



Case Report: Another Burden to Bear: The Impacts of Climate Change on Access to Sexual and Reproductive Health Rights and Services in Bangladesh

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Climate change disproportionately impacts women, particularly those who are already restricted by gender inequality. Climate related events (CRE), such as extreme weather events, droughts, rising sea levels, leave millions vulnerable. Increasingly, the sexual and reproductive health and rights (SRHR) of women are negatively impacted during and post climate change related events. In the absence of climate related events, access to SRHR services is already limited due to economic, cultural, and social constraints that prevent women from making decisions concerning their bodily autonomy. During and post climate disasters, such constraints are worsened. Limited access to SRHR services increases women's risk of physical, mental, and psychological harm; it also impacts on their ability to build capacity and resilience to climate change. This article examines the rise in climate related events in Bangladesh and the corresponding harm of climate change on women's access to sexual and reproductive health care. The article argues that the impact of climate change on women needs to be viewed through a reproductive justice framework. The first step to prevent the gendered impacts of climate change is for international and national frameworks to identify individual needs to build capacity and resilience.

Keywords: Bangladesh, girl, women, climate change, sexual health, reproductive justice

INTRODUCTION

Climate change poses a significant threat to humans and the environment. Climate related events (hereafter referred to as CRE), such as extreme weather events, droughts, rising sea levels, leave millions vulnerable (Smith et al., 2014). It can affect economic and social structures, resulting in mass displacement of populations, intensified poverty, conflict, and even war (Banwell et al., 2018). Climate change can also significantly impact health outcomes (Smith et al., 2014; Mahapatra et al., 2018). Poor health outcomes, because of climate change, are often seen in disadvantaged population where capacity and resilience to climate change is poor. Women, particularly women restricted by gender inequalities, are often amongst the populations most affected (Smith et al., 2014). The sexual and reproductive health and rights (SRHR) of women are progressively worsened during and post climate change related events (Olsson et al., 2014; Women Deliver, 2020). In the absence of CRE, access to SRHR

services may already be limited due to economic, cultural, and social constraints that prevent women from making decisions concerning their bodily autonomy. During and post climate disasters, these access constraints increase (Women Deliver, 2020). Limited access to SRHR services increases women's risk of physical, mental, and psychological harm; it also impacts on their ability to build capacity and resilience to climate change.

Improved gender equality is linked to improved climate change resilience and adaptation. Successful climate change resilience and adaptation requires understanding the gender-specific requirements of women. Climate change threatens the economic, social, and reproductive security of women. In situations where there is already limited access and rights, climate change related events (disasters) place additional stress on women's sexual and reproductive autonomy. Women's reproductive justice is essential for improved climate change mitigation and adaptation. Yet reproductive justice is missing from the international and national frameworks on climate change.

References to SRHR needs or services, in relation to climate change, are scarce in many of the international frameworks designed to introduce international and national standards for climate change resilience and mitigation. Consequently, only two out of 194 states (Liberia and Peru) have reported on their gender inclusions in their national climate change policy. No state has referenced or considered right to access of sexual and reproductive health services in the aftermath of climate change in their Intended Nationally Determined Contributions (Flavell, 2020).

Why are SRHR services missing from national climate change related mitigation frameworks? In examining the single case study of Bangladesh, where there has been a growth in climate change related events over the past decade, the article finds national policies increasingly refer to women as vulnerable to the impact of climate change yet provide no specific policy to address their SRHR needs. The exclusion of SRHR from climate change policy is a form of reproductive injustice. Neglect of SRHR needs and services due to climate change related events stems from wider conditions of gender inequality and gender blindness. The article examines the absence of SRHR services from climate change related national frameworks in two sections. First, we identify the limited integration of gender in climate policies at the international and national levels, despite clear evidence of their constitutive relationship. Second, we examine Bangladesh as an example of a situation where climate related events have persisted in parallel with intense gender inequality and discrimination. Despite the absence of specific sexual and reproductive rights language in Bangladesh climate change frameworks, we investigate whether, over the past 5 years (2015–2020), there is growing awareness of sexual and reproductive inclusions in the climate related mitigation programs being carried out by non-government organisations (NGO), donor aid organisations, and the Government of Bangladesh.

We argue that international and national climate policies do not effectively mainstream gender-specific requirements into their frameworks. SRHR services are, in fact, completely excluded from international and national level frameworks. The

exclusion of SRHR from climate change related event mitigation frameworks is a continuation of reproductive injustice. The Bangladesh case reveals that the women most likely to be affected by climate change related events already experience high levels of gender inequality. Under these circumstances, there is limited opportunity for them to challenge traditional social norms by suggesting SRHR needs in climate change policy. There is a need for international frameworks concerning climate change to take up the issue of SRHR to facilitate discussion and inclusion of the reproductive justice framework at the national level.

Methodology and Data

The article seeks to understand why SRHR services are missing from national CRE mitigation frameworks. We examine Bangladesh as a single case study to examine whether, between 2015 and 2020, the absence of specific mention of SRHR service inclusions is affecting access and services during climate related events. Given the current global pandemic, ethically attaining primary data and first-hand information on this topic is complex. Thus, a discourse analysis of existing literature and secondary data analysis for the single case study has been employed. An inductive process tracing approach to a single case study has the advantage, from a feminist approach, of generating inclusive insight into individual and community level phenomena and experiences (Ackerly and True, 2010).

The purpose of utilising this method is to understand how key national and international stakeholders have responded to CRE in Bangladesh with SRHR inclusions, and to investigate under what conditions access to SRHR services has been included during and post-CRE disasters in Bangladesh. The database used for this report is ReliefWeb. ReliefWeb is a humanitarian information service provided by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA). The service monitors and collects information from more than 4,000 key sources, including humanitarian agencies at the international and local levels, governments, think tanks and research institutions, and the media. Through this portal, global humanitarian workers and decision-makers are provided with up-to-date reports, programmes, and frameworks on a 24/7-h basis, allowing them to make educated decisions and prepare successful responses. This database includes specific thematic searches for gender policy, programs, and frameworks, as well as climate change policy, programs, and frameworks being implemented at the national and community level by states, international actors (i.e., United Nations agencies and partner organisations), international and national NGOs, Bretton Woods institutions (World Bank, International Monetary Fund), development actors, and civil society. Two separate searches were conducted. A time criterion of ~6 years (01/01/2015–23/09/2021) was applied to both searches. Except for infographics, news and press releases, and maps, all content format types were included in both searches. The initial search included the theme of "Climate change and Environment." This search generated 73 reports. The second search included the addition of "Gender" in the theme criterion, generating 9 reports.

LITERATURE REVIEW

Climate change and subsequently CRE are accelerating, and its impacts are expected to become more severe (The Climate Council, 2022). The most recent Intergovernmental Panel on Climate Change (IPCC) reports (Assessment 6, 2022) states that multiple unavoidable climate hazards ensue over the next two decades with global warming of 1.5°C (IPCC, 2022). Risks to populations will increase, particularly for those in low-lying coastal settlements. Between 2000 and 2009 at least 7,348 climate related disasters have occurred, claiming the lives of 1.23 million people (OCHA, 2021). Further, in 2014 the Intergovernmental Panel on Climate Change (IPCC) exposed various climate-induced health complications that have surged in recent times. These health complications were seen to rise due to poor air quality, the spread of vector-borne diseases, changes in temperature, floods, and storms (Smith et al., 2014; Mahapatra et al., 2018). Although the nature of climate change is transboundary, its effects are selective in that those who are already experiencing inequality and resilience limitations (namely populations in the Global South) are most affected (Hashim and Hashim, 2015; Banwell et al., 2018). “Gender, age, race, economic status, education, and other social characteristics” all determine an individual’s vulnerability and adaptive capacity to climate change and climate related events (Olsson et al., 2014; Smith et al., 2014; UN Women, 2021).

Considering past trends and weak climate measures, as pointed out in the Sixth Assessment Report, outcomes are expected to cause severe chaos (IPCC, 2022). Weak policies and frameworks often stem from limited or misdirected framing or perspective of the situation. Kronsell (2019) states that the global agenda on climate change lacks social perspectives—the lived experience of climate. As a result, policies and frameworks are focused on the economic impacts of steering away from carbon-emitting activities (e.g., burning of fossil fuels) rather than the 2-fold deficits that result from the impacts of climate change (Olsson et al., 2014; Sorensen et al., 2018; Kronsell, 2019). Consequently, policies and frameworks primarily focus on adaptation (adjustments in systems in response to CRE) rather than mitigation (reduction or prevention of CRE) (Sorensen et al., 2018; Flavell, 2020). This focus limits efforts to understand how effective mitigation and subsequent adaptation needs to be designed and realised through the participation of all affected and vulnerable groups (Smith et al., 2014). Additionally, current national level policies and frameworks concerning climate change lack a comprehensive understanding of the cause-and-effect relationship between climate change and factors such as health and women’s rights (Bedoya, 2018; Sorensen et al., 2018; McLeod et al., 2019).

Researchers and scientific bodies like the IPCC have found that adolescent girls and women are more vulnerable (due to prominent gender inequalities) to the impacts of climate change (i.e., heatwaves, droughts, floods) than men (ARROW, 2014; Olsson et al., 2014; Women Deliver, 2020). This is particularly true for women already burdened by poverty and persisting gender inequalities. Women Direct (2020) states that the bidirectional relationship between gender inequality

and social and economic factors is responsible for the higher degree of adversities women face due to climate change. Before climate related events, most women in locations vulnerable to these events experienced unequal access to essential social, financial, and natural resources, including food insecurity and unequal decision-making power. They have limited capacity to increase resilience to CRE (Women Deliver, 2020). During CRE or periods of instability, these adversities are worsened (Bedoya, 2018).

Neumayer and Plümper (2007) have found that women who have survived climate related events are more likely to face decreased life expectancy, increased complications during childbirth, mental health disorders, and gender-based violence. Such patterns were seen in Bangladesh during past cyclones (1970, 1991, and 2007) (Rahman et al., 2019). Furthermore, research has shown that during a climate related crisis, girls are often the first to be pulled out of school to help their families with domestic chores, make money or look after their siblings (McLeod et al., 2019; Women Deliver, 2020). Additionally, girls and women who depend on their surrounding environment (i.e., smallholder farmers) are at a greater risk of falling below the poverty line and developing poor health outcomes specific to their gender (Sorensen et al., 2018).

Climate change also directly impacts on sexual and reproductive health (SRH) among girls and women (Women Deliver, 2020). SRH, according to the Guttmacher-Lancet Commission, refers to “the state of physical, emotional, mental and social well-being in relation to sexuality and reproduction” (Starrs et al., 2018). Bedoya (2018) notes that the impacts of climate related events on SRHR are 2-fold, meaning that its effects can be direct and/or indirect (Women Deliver, 2020).

CRE can directly influence maternal and neonatal health outcomes, fertility, human immunodeficiency virus (HIV) infection and transmission, menarche, and the spread of vector-borne diseases. These health outcomes often worsen when access to SRHR services is disrupted or limited by climate related events (Women Deliver, 2020). More frequent storms, floods, and wildfires can inflict physical damage to health services and infrastructure, as well as interruptions in medical supply chains and the loss of medical data (Benjamine, 2016). When health facilities and supply chains are interrupted, it has a direct and immediate impact on SRHR service access and quality, such as “post-exposure prophylaxis for Human immunodeficiency virus (HIV), HIV treatment, emergency contraception, and safe abortion services” (Onyango and Heidari, 2017). This is visible in Bangladesh, where increased flooding incidences have resulted in a shortage of contraceptives at health institutions in rural and distant locations (ARROW, 2014; Bongaarts and Sitruk-Ware, 2019).

Insufficient access to health services can indirectly decrease the use of contraceptives, limit counselling and psychosocial support for young mothers, limit post-abortion care for crisis-affected communities (if previously available), and decrease treatments and testing for HIV infections and sexually transmitted infections (STIs) (Benjamine, 2016; Chukwumalu et al., 2017). Increased counts in STIs can cause adverse long-term health implications (i.e., infertility, tubal and ectopic pregnancy,

cervical cancer, etc.) for women if left untreated (Behrman and Weitzman, 2016). Reduced contraception access can also lead to more unwanted pregnancies, pregnancy difficulties, unsafe abortions, and death during childbirth (Behrman and Weitzman, 2016; Women Deliver, 2020). Unsafe abortions during and post CRE account for more than 13% of maternal deaths globally (Behrman and Weitzman, 2016; Chukwumalu et al., 2017).

Extreme weather events, wildfires, and decreased air quality can also impact girls' and women's mental and physical health (Bedoya, 2018). During menstruation and childbirth, girls and women are more prone to anaemia and malnutrition, especially during periods of climate-driven food insecurity (Sorensen et al., 2018). Anaemia is linked to cognitive impairments, including diminished working memory, poor attention span, and poor educational outcomes (Jáuregui-Lobera, 2014). Additionally, exposure to poor air quality preferentially impacts women due to a greater proclivity for higher deposition of particulate matter in lung tissue and higher rates of anaemia (Chen et al., 2005). Poor air quality is known to be linked to adverse birth outcomes (Šrám et al., 2005) and affects maternal or child health in that it is associated with stillbirths, intrauterine growth restriction, and congenital disabilities (Chen et al., 2005; Health Effects Institute, 2018).

Such disparities persist due to gender exclusion in climate change research. The 2019 Lancet Countdown on health and climate change, for example, primarily focused on the direct health impacts of meteorological changes (Watts et al., 2019). Gender-specific impacts were only mentioned when socioeconomic and cultural circumstances are discussed. Furthermore, literature on SRHR and climate change present very gender disaggregated data, limiting understanding of how cross-sectoral issues impact people's resilience to climate change and their capacity to participate in climate action (Women Deliver, 2020). Lack of disaggregation also amplifies gaps in our understanding of how access to SRHR services for women is impacted during CRE. Therefore, analysis rooted in social justice and equity needs to be employed to understand the complex link between SRHR, gender, and climate change. In turn, this will allow for effective climate change action and ultimately operative strategies to promote the use and access to SRHR and services.

Climate change and climate related events are disasters that have a disproportionate impact on women (Olsson et al., 2014). As described above, the health impacts as well as the concomitant economic and social impacts limit women's resilience and recovery. Women Deliver (2020) suggests that national and international Disaster and Risk Management (DRM) efforts need to incorporate the immediate, short-term, and long-term impacts of CRE and antedate how the unexpected impact of disaster impacts access to health services and recovery (Women Deliver, 2020). DRM processes also need to pay more attention to the SRHR of women and young girls. Currently, international frameworks and conventions have only briefly discussed the differential impacts of climate change on women. Guidelines concerning this issue are vague and up to the interpretation of individual nations. As a result, climate mitigation and adaptation policies concerning women vary depending on the nation.

Climate Framing

The combination of environmental stress and gender inequality contributes to higher level of human insecurity during and after CRE. Environmental insecurity (Detraz, 2009, 2014) describes how individual's access to political, economic, and social systems are impacted by climate change events; and this stress, in turn amplifies preexisting inequalities. In situations, for instance, where gender inequality already produces differentiated access to resources and power, environmental stress and climate disasters accelerates gender inequality gaps (Detraz, 2009).

CRE and disasters like floods, droughts, cyclones, and extreme heatwaves bring about challenges that often worsen outcomes for women. Women and young girls are tasked with roles that heavily depend on the access to local natural resources. When natural resources become limited because of climate change, girls and women must travel longer distances to obtain food and water, increasing their risk of sexual and physical abuse (Parkinson and Zara, 2017; Sorensen et al., 2018; Women Deliver, 2020). As well as restricted access to natural resources, access to basic health services also become scares during and post CRE and disasters. Often women, particularly pregnant women, are left without access to antenatal care for months, with many having to walk longer distances to regain access to services. In addition to physical relocations, social and cultural issues, as well as gender norms, influence access to and control over resources, as well as the division of labour. As a result of CRE and catastrophes interwoven with social, institutional, cultural, and political causes that sustain differential vulnerability, existing gender inequality is amplified or heightened (Olsson et al., 2014).

While previous studies have emphasised women's quasi-universal vulnerability to climate change (e.g., Denton, 2002), this focus can overlook the complex, dynamic, and overlapping power relations as well as other structural and place-based sources of inequality (Nightingale, 2009). Furthermore, portraying economically disadvantaged women as victims ignores their agency and stresses their fragility as a problem in and of itself (Olsson et al., 2014).

Women's and girls' special needs are not always regarded with the same urgency as concerns like shelter, water, and food help in catastrophe response and recovery (Olsson et al., 2014). Internal displacement, on the other hand, tends to exacerbate pre-existing vulnerabilities, such as gender inequality and the risk of Gender Based Violence. Women are, on average, less economically, legally, politically, and socially empowered than men in the world (Olsson et al., 2014). The risk of climate change disasters and its impact on populations is increasingly determined by health, economic, and security inequalities. These inequalities are gendered and intersectional. The differentiated impact of climate change on populations is further explained through the lens of intersectionality. Intersectionality indicates that multiple categories of privilege and repression at the macro social-structural level intersect at the micro-level of human experience (Bowleg, 2012).

An intersectional approach to gender and climate change has led to researchers like Kaijser and Kronsell (2013) arguing that we need to understand in contextual, case by case detail, how women's social, economic, and political

circumstances will be altered by climate change in different contexts. Within the context of climate change, this approach seeks to identify its negative impacts and which conditions worsen or intensify micro and macro-level outcomes for women (Kajiser and Kronsell, 2013).

Gender and environment security literature argues that women's lived experience of climate change disasters is generally excluded from policy design that seeks to mitigate and prevent further disasters (Detraz, 2009; *Women Deliver*, 2020). Exclusion represents a continuation of structural gender inequality rather than being new or distinct to climate change politics. May the same, we ask, be said of reproductive justice? Reproductive justice is rarely discussed within the same space as climate change policy (*Women Deliver*, 2020). Women who can make important decisions about their bodies are also more likely to take charge of other important aspects in lives (Bradshaw and Fordham, 2015). In situations, such as Bangladesh, climate change adaptation and mitigation policies are blind to reproductive justice because of a systematic failure to improve SRHR and bodily autonomy for women.

Reproductive justice, as defined by the SisterSong Women of Colour Reproductive Justice Collective, is "the human right to maintain personal bodily autonomy, have children, not have children, and parent the children we have in safe and sustainable communities" (SisterSong, 2014). The reproductive justice principle examines how a woman's ability to control her reproductive destiny is inextricably related to the conditions in her community, which are more than just a matter of individual choice and access (Ross, 2007, 2017). Further, it emphasises the societal realities of gender inequality that overlap with interactionism, notably how different women experience disparity in their reproductive destiny and control opportunities. Reproductive justice demands the identification of stakeholders to assert and protect women's human rights, and (equally important) to ensure social supports are available for individual reproductive decisions to be effectively fulfilled (Ross, 2017). Reproductive justice is applicable to CRE because, in disaster situations, it is not just the right to access services but the provision of services that is essential for women's reproductive autonomy.

The environment and gender literature has identified policy and program gender blindness when it comes to understanding the stress of climate change on women's existing micro level experiences, including the harm of CRE on SRHR services and health outcomes. This is a form of reproductive injustice. To what extent is this blindness the result of gaps in international and national frameworks, but also pre-existing systemic inequalities concerning women's right to access sexual and reproductive health care. Kronsell argues that "there is a need to recognise the importance of power relations to build resilience in societies to deal with climate change" (2018: 733).

This article proposes, using the reproductive justice framework, that gender blindness has endured in Bangladesh's CRE mitigation frameworks because pre-existing conditions of gender inequality within that context.

REPRODUCTIVE JUSTICE GAPS IN POLICES

The United Nations Framework Convention on Climate Change (UNFCCC) (United Nations Canada, 1992) is the primary framework for international cooperation on climate change (DFAT, 2018). The framework aims to stabilise greenhouse gas concentration to prevent dangerous induced interference with the climate system. The Convention acts as a control guideline for augmented and updated agreements released as research on climate change progresses and has led to agreements including the 1997 Kyoto Protocol and the 2015 Paris Agreement (DFAT, 2018). At the national level, many states have developed and adapted their frameworks to manage nation specific climate related events. These national frameworks are designed per international guidelines.

The Paris Agreement for the UNFCCC was adopted in 2015. This Agreement requires all countries to set emissions reduction pledges or Nationally Determined Contributions (NDCs) (post-2020 climate action plans) to prevent the global average temperature from rising 2°C above preindustrial levels. By the second half of the century, the Agreement plans to achieve worldwide net-zero emissions, in which the amount of glasshouse gases emitted equals the amount removed from the atmosphere (Maizland, 2021). Prior to the drafting of this Agreement, research had begun to demonstrate an empirical relationship between climate change, the environment, and realisation of human rights. Accordingly, for the first time under the UNFCCC, the 2015 climate change framework included a rights-based language and approaches to generate a more holistic, and universal framework (Duyck et al., 2018).

The Paris Agreement, although praised for its commitment to gender equality, was considered a "huge disappointment" by the Women and Gender Constituency (WGC)¹ (Flavell, 2020). Within the Agreement, the term "woman" is mentioned once, and "gender" is referenced three times. The first and most significant mention of "gender" was within the preamble:

"Acknowledging that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity" (UNFCCC, 2015, Preamble).

The ambiguity within this preamble, particularly how nations "should" take gender equality and empowerment of women into account was viewed as deeply problematic. This ambiguous framing permitted misinterpretation as different states, cultures, and peoples' viewed responsibilities to address needs of women, equality, and empowerment in different ways.

"Gender" is referenced once concerning adaptation and once more when capacity-building is discussed (UNFCCC, 2015, p. 25,

¹Women and Gender Constituency is one of the nine stakeholder groups of the UNFCCC.

28, respectively). The first reference is to “gender-responsive” approaches to adaptation and capacity-building and concern for achieving “gender balance” on boards and committees in the implementation of the Agreement. There are no quotas, and it is just presumed that “gender balance” will refer to men and women. Lack of specificity to women’s right to participate, harbours the risk of Parties avoiding their responsibility to address the growing inequalities between men and women in climate change policy (Flavell, 2020). Further, the Paris Agreement represents little quantitative progress from UNFCCC (1995) (Conference of the Parties 1 – an apex decision-making body of the UNFCCC), which focused on vulnerability and gender balance. Twenty years on from COP1, many argue that the Paris Agreement failed to substantially address gender inequality in capacity-building (Flavell, 2020). The lack of specific recommendations on gender-inclusive benchmarks, specifically women’s inclusion in adaptation and mitigation policies, meant that only 64 of 190 Intended Nationally Determined Contributions (INDC) put forward by States mentioned gender. Like the Agreement, INDCs released by nations like India were disappointing with generic references to gender in the context of the country’s broader sustainable development strategy and not specifically climate change policies (WEDO, 2016).

Despite expanding research on the economic, social, and health effects of climate change on women, only two governments (Liberia and Peru) have special legislation addressing the nexus of climate change and gender (WEDO, 2016; Flavell, 2020). In terms of sexual and reproductive health care, rights, and services, none of the 190 INDCs examined by the WGC included the right to access sexual and reproductive health services in the aftermath of climate change and climate change-related catastrophes (Flavell, 2020).

Notwithstanding growing evidence, gender equality is not viewed as essential to addressing climate change and CRE. As Kronsell (2019) argues, climate change policy and frameworks are silent on the gendered impacts and harms. Primary focus is often on science, technology, and policy. When a gender-inclusive response to climate change-related events is considered, it is relegated to other instruments, namely, disaster reduction frameworks. Considering that fact, the Sendai Framework for Disaster Risk Reduction (SFDRR) 2015–2030, is the only framework to consider access to health services as an “essential” measurement to enhance resilience and empowerment. The SFDRR outlines seven targets and four priorities for action to prevent and reduce existing disaster risks. Risk prevention is concerned with elements that endanger people’s lives, livelihoods, “health, and economic, physical, social, cultural, and environmental assets of persons, communities, and countries” (UNDRR, 2021).

Zaidi and Fordham (2021) argue despite this inclusion, the Sendai Framework has also fallen short in addressing fundamental gender-based risks that arise in disasters. When assessing reports relating to the framework, Zaidi and Fordham (2021) found that, to date, no standalone guide has been produced for the inclusion of women and girls’ voices and needs in disaster risk reduction (DRR) programming. Therefore, they argue that a more nuanced understanding of gender is required to

ensure that women and sexual minorities are better represented in its indicators and implementation guidelines (Zaidi and Fordham, 2021). Specific to addressing climate change, Zaidi and Fordham (2021) call for greater alignment with parallel policy frameworks and other indicator systems (such as the Paris Agreement). Meaningfully gender inclusion is necessary to provide actionable gender strategies that can be tailored to the national and local levels.

The literature on climate change and gender showcases the social, economic and health impacts of CRE, but there remain few specific recommendations requiring states to monitor the gendered social, economic, and health impacts of CRE disasters on men and women (Bradshaw and Fordham, 2015). Even within data collection and reporting, little is done to collect data that is sex disaggregated. For the two target indicators that require sex-disaggregated data, only 93 out of 195 UN nations have provided data for Target A (Disaster related mortality) and 85 for Target B (number of impacted people) for 2017, according to the latest Sendai Monitor Target Reporting (Zaidi and Fordham, 2021). This count fell to 82 and 72, respectively, for 2018: this is less than half of UN member states. As a result, it remains a challenge to estimate the extent of direct disaster impacts experienced by men and women for Target A and B. None of the remaining Sendai targets or indicators require gender-responsive inclusions, making it impossible to assess how much of the Sendai Framework has been translated into real risk reduction plans specific to women (Nhamo et al., 2018; Tearne et al., 2021; Zaidi and Fordham, 2021).

Current climate change conventions and policies are at best narrow when addressing gender-specific matters (Sorensen et al., 2018). Health protection has been identified as an area of “critical concern” for gender-sensitive disaster risk management (Zaidi and Fordham, 2021). Several Sendai indicators measure impact of disaster on human health and call for:

‘Strengthening the design and implementation of inclusive policies and social safety net mechanisms, such as supporting access to basic health-care services, including maternal, newborn, and child health, sexual and reproductive health’ (Paragraph 30(j) Priority 3)

However, there are no sex-disaggregated sub-indicators to measure loss of access to health services (Zaidi and Fordham, 2021), including SRHR services. Many believe that these measures are at best reductive in their portrayal of vulnerability for all groups, particularly women, who are more likely to require SRHR assistance during catastrophes (Benjamine, 2016; WEDO, 2016; Zaidi and Fordham, 2021). These lacking portrayals of vulnerability have consequently neglected SRHR in disaster responses. Benjamine (2016) noted that institutional medical priorities rarely consider sexual and reproductive health as essential emergency relief during humanitarian crises. For example, women reported having fewer contraceptives during the 2010 earthquake in Haiti, even though emergency help included some SRHR funds (Behrman and Weitzman, 2016; Women Deliver, 2020).

There is adequate knowledge about the SRHR health harms that amplify during disasters. This makes the absence of effort to consistently document and plan to prevent the impact of CRE on SRHR a puzzle. For governments and other actors to pursue SRHR-related initiatives as a basis for climate change adaptation, there is an insufficient foundation of information, guidance, and experience. Yet, at the international level, there is still no agreed-upon definition of gender-responsive climate action, let alone SRHR-specific standards. Though the present World Health Organisation (WHO) guidance for health sector adaptation planning incorporates gender considerations to some level, it does not clearly address SRHR issues beyond noting that pregnant women are at risk of malnutrition (WHO, 2014; Women Deliver, 2020). The current international frameworks and policies fail to recognise the interconnectedness of these issues, require states to collect data and design frameworks to address these issues, and silo the causes into separate problems (e.g., the SDGs contain separate targets for poverty, gender equality, SRHR services, and climate action (Sorensen et al., 2018). Excluding gender equality and gender-responsive reforms from climate change adaptation and CRE mitigation runs the danger of creating inconsistent, inefficiencies, and communication obstacles across agencies tasked with handling these multi-sectoral problems (Sorensen et al., 2018).

This begs the question: why are SRHR services missing from CRE mitigation frameworks? Kronsell (2019) argues that current adaptation and mitigation methods lack a social gendered perspective, and this is the key driver of policy gaps. Halsnaes et al. (2007) states that gaps stem from misleading framing of the issue—where international policies have either excluded gender altogether or presented gender targets as optional in climate policy targets. We suggest that due to the exclusion of gender equality from climate change adaptation strategies, reproductive justice is also missing from CRE mitigation strategies. We will examine Bangladesh as an example of how the exclusion of SRHR from international climate change frameworks and CRE national action plans, coupled with pervasive condition of gender inequality, is permitting national gaps to persist.

CRE IN BANGLADESH

Bangladesh is in a low-lying delta produced by the confluence of the Ganges and Brahmaputra rivers. The bulk of Bangladesh's coastal cities lie between 1.2 and 1.5 metres above sea level, and 10% of the country is below 1 m above sea level (Rahman et al., 2017). This leaves the country susceptible to severe and constant environmental shocks like floods, tropical cyclones, and droughts. Changes in Bangladesh's climatic patterns and social structures have spurred rapid economic migration, resulting in exacerbated urban poverty, increased unemployment, and population congestion in urban areas. Unsurprisingly, this has put pressure on the country's development capacity and resilience.

Although Bangladesh's economy has grown by 6% each year since 2005, roughly 40% of the population remains unemployed, with many only working a few hours a week for low wages.

The service sector accounts for the majority of the country's GDP, yet agriculture employs more than half of the population (Alston, 2015). Therefore, in the wake of climate change, income availability in the agricultural sector has worsened and forced many to migrate to urban areas for employment. Further, around 25% of the population is still entrenched in poverty, with most of this population consisting of women. Alston (2015) states that these inequalities, perpetuated by social structures, political instability, and economic shocks, worsen in the wake of environmental disasters.

Bangladesh is ranked 162 out of 181 nations in the Notre Dame Global Adaptation Initiative, which measures a country's vulnerability to climate change and other global challenges combined with its potential to enhance resilience (Notre Dame Global Adaptation Initiative, 2021). This ranking, therefore, indicates that Bangladesh's susceptibility is high, and its readiness to adapt to climate change is medium to low. Given the number of natural disasters that have taken place over the past couple of decades, Bangladesh's efforts in constructing effective climate change mitigation and adaptation action plans are a serious concern. Because of its low-lying delta landscape, Bangladesh is exposed to extreme climatic events that pose a significant risk to residents, particularly those living in coastal areas. Droughts, river erosion, increasingly strong cyclonic activity, and hotter, drier summers have all been part of the country's climate history over the last five decades (Rahman et al., 2017). Between 1970 and 2008, over 219 natural disasters occurred in Bangladesh, with the scale of these disasters being unparalleled. These climate related impacts are exacerbated by water rights disputes and socio-economic circumstances, including population density, poverty, and poor institutional capacity and infrastructure (Rahman et al., 2017).

In Bangladesh, the rise in average temperature (approximately a 2.6° Celsius increase between 1950 to 2000) has contributed to significant changes in climate patterns. A rise in atmospheric temperature contributes to rising sea levels. With two-thirds of the country <5 m above sea level, this presents significant social, environmental, and economic challenges. In a report published by the Consortium for Trade and Development, researchers have predicted that by the end of 2050, the sea level in Bangladesh will rise by 153 cm compared to 2008. Rising water levels will lead to inundated and submerged coastal areas, shoreline erosion, loss of habitable land, and population displacement (Alam, 2019). Bangladesh has undergone 14 major floods in the last 50 years, according to government data and statistics, with the floods of 1988 and 1998 displacing as many as 45 million and 20 million people, respectively. It is predicted that by 2050, coastline erosion will be roughly 1.5 km long, and Bangladesh's livable land will be reduced by up to 16 kilometres (Alam, 2019).

Undoubtedly, this loss of land area will create population challenges. By the end of 2050, it is predicted that 13% of the population will be displaced, especially from coastal areas (MoEF Bangladesh, 2009; Alam, 2019). By 2100, this could reach 40%. Additionally, the Sundarbans (mangrove habitats consisting of shrubs and groupings of trees near coastal intertidal zones) are anticipated to shrink by 75 km² by 2050 and up to 95 km² by 2100 (MoEF Bangladesh, 2009; Alam, 2019).

Aside from its environmental impacts, climate change poses a significant threat to Bangladesh's economic security. The agricultural sector, responsible for 12% of GDP, is exposed to climate impacts, including storms, cyclones, increased temperatures, droughts, and saline intrusions. Rice production is especially vulnerable to climatic changes, with researchers projecting a 7.4% decrease in rice production every year between 2005 and 2050 (Skider and Xiaying, 2014). Consequently, decreased land availability and dwindling crop yields contribute to unemployment and mass movement from rural areas into urban towns and cities (MoEF Bangladesh, 2009; Alam, 2019).

According to the IPCC Fifth Assessment Report, malaria, influenza, and cholera incidents have increased dramatically in Bangladesh over 30 years and have caused significant public health problems. In Bangladesh, 14.7 million persons are at high risk of contracting malaria (Nasreen et al., 2017). Dysentery, diarrhoea, dengue fever, heat-related hypertension, asthma, and skin illnesses are all on the rise in Bangladesh, particularly during the summer months. Climate change-related factors (temperature, rainfall, and salinity) and their effects on water supply, sanitation, and food production, create favourable conditions for the occurrence and spread of infectious illnesses (Sorensen et al., 2018; Tearne et al., 2021).

Further, extreme precipitation and flooding can put populations at risk by contaminating drinking water with salt, human waste, and other biohazards. During droughts, water supply is frequently decreased, forcing people to rely on contaminated water sources. Population displacement from events like floods is linked to upsurges in infectious diseases and poor nutritional status from population congestion and a lack of potable water, food, and shelter (Benjamin, 2016). As well as physical complications, climate stresses, and extreme events can also manifest mental disorders and post-traumatic stress syndrome. This is particularly noted among those who live in disaster-prone areas and have been displaced because of CRE.

Public health emergencies are frequently caused by hazards and disasters such as significant flooding or cyclones (Climate Centre, 2021). Health spending rises dramatically during and after extreme CRE because of the increased costs of treating waterborne and water-related diseases, injuries from land or mudslides, and relocation or homelessness. In Bangladesh, such dangers are exacerbated by a lack of sufficient sanitation facilities, a weak health sector, and restricted healthcare provision (Alam, 2019; Climate Centre, 2021). Physical climate impacts are threatening the healthcare system, which has limited infrastructure and the ability to respond during extreme weather events (Climate Centre, 2021).

CRE Policy Instruments in Bangladesh

Bangladesh has ratified several international frameworks including the UN FCCC, Kyoto Protocol, and the 2015 Paris agreement (Climate Centre, 2021). Bangladesh has also developed a national biodiversity strategy and a National Adaptation Programme for Action (NAPA) in addition to these ratifications. In 2008, many of the strategies of the NAPA were adopted into the Bangladesh Climate Change

Strategy and Action Plan (BCCSAP)—a cross sectoral 10-year programme (2009–2019) to build resilience to climate change impacts. It established 44 short, medium, and long-term goals across six areas: Food security, social protection, and health; Comprehensive disaster management; Infrastructure; Research and Knowledge management; Mitigation and low carbon development; and Capacity building and institutional strengthening. Timelines for projects within each area are categorised under “immediate,” “continuing,” “short-term,” “medium,” or “long-term.” The time lengths are not defined within the BCCSAP.

Women are mentioned within the context of food security, social protection and health, and capacity building. Each area, however, only describes the level of vulnerability faced by women during and post CRE, and states that priority should be given to vulnerable groups. No guidelines or strategies are provided on ways local or national government can accommodate to the needs and survival of women. Strong emphasis is placed on recovery, where a set action plan for planning and construction of new designs and repairs of existing infrastructure is available (Alam, 2019).

When assessing Bangladesh climate policy for addressing the gendered impacts of CRE, very little exists. IMF (2005) was the first policy to contain gender-based considerations for climate adaptation, but operational processes under this policy have not yet met these goals. The paper recognised women as economically disadvantaged and recommended for social forestry programmes to “make a judicious use of the disadvantaged sections of human resources, including women and educated unemployed youth” (Government of Bangladesh, 2005). Women are recognised as vulnerable in climate change legislation, but operational responses have yet to be implemented. There is no action plan to address the impact of climate change on gender equality or sexual and reproductive health, apart from the National Women Development Policy (Shabib and Khan, 2014). This policy, however, only briefly promotes women's role in environmental management and the importance of ensuring facilities for pregnant women in the event of natural disasters (Shabib and Khan, 2014). This theme of “ticking the box” within policies are seen in latter policy developments.

Nevertheless, the impacts of climate change in Bangladesh continue to intensify. The Government of Bangladesh's (GoB) main challenge with adaptation policy, as proclaimed by Alam (2019), is that adaptation needs to mainstream and incorporate climate change into poverty reduction and development activities. Mainstreaming, as defined by Dalal-Clayton and Bass (2009), is the “informed inclusion of significant environmental concerns into institutional decisions that drive national and sectorial development policy, investment, and action.” The only form of mainstreaming led by the GoB has been the incorporation of climate change into the agriculture sector and the start-up of research programs (Alam, 2019).

Bangladesh has a high density of population, with varying degrees of poverty and social inequality. The NAPA for Bangladesh does not mention rights-based approaches to address climate change. The most vulnerable groups to climate change impacts—namely women but also children, disabled,

and elderly—will be least able to control the mitigation and adaptation consequences of climate change.

Gender Inequality Preconditions in Bangladesh

Vulnerability to climate change related events is directly related to gender and poverty. Bangladesh's traditional, patriarchal society makes it extremely difficult for women to establish their rights in family, society and in state institutions. Although the Constitution of Bangladesh has adopted international frameworks like CEDAW (Convention on the Elimination of All Forms of Discrimination Against Women), significant gender inequalities persist in practise. Women are critically affected by limited access to safe drinking water and sanitation (Ferdaush and Rahman, 2011; Alam, 2019). In Bangladesh, violence against women is particularly prevalent. According to a 2015 survey conducted by the Bangladesh Bureau of Statistics (BBS) and the United Nations Population Fund (UNFPA), more than 70% of married women or girls in Bangladesh had experienced intimate partner violence in some form (Human Rights Watch, 2020). In the first 9 months of 2020, at least 235 women have been murdered by their husbands or his relatives. Approximately 3,300 women and girls were murdered over dowry disputes between January 2001 and December 2019 (Human Rights Watch, 2020). These figures are most likely only a fraction of the genuine levels of violence.

Unsurprisingly, cultural, social, legal, and religious inequalities have negatively impacted the health and well-being of women's sexual and reproductive health. For women in rural communities, especially, topics relating to sexual and reproductive health remains taboo. Religion and traditional cultural norms hinder open communication. Often young girls and women seek information from peers and friends. This leaves room for misconception and false information sharing, which can be detrimental to the health and well-being of women. Ahmmed et al. (2021) has found that knowledge about menstruation and the menstrual cycle is limited and often non-medical based. In some communities, women refer to periods as "poisonous blood" or a "secret disease of women." Further, women often refrain from buying sanitary pads to avoid male sellers' curiosity about their sexual development (Alston, 2015; Women Deliver, 2020; Ahmmed et al., 2021). The lack of education compounded by the stigma attached to periods, result in poor menstrual hygiene, and puts young girls and women at risk of toxic shock syndrome, reproductive tract infections, and other vaginal diseases. Efforts to introduce basic SRHR into the school curriculum have fallen short due to social taboos and socio-cultural and religious norms. Teachers and students often feel too uncomfortable to discuss such topics, and the fact that teachers are not equipped with adequate medical knowledge makes trust-building and open communication difficult.

Other cultural practises like child marriage also affect women's bodily autonomy, limits life choices and opportunities. Although the law prohibits marriage under the age of 18, child marriage occurs on a wide scale in Bangladesh (Ahmmed et al., 2021; Bhowmik et al., 2021). In rural areas like Mouzas, young girls

are three times more likely to be married under the age of 18 and those in urban areas (Bhowmik et al., 2021). Girls, as noted, are largely unaware of sexual and reproductive health and are often forced to engage in sexual activities before attaining biological maturity. Married girls receive very little support from their parents when it comes to SRH, and often choices regarding contraception or pregnancy are decided by their husbands and mother-in-law (Bongaarts and Sitruk-Ware, 2019). Unsurprisingly, such restrictions also limit a women's choice when it comes to pregnancy and family planning. Women who cannot conceive after 6 months after marriage or do not want to have children are often thought to have reproductive health problems and are made to seek help from natural healers (Bhowmik et al., 2021).

Women who experience unwanted pregnancies are often forced to seek unsafe and illegal abortions. In Ahmmed et al. (2021)'s study, 63% of participants had reported having had an abortion. Most participants had little knowledge about safe abortions, and many considered abortion a sin. Abortion is strictly regulated by law in Bangladesh, leaving women to seek assistance from non-medically trained service providers. This leaves women exposed to severe health risks, including long-term bleeding, vaginal infections, and physical weakness (Ahmmed et al., 2021). Most women within this study did not know that such health adversity could arise from an unsafe abortion. Failed abortions often meant unwanted pregnancies would result. Women who did not have a choice in their bodily autonomy (either to either failed abortions or cultural and family pressures) were forced to proceed with the pregnancy and would receive very little medical support or care during and post-pregnancy (Ahmmed et al., 2021).

Pregnancy is perceived to be a natural occurrence dependent on God's will, and many believe that all matters that arise (positive or negative) should be left to the will of God. In cases where severe complications do arise, support from traditional healers would be sought first before any effort is made to seek help from medical physicians. Studies had found that married women in Bangladesh often received no medical advice before pregnancy and only visited health centres if excessive bleeding occurred. Therefore, the maternal mortality rate is high — 194 per 100,000 live births— and only 24% of births are attended by skilled health personnel. Further, in a study conducted by Kim et al. (2019), only 41.81% of women received specific intervention during maternal postnatal care, with 3.56% of these women (mostly in rural area) receiving care from unqualified or traditional providers.

Where reproductive and maternal health is concerned, several national health plans are in play, but priority is given to programs aimed to reduce the rate of child and maternal mortality. The 2011 National Health Policy set out to instal facilities for safe and hygienic child delivery in village and reproductive health resources and services as well. These programs are designed as family planning programs, which implies that women should only be accessing these programs when they are married. Alongside the National Health Policy, Bangladesh has also established a National Population policy (2012) that gives emphasis to universal access to quality reproductive health services, including assurance of opportunity and freedom to

choose contraceptive methods. It is worth noting that access to safe abortions was not included in this policy. Currently under the Penal Code of 1860, induced abortion (funded by the GoB) is permissible only to save a woman's life (WHO, 2021). In all other circumstances, it is a criminal offence punishable by imprisonment or fines. These existing gender inequalities places stress on already limited access to SRH during and post climate related events.

Bangladeshi Women's Access to SRHR During CRE

When Bangladesh is met with a CRE, the initial focus is to provide food and shelter. Yet women are experiencing unique health vulnerabilities during CREs. Nasreen et al. (2017) has found that in disaster settings, women face problems of itching or irritation in the vaginal area with discharge related problems, genital ulcers, and severe abdominal pain with discharge. A study conducted by Azad et al. (2013) found that ~46% of Bangladeshi women encountered menstruation management difficulties during and after floods (Azad et al., 2013). CREs pose serious risk to pregnant women, leaving them susceptible to early pregnancy loss, birth defects, low birth weight (LBW) or preterm births (PTB) (Nasreen et al., 2017). As well as physical harm, women face an increased level of psychological trauma during and post CRE. Gender-based violence has also been found to increase during and post disaster periods in Bangladesh (Nasreen et al., 2017).

For Bangladeshi women, availability, and access to SRHR and services are often limited, and during CRE, these services almost become scarce. During and post the Bangladesh's most recent tropical cyclone—Cyclone Amphan—more than 500,00 women and girls lost access to life-saving sexual and reproductive health services in affected areas (CARE, 2020). Consequently, women become more vulnerable, and climate resilience both locally and nationally weakens. In the absence of national frameworks and policies addressing SRHR services, it is necessary to understand whether key actors are responding and addressing the vulnerabilities women face during and post CRE. To investigate and recognise the response types (prevention, recovery, or relief) seen during and post CRE in Bangladesh, a secondary data analysis was conducted. The purpose of this analysis is to investigate whether SRHR vulnerability is being recognised in CRE response and if so, in what way.

Between 2015 and 2020, RefWorld was searched for reports in Bangladesh under the theme of "Climate change and Environment." 73 reports were analysed for their focus on women and SRHR and services. The first key finding noted among the reports was the practical exclusion of SRHR and services from CRE analysis in Bangladesh. The search located programs where SRHR services were discussed, but services were not identified as central to CRE experiences but mentioned as circumstantial. Second, SRHR at the national level is only considered within the context of recovery. SRHR is only framed as necessary for economic empowerment and consequently policies only seek to provide aid to maintain economic security. There was no inclusion of the social

gender inequalities and intersecting inequalities that may affect women's (particularly a non-married women's) access to SRHR. Third and final, there was a growing focus on Rohingya refugee women population. In contrast to CRE discussions for Bangladesh women and girls, these reports discussed and identified the need for SRH rights and services. However, these reports were primarily authored by international donor agencies that focus on humanitarian programs rather than preventative measures concerning women and girls' particular vulnerability to CRE due to their displacement. The findings from this analysis reveals that most of the reports present a recovery centred approach to disaster that excludes SRH rights and services. The absence of international and national frameworks is affecting SRHR service delivery in response to CREs in Bangladesh.

Out of the 73 reports found on CREs in Bangladesh, only 13 reports referenced sexual and reproductive health rights and services. The 13 reports explored the "circumstantial situations" of women with reference to topics like climate change, disaster recovery, COVID-19, gender-based violence, agriculture, and migration. Reference to sexual and reproductive health rights and services within these reports were minimal. In the reports that did address the topic of SRHR, it was often referred to in the context of more substantial discussion about gender-based violence and population displacement during and post disaster. The Disaster Management Reference Handbook (2020)—Bangladesh², discussed the need for more sanitation facilities in refugee settlements; and the Cox's Bazaar Gender-Based Violence Sub-Sector Strategy 2018³ report recognised "insufficient access" to SRHR services, including Clinical Management of Rape. Both reports spoke only in reference to victims of gender-based violence, particularly within the Rohingya refugee community.

Sexual and reproductive rights, in the specific context of climate change and the environment, was only briefly discussed in two reports. The first occurrence was in Plan International's "Disaster and gendered impact in a changing climate toward girl's education." The report commented on the compounding impacts of climate change on the reproductive rights of girls and women living with disabilities (Bun et al., 2021). The second reference was in the "Results strategy for Bangladesh 2014–2020" report published by the Government of Sweden (Government of Sweden, 2021). This report discussed aid distribution and revealed Sweden's involvement in "difficult and controversial" areas such as sexual and reproductive health rights. No report presented an in-depth discussion of the direct impacts of climate change on access to sexual and reproductive rights and health.

Of the 13 reports analysed, only four referred to the need to improve access to essential health services to sustain better health during and post CRE. Four of these reports voiced the need to access SRHR and services to attain improved

²Report published by the Centre for Excellence in Disaster Management and Humanitarian Assistance.

³Report published collaboratively by Global Protection Cluster and United Nations Population Funds America.

climate resilience. The Population Movement Operation (PMO) Annual Report (2018) released by UN Women identifies the need to provide inclusive and life-saving reproductive, maternal, neonatal, and adolescent health care to reduce morbidity and mortality rates. When women's mitigation and climate resilience programs were discussed, they often ran in parallel with action to improve women's economic freedom. Opportunity for women to "improve" their economic freedom aimed for their inclusion in policy and mitigation discussions. Amongst these four reports, there were no precise investment targets with specific timeframes detailed to explain how these policies would benefit women directly during and post CRE.

National government response to women's health and climate change was only noted once in the analysis. This was in the Government of Bangladesh Climate Financing for Sustainable Development: Budget Report 2018-19⁴. This report discussed women's resilience to climate change through the lens of empowerment. Empowerment, monitored by the Ministry of Women and Children Affairs, would be enabled through the Vulnerable Group Development (VGD) allowance programs, Income Generating Activities (IGA), and maternal health voucher (MHV) schemes. Apart from the MHV scheme (for married women), there was no additional SRH schemes (including access to contraception, sanitation, and sexual education) to assist girls and women in this report or any of the government reports analysed. Despite the widespread and growing impact of climate change events, the Bangladesh budget report recorded 1.4% of the operating budget allocated to climate relevant sectors within the health services division. Compared to other sectors like agriculture where 38.42% of the operating budget is allocated to climate related sectors, health prioritisation is at best minimal.

Five additional reports were curated from the Government of Bangladesh, and all discussed the impacts of climate change on women. Reports, like the National Strategy on the Management of Disaster and Climate Induced Internal Displacement, recognised women as vulnerable to climate change and emphasised the need to "strengthen humanitarian and disaster relief assistance" by providing safe spaces for women within shelter areas. Equally, the Climate Protection and Development: Budget Report (2017-18) also acknowledged the burden or climate change on women. The report outlined the benefits of flood control and drainage systems, repair and rehabilitation of embankments which will protect women's property which will enhance their social security.

These reports, however, did not refer to the impact of climate change on SRHR and services. No conversation around SRHR and climate change was made. Governments, as noted, can play a catalytic role in effective climate mitigation and adaptation. In the case of Bangladesh, the lack of clear prioritisation has resulted in minimal SRHR service availability. This has translated into a lack of climate policy addressing SRHR.

Although recommendations to include women in disaster risk management planning were made, there is no detail of how the government intends to do this. Many of the reports analysed were economic development, recovery, or relief-based responses to CRE and disasters.

Finally, most reports analysed during this period published on recovery and relief were centred around Bangladesh's refugee population—namely the Rohingya refugees. Climate refugees in Bangladesh are situated in Cox's Bazar district, prone to severe climate related events. Unspringing, more effort has been put into providing immediate aid and promoting mitigation and adaptation strategies. The Rohingya refugee crisis was featured in 12 of the 74 reports analysed. Within the context of women and SRHR, relief programs were primarily focused on hygiene and sanitation. Several key actors (namely UNDP, CFE-DMHA, ActionAid and ICMPD) identified an apparent lack of sanitation facilities available for adolescent girls and women. Within the humanitarian setting, lack of available facilities and sanitation products meant that more girls were using unclean clothes, increasing their susceptibility to infections and other diseases. Further, the lack of basic infrastructure and services has forced many girls to miss out on school.

Humanitarian aid has primarily focused on providing reproductive health kits to women and adolescent girls in host and refugee communities. As revealed in UNDP's Impacts of the Rohingya Refugee Influx on Host Communities report, these kits were aimed to provide sanitary aid for girls and women, and in some cases, were used to ensure clean and safe births. The reports also revealed that distant learning centres were established to teach reproductive health and life skills via smartphones. Further, the spread of awareness on important issues among community members has also been prioritised. As part of the United Nations High Commissioner for Refugees (UNHCR) aid response to the 2018 influx of refugees into Bangladesh, youth groups held community discussions on several topics. These discussions aimed to encourage the community to raise awareness and identify community-led solutions together with service providers (UNICEF, 2019).

In policy and program delivery, the secondary data analysis has revealed that climate change mitigation and adaptation efforts are limited within the context of SRHR in Bangladesh. Outside the refugee population, little discussion has focused on the SRHR experiences of girl and women populations during and post CRE. Climate change has primarily been portrayed as an economic and environmental issue, with social consequences receiving far less emphasis. Much of the discussion about climate change is based on unspoken principles of productivity and resource security. It is a sparsely inhabited area where issues of social and gender justice are rarely discussed. This has separated climate change and gender policy objectives. Bangladesh treats the two as mutually exclusive issues and existing climate change policies do not consider gender specific operational activities. The separation of the two has allowed climate change to intensify existing inequalities and limitation faced by women, and thus increase their vulnerability to the impacts of CRE.

⁴This report was issued by the Finance Division with support from Inclusive Budgeting and Financing for Climate Resilience (IBFCR) Project funded by UNDP Bangladesh.

CONCLUSION

Women in Bangladesh face an amplitude of barriers that prevent effective integration and participation in society. Cultural, societal, and religious customs all dictate the social, political, and economic movement of women, thus subjecting them to inequality, discrimination, and violence. Such limitations can impact health, particularly sexual and reproductive health. In Bangladesh, women (particularly poor, rural women) often have limited access to medical services that specifically cater to their SRHR and needs. Poor SRHR can have a cyclic impact on women, where her resilience and ability to reintegrate into society in impacted.

In the wake of climate change, these adversities are worsened. Access to services during and post CRE are at best limited. This subjects women to increased physical and psychological trauma that ultimately weakens their resilience to future CRE. The laws and policies governing environmental issues that currently exist are lacking in adaptation strategies that consider the gendered impacts of climate change. Given that rural and coastal residing women in Bangladesh face greater risks to the negative impacts of climate hazards, failure to address their differential needs in the government's climate responses threaten to undermine progress on gender equality.

Currently, international, and national policies only briefly discuss the disproportionate impacts of climate change on women. These framework or constitutions do not guide nations on how to address inclusion of needs from populations where gender and intersecting inequalities are high. Bangladesh is no stranger to trying to implement adaptation strategies to reduce vulnerability. As discovered through the secondary data analysis, primary focus is on providing recovery aid and where climate policy is concerned, mitigation policies are being deployed. The problem is who gets to participate in these strategies, and very little had been done to include women's experience

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to acknowledge and address SRHR during climate change related events.

Adaptation is dependent on the resilience and capacity of the people and communities affected (Alston, 2013). In Bangladesh, the physical aspects of the disaster, financial resources, cognitive aspects, normative behaviour patterns, and institutional governance and structures are all barriers to resilience and successful adaptation (Alston, 2013). Resilience and adaptation require transformative change, it requires for structural disparities and restrictive norms that impede gender equality to be addressed.

This article has found that SRHR is neglected from CRE policies and frameworks because there is a national and international neglect of SRHR in climate change policy. Gender inequality and discrimination determines access to SRHR services and needs; and climate change related events negative impacts on services and needs where there is SRHR discrimination. This neglect is permitting and creating reproductive injustice with SRHR gaps in national and local level CRE responses. Improving SRHR services for women and girls, for unmarried women and girls, will enhance climate change resilience. More collaboration between the IPCC, government bodies and local women's groups is crucial.

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author/s.

AUTHOR CONTRIBUTIONS

SH conducted the research and wrote the first draft of the article. SD assisted with the research question, framing, and writing of the article. All authors contributed to the article and approved the submitted version.

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