be burned to produce a similar amount of energy.” Clean coal is one of the alternatives being eyed to be marketed by the World Bank (WB) and the Asian Development Bank (ADB). “A Clock Ticking.” In Women in Action (Vol2, 2009), p.
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In the Philippines, climate change will challenge an already weak health system posing significant challenges for SRHR, including the resourcing of reproductive health, women's health, STI and STD screening and services, and HIV prevention, testing, counselling, and treatment. While the Philippine Climate Change Commission conducts regular consultation among stakeholders, the participation of women's groups is limited.

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Examination of SRHR and National Action Plans

The national climate change adaptation action plans of Bangladesh, Indonesia, and the Philippines recognise the importance of addressing gender-related vulnerabilities by mainstreaming gender and identify population issues including population pressures and migration. They have set out priorities aimed at improving information systems, building resilient infrastructure, having robust disaster management, and ensuring access to appropriate technology. However, they have yet to make the link to SRHR as an integral part of addressing existing gender inequality and vulnerability. A common institutional challenge is the ongoing task of bolstering the credibility of climate change governance and coordinating mechanisms that are fairly new compared with more established and critical agencies such as ministries on environment and forest, science and technology, public infrastructure, and health, among others. The national adaptation plans also recognise that climate change affects men and women differently and that the gender-differentiated impacts of climate change have become more pronounced in each country.

The national adaptation plans fall short in appreciating the deeper disparities that inform the disproportionate impacts of climate change and the necessary specificity in planning and implementing any policy, program, and practical intervention. While they provide context in terms of climate change's immediate challenges to natural resources and human capacity, they fail to incorporate disparities along class, gender, sexuality, religion, ethnicity, language, among others. They remain in the technical and scientific realm and miss the important social and human dimensions of climate change.¹¹¹ These plans are shaped by the pillars of discussion at the UNFCCC: adaptation, mitigation, technology transfer, and finance. Aligning the plan's pillars with the UNFCC processes enables countries to qualify for funds from various climate financing instruments. The most recent IPCC assessment will support bringing to the fore the social dimensions of climate change and hopefully help countries move toward more holistic approach with the aim of building the resilient communities. Consequently, there is now also an important opening to advocate for the inclusion of SRHR within the National Adaptation Plans.

Key informants in this research articulated vulnerability to climate change in the context of SRHR largely from a public health perspective.¹¹² Talukder (2014) and Soentoro (2014) contend that the SRHR dimension is most pronounced when we consider the health impacts of climate change on women and girls. In disaster prone areas, when an emergency strikes, interventions deal with pressing and urgent humanitarian needs, and often overlook equally critical SRHR services.¹¹³

The needs and capacities of Lesbian, Gay, Bisexual and Transgender (LGBT) populations or other marginalised groups are also often overlooked in emergency situations. A recent study¹¹⁴ in the Philippines found that despite some initial community resistance, an LGBT organisation played a critical role in recovery efforts after Typhoon Ondoy hit their community in 2009. The experience led to greater community acceptance of the LGBT community and provided the LGBT organisation the opportunity to support their community on broader development issues.

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Conclusion and Recommendations

Disasters and climate-related events will worsen an already precarious environment for gender equality and the achievement of SRHR. While the Bangladesh, Indonesia, and the Philippines recognised that women and girls and their needs must be an integral part of climate change responses, there is still a major gap between policy pronouncements and action on the ground.

To accelerate progress and reduce the impact of climate change related disasters on women and girls, this study offers the following recommendations:

- Fulfil international commitments to address the root causes of gender inequality and increase women's access to decision-making structures and climate change resources, including funding streams.
- Eliminate social, political and economic barriers to women's enjoyment of their human rights as these barriers cause or increase their vulnerability to the impact of climate change.
- Ensure policy coherence between government policies and commitments to gender equality, SRHR and climate change plans and budgets.
 - Collect, analyse, and report relevant data disaggregated by sex and age and other stratifiers to inform gender analysis and inform processes and practices.
 - Develop gender-responsive sexual and reproductive health services that reach the poorest populations and respond to the needs of women throughout their life-cycle.
- Integrate gender assessments, analysis, and gender equality indicators into mitigation and adaptation programmes to identify where specific vulnerabilities to climate change lie, and where opportunities for mitigating and adapting to climate change can be found.
 - Engage women at the community level in participatory assessment processes.
 - Actively support women's leadership in identifying opportunities for mitigation and adaptation.
 - Develop gender-responsive monitoring and evaluation tools of adaptation and mitigation to support and evaluate gender mainstreaming efforts.
- Ensure the participation of women in disaster risk management, including in the planning, implementation, and monitoring and evaluation processes
 - Organise separate disaster risk management consultations and planning exercises with women at a time that is convenient for them given their multiple roles and responsibilities.
 - Identify gender-specific recovery needs, with respect to housing, land/property rights, security, physical and mental health, sexual and reproductive health, and engage women in recovery activities.
 - Develop a gender and strategy plan, including resource needs and monitoring tools.
 - Ensure that sex-disaggregated data is collected pre- and post-disaster and engage women's organisations in the collection and analysis of this data.
 - Specifically address gender-based violence in all aspects of disaster risk management and in working with populations displaced by emergencies.
 - Document and disseminate best practices for the involvement of women in disaster risk reduction.
 - Review and strengthen NAPAs to include SRHR, including integration into adaptation and disaster responses.
 - Build the capacity of government bodies leading on climate change to integrate gender analysis, tools for mainstreaming, indicators and best practice into their work.
 - Ensure that human and financial resources are earmarked for the implementation of gender mainstreaming activities included in the NAPAS.
 - Donor countries, foundations, and UN agencies should earmark climate change resources for projects addressing gender equality and climate change and SRHR in the context of climate change.
 - Loss and damage assessments must go beyond using an economic lens and include a broader social perspective that considers and responds to gender inequalities and to the different roles played by men and women.
 - Conduct comprehensive assessments on the effect of climate change on women's health,

- including their sexual and reproductive health.
- Addressing violence against women and girls as part of the disaster risk reduction and development agendas, ensuring that planners anticipate increased violence against women and girls and involve women's organisations and domestic violence services in emergency planning.
- Create mechanisms that guarantee women's equal access to negotiating, developing, managing, and implementing adaptation and mitigation financing.

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