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خشونت جنسیت‌مبنا در بحران اقلیمی جنوب آسیا: رویکردی حقوقی از منظر بوم‌فمینیستی

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چکیده

مطالعهٔ علمی خشونت جنیست‌مبنا ناشی از تغییرات اقلیمی رو به افزایش است، به‌ویژه در جنوب آسیا که مداخله‌ای فوری و مؤثر را می‌طلبد. در پژوهش حاضر با بهره‌گیری از الگوی بوم‌فمینیستی (اکوفمینیستی)، ابعاد حقوقی مقابله با خشونت جنسیت‌مبنا در شرایط دشوار ناشی از تغییرات اقلیمی در جنوب آسیا بررسی شده است. کارگروه آنتروپوسن (Anthropocene)، با شناسایی «اثر انسانی» بر زمین، آغاز دورهٔ تغییرات اقلیمی را تأیید کرد؛ پدیده‌ای که بر تمامی جوامع انسانی تأثیر می‌گذارد؛ البته، زنان و دختران بیش از سایر گروه‌ها از پیامدهای آن آسیب خواهند دید. جنوب آسیا منطقه‌ای در حال توسعه محسوب می‌شود که ارتباط میان بلایای طبیعی و افزایش آسیب‌پذیری زنان در برابر خشونت‌های جنسی و جنسیتی، یکی از نگرانی‌های مهم به‌شمار می‌رود. همچنین، پیوند میان کسب‌وکارهای کشاورزی، امنیت غذایی، تغییرات اقلیمی و خشونت جنیست‌مبنا به‌وضوح مشهود است؛ به‌گونه‌ای که شوک‌های اقلیمی اغلب امنیت غذایی را تضعیف می‌کند و به تشدید خشونت‌های جنیست‌مبنا می‌انجامد. در این مقاله، بر فقدان ابزارهای حقوقی بین‌المللی تأکید می‌شود که به‌طور مشخص، خشونت‌های جنسی و جنسیتی علیه زنان، خشونت‌های جنسی و جنسیتی در جریان بلایای طبیعی، و نیز خشونت‌های تشدیدشده در اثر تغییرات اقلیمی را شامل می‌شود. گرچه در اسناد و سازوکارهای حقوقی بین‌المللی موجود به پیامدهای تغییرات اقلیمی اشاره شده است، به‌طور مؤثر به تأثیر این پدیده بر افزایش خشونت علیه زنان پرداخته نشده است. در این پژوهش،از رویکرد بوم‌فمینیستی حمایت شده است و بر ضرورت انجام مطالعات اقلیمی با رویکرد جنسیت‌محور تأکید می‌شود تا نتایجی عادلانه و مؤثر حاصل شود. یافته‌های مطالعه حاکی از آن است که مقابله با خشونت جنسیت‌مبنا و ناشی از تغییرات اقلیمی، بخشی مهم از تعهد به تحقق اهداف توسعهٔ پایدار است و حملیت از حقوق زنان در برابر تنش‌ها و مخاطرات اقلیمی، پیش‌شرطی بنیادین برای شکل‌گیری جوامعی تاب‌آور، عادلانه و پایدار در جنوب آسیا محسوب می‌شود. کشورهای جنوب آسیا می‌توانند با اتخاذ رویکرد بوم‌فمینیستی و به‌کارگیری رهنمودهای مرتبط، نظام‌ها حقوقی خود را برای پیشگیری و پاسخگویی مؤثر به خشونت جنسیت‌مبنا و ناشی از تغییرات اقلیمی ارتقا بخشند و همزمان در ارتقای برابری جنسیتی و عدالت محیط‌زیستی گام‌هایی مؤثر بردارند.

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Gender-based violence in South Asia's climate crisis: An eco-feminist legal perspective

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Abstract

Climate-induced gender-based violence (GBV) is a growing topic of study that requires immediate intervention, especially in South Asia. This research work looks at the legal perspectives on addressing GBV in South Asia's climate hardship through an Eco- feminist model. The Anthropocene Working Group's identification of the 'human effect' on the Earth has proven the onset of climate change, which impacts entire populations, with women and girls paying the most. In South Asia, a developing domain, the correlation between natural disasters and a higher susceptibility of women to sexual and gender-based violence (SGBV) is a root of immense concern. The connection between agribusiness, food security, climate change, and GBV are also common, with climate shocks frequently having a damaging influence on food security and contributing to increased GBV. The paper emphasizes the absence of international legal tools that particularly address SGBV against women, SGBV during natural disasters, and SGBV exacerbated by climate change. Existing international legal instruments highlights the implications of climate change, but they do not effectively mention the impact of violence against on women. The study promotes an Eco-feminist motion, emphasizing the need of gendered climate change research in ensuring equitable and effective outcome. This study identifies that addressing climate-induced GBV forms a core part of the commitment toward Sustainable Development Goals, and that protecting the rights of women in the aspect of climate stressors is fundamental to building resilient, fair, and sustainable societies in South Asia. South Asian countries can finer their legal systems to effectively prevent and respond to climate-induced GBV through hold an Eco-feminist approach and employ these guidelines, all while upgrade gender equality and environmental justice.

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1. Introduction

Climate-induced gender-based violence is an emerging field of scrutiny. While research on women and climate change is not new, there is a need for a better understanding of gender-related challenges and problems, especially in South Asian region (Desai & Mandal, 2021). The Anthropocene Working Group recognized the 'human impact' in bringing major adjustments to the Earth on May 21, 2019, confirming the period of climate change (Desai & Bharat, 2019). Climate change affects entire communities, but women and girls suffer the most (UN Women, 2014). Because of their traditional responsibilities, women rely largely on natural resources. In South Asia, which is a home to developing nations, this is advancing into a matter demanding urgent attention.

Numerous studies have shown that in South Asia natural calamities have increased women's vulnerability to SGBV. They experience lack of protection and mental trauma (Desai & Mandal, 2021). In India, addition in annual mean temperature by 1°C led to 8% rise in physical violence and 7.3% sexual violence on women by their intimate partner (Zhu et al., 2023). Following the 2011 floods in Pakistan, in 2012 Protection Rapid Assessment communities surveyed stated that some women were subjected to incidents of GBV, including exacerbated domestic abuse, forced marriage, early marriages, and exchange marriages (Irish Consortium on Gender Based Violence, 2022). Women go up to10 km on foot every day in Bangladesh's water-scarce areas only to find water for their family, increasing the risk of sexual assault, mistreatment, incidents, and threats of rape for women and girls (ibid).

A comprehensive examination of major areas of international law reveals no international legal tools dealing with SGBV against women during and after climate change-induced disasters (Desai & Bharat, 2019). The texts of three specific climate change accords (1992 UNFCCC, 1997 Kyoto Protocol, and 2015 Paris Agreement) do not address this topic. In recent years, the Discussion of the Parties has prioritized this issue (Brody et al., 2008). However, none of the South Asian nations have passed any legislation on the issue of GBV induced by climate change.

Various global movements, such the Chipko movement in India, the Anti-Militarist movement in Europe and the US, the combat against hazardous waste dumping in the US, and Green Belt, aim to preserve life on Earth (Datar, 2011). The paper attempts to shed light on how gender, ethnicity, and class influence the dominance of individuals over nature. Ecologic Marxists, identify unequal access to resources as a major issue in society. Furthermore, recent Eco-feminist discourses emphasize the importance of tackling the inter-connectedness of climate change and GBV, stressing the linked exploitation of women and the environment under patriarchal power structures (Warren, 2000). Eco-feminism contends that the exact oppressive mechanisms that

cause women's exploitation and degradation also contribute to ecological adversity. This viewpoint primarily emphasizes the value of a gender-sensitive move to solving climate change and environmental obstacles.

2. Literature review

The existing body of work increasingly acknowledges that climate change goes beyond just being an environmental issue to become a gender issue. The early academic works related to climate governance concentrated mainly on the issues of environmental degradation, sustainable development, and resource scarcity while disregarding the impact of such climate crises on women and gender relations. Modern feminist and inter-disciplinary research has, however, highlighted how climate emergencies hit women more than anyone else due to lack of resources, socio-economic marginalization, and deep-rooted patriarchy (ADB, 2020). The connection between environmental degradation and violence against women in South Asian regions is evident due to women's reliance on agricultural activities, fetching of water, and informal labor markets (Brody et al., 2008).

Various authors have looked at the nexus between climate change and violence against women. For instance, Bharat H Desai and Moumita Mandal observed that climate change poses a serious threat to international law since environmental insecurity triggers sexual and gender-based violence in vulnerable populations (Desai & Mandal, 2021). In this regard, international legal systems continue to fail in adequately acknowledging climate-induced GBV as a unique manifestation of structural violence. Likewise, Zhu et al. (2023) empirically established the connection between increasing temperature levels and the incidence of intimate partner violence among married women in low- and middle-income South Asia. The study proved that apart from facilitating violence during displacement, climate change is also responsible for increasing domestic violence due to economic and environmental insecurity.

Studies have also been done recently on the effects of climate change on women with respect to physical and occupational aspects (Habibi et al. 2024). This study involved conducting a systematic review regarding occupational heat strain experienced by women workers. They discovered that the effects of increasing temperature are mostly felt by women working in informal and physically demanding occupations. It is evident from this study that climate vulnerability does not only involve the environment but also the body, work environment, and socioeconomic aspects.

Furthermore, ecofeminism, an ideological school of thought that explores the relationship between women and the environment, has been applied to study climate governance. According to ecofeminism, the exploitation of nature and the subordination of women are

interrelated products of patriarchal systems that are based on domination, appropriation, and control (Bee et al. 2015). It called for a feminist perspective on climate governance, stressing the importance of "intimate and everyday politics" of climate change because environmental issues are intrinsically linked to body security, social relations, and vulnerabilities. Likewise, it revisited ecofeminism in the context of India's environmental policy framework by bringing the voice of women to the forefront and highlighting grassroots ecological movements (Somokanta, 2024). This type of literature is especially pertinent in South Asia, where environmental degradation often correlates with displacement, caste oppression, poverty, and gender-based violence.

Additional evidence on the presence of a robust climate-gender relationship can be drawn from institutional and policy-related studies. According to the reports by the Asian Development Bank (2020), the impact of climate crises exacerbates insecurity, migration, trafficking, and acts of violence committed against women, especially in fragile and vulnerable locations prone to disasters. This was corroborated by the Irish Consortium on Gender Based Violence (2022), which stated that preexisting disaster response mechanisms still focus on managing infrastructure issues, distribution of aid, and recovery efforts, while failing to ensure women's security, bodily autonomy, and freedom from violence in situations of emergencies.

Within international law, conventions like the Convention on the Elimination of All Forms of Discrimination Against Women and the United Nations Framework Convention on Climate Change have begun to incorporate gender considerations within climate governance (CEDAW, 1979; UNFCCC, 1992). The Paris Agreement also makes reference to gender equality and empowerment of women within climate action frameworks (UN, 2015). However, despite their progressive stance, international legal instruments continue to fall short in explicitly identifying climate-related GBV as a distinct form of violence necessitating specific interventions.

While such studies have made considerable contribution to the study of climate change and gender-based vulnerabilities, there are still some significant limitations present in contemporary literature. Many authors conduct general analysis of the problem related to gender-based vulnerabilities induced by climate change, or they explore different aspects of climate change and GBV separately. In addition, there is a notable scarcity of research dedicated to the examination of climate-induced GBV in terms of legal issues in South Asia, where the concepts of environmental law and disasters governance could be taken into account together with ecofeminist approaches. Moreover, there are virtually no scholarly works on the issue concerned with the evaluation of why legal systems do not treat such forms of gender-based violence as preventable phenomena caused by environmental emergencies.

3. Methodology

For this research, the chosen methodological approach will be that of qualitative doctrinal and legal inter-disciplinary analysis in the context of climate change and GBV. This is achieved by analyzing the main legal instruments at an international level such as the United Nations Framework Convention on Climate Change, the Paris Agreement, and the Convention on the Elimination of All Forms of Discrimination Against Women, as well as regional agreements, namely the South Asian Association for Regional Cooperation Trafficking Convention.

The geographical focus of the research includes four climate vulnerable countries in South Asia, namely India, Bangladesh, Nepal, and Pakistan. The sources have been selected on the basis of three standards: (i) the reliability of the source (United Nations agencies, national commissions, and well-known NGOs such as Human Rights Watch), (ii) factual content based on observed incidents (such as studies conducted after the disaster), and (iii) legal significance within the scope of climate governance and gender justice. An eco-feminist lens will also be employed for understanding the issue at hand.

4. Discusion

4.1. Climate crisis and gender-based violence in South Asia

4.1.1. Climate change and gendered vulnerability in South Asia

South Asia ranks among the worst-hit regions in terms of climate change effects owing to its large population concentration, reliance on climate-dependent livelihood systems, and existing socio-economic disparities (Ahmed et al., 2019; Rahman, 2014). The adverse effects of climate-related events including flooding, cyclones, glacier melt, droughts, and heat waves exacerbate migration, food insecurity, and vulnerability of the affected populations (Desai & Mandal, 2021; IPCC, 2022 as cited therein). Nevertheless, the negative consequences are not evenly distributed between males and females, with women bearing the brunt due to their lack of property rights, education, health care services, job opportunities, and decision-making power.

Among South Asian societies, women are mainly expected to engage in household chores without monetary compensation, fetch water, practice subsistence farming, and care for dependents (Kelkar & Nathan, 1991; Bartlett, 2008). The resulting impacts of climate change on the environment thus have direct effects on the physical and economic burdens placed on women (UNEP, 2016). Feminist researchers state that climate change functions as a "threat multiplier", which enhances gender disparities that were already existent within patriarchal structures, as well as escalates gender-based violence in both personal and public domains (Gaard, 2015; Desai & Mandal, 2021). Ecofeminism has revealed that ecological vulnerability is systematically produced via gender-based labour and land tenure systems.

4.1.2. Displacement, shelter insecurity, and sexual violence

During emergencies, particularly conflicts and catastrophes, women are vulnerable to SGBV due to family and societal crises, as well as the disintegration of family and community institutions caused by forced displacement (UNHCR, 2003). Women and girls are at a higher risk of physical, sexual, and psychological damage, as well as denial of essential services. Research in Bangladesh (Rahman, 2014), Philippine (Su & Tanyag, 2020) and Pakistan (Memon et al., 2022) have shown instances of physical or mental mistreatment, unwanted sexual conduct, and rape in these scenarios. In Bangladesh, women oftentimes choose to stay at home rather than seek shelter during cyclones, putting them at greater risk of destruction. Local officials or volunteers for charities may coerce women and girls by demanding sexual activity in exchange for releasing relief (Rezwana & Pain, 2021). Since 2011, concern has been implementing medium to long-term projects in this coastal region, with a focus on addressing three characteristics of severe poverty: low asset returns, inequalities, and vulnerability to risks and vulnerabilities (UN Women, 2014). After the 2011 floods in Pakistan, 52% of surveyed communities expressed concern for women's and girls' privacy and safety. In a 2012 Protection Quick Assessment with conflict-affected IPDs, communities reported a range of gender-based violence against women and girls, including severe internal violence, forced and marriages, and exchange marriages (GBV AoR, 2018). GBV is the most ubiquitous and pervasive human rights violation in the world, affecting more than one in every three women throughout their lives (UN, 2018). In 2020, 81,000 women and girls were slaughtered globally, with one being killed at home every 11 minutes (UNODC, 2021).The women-and-development debate has centred on the negative effects of modernization and technological innovations on women's work and income, the effects of migration, the rise in female-headed households, exploitative situation in the informal sector and free-trade geographical area, the impact of environmental degradation, and so on (Kelkar & Nathan, 1991). The issues of marginalized groups, including tribal groups, destitute, rural, and urban women, were also recognized.

GBV, a shadow epidemic during COVID-19, illustrated the increase in violence during crises and disasters (UN Women, 2021). As stated in CEDAW general recommendation 37 on the gender related dimensions of disaster risk reduction in the context of climate change, marginalized groups, including indigenous women, those living in poverty, and those belonging to ethnic, racial, spiritual, and sexual minority groups, as well as women with disabilities, face additional risks and burdens (CEDAW, 2018). Immediate action and greater analysis are needed to address the tie-in between climate change and struggle from a gender viewpoint (UN Security Council, 2019). Regrettably, GBV programming get less than 1% of total human-centred financing. This results in significant

resource gaps in addressing GBV, and the situation's urgency cannot be overstated (Agarwal, 1992).

4.1.3. Trafficking, child marriage, and structural violence

There have been empirical studies which have shown that livelihood disruptions caused by the climate situation can be responsible for an increased incidence of domestic violence and insecurity in households in South Asia. Distress arising from agricultural activities, heat stress, and crop failure contribute to tensions within households when there are situations whereby women have no economic power to walk away from their partners (Zhu et al., 2023; Hindin, 2006). A recent study conducted on a broad scale in South Asia showed that a 1-degree centigrade increase in environmental temperature was responsible for an increased incidence of domestic violence.

According to reports of post-earthquake assessment studies conducted in Nepal, the issues related to family separations and economic difficulties resulting in loss of income sources contributed to rising cases of trafficking along the Indo Nepal border, especially those involving adolescent girls displaced from temporary shelters (OHCHR, 2023; UN Women, 2021). Several reports of recent post-disaster trafficking studies conducted in South Asia suggest that traffickers consider children and young women displaced, out of school or economically unsupported as the most vulnerable to exploitation for purposes of trafficking and forced labor (Gevers et al., 2020; UN Women, 2021). The climate-induced displacement and loss of forest and fish-based livelihood opportunities among other reasons make women and adolescents particularly vulnerable to trafficking in the Sundarbans (Ahmed et al., 2019; UNEP, 2016).

4.2. International and South Asian legal instruments on climate-induced GBV

There are no international legal instruments specifically addressing SGBV during natural catastrophes, and SGBV aggravated by climate change. There is no worldwide treaty for managing natural or man-made disasters. International legal systems for environmental and climate change fail to address the impact of sexual violence on women. International instruments address women's rights as human during both peacetime and conflict situations (IFRC, 2017). Important instruments applicable to women affected by climatic change include the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), the Refugee Convention 1951, and the UN Security Council resolution 1325 (2000). The following are internationally established regulations regarding the impact of climate change on women and girls and how an ecofeminism framework can help.

4.2.1. The UNFCCC and the Paris agreement

The UNFCCC and the Paris Agreement represent the principal international legal framework addressing climate change (UNFCCC, 2015; UN, 2015). The Paris Agreement explicitly mentions gender equality and human rights in its Preamble, recognizing the necessity for gender-responsive approaches to climate change (UN, 2015). Moreover, the UNFCCC Gender Action Plan (2019) calls for women's engagement in climate governance and adaptation strategies (UNFCCC, 2019; UN Women, 2021). General recommendation number 37 of the Committee on the Elimination of Discrimination Against Women (CEDAW): It includes a language focusing on reducing gender-related disasters induced by climate change occurrences (IFRC, 2017).

However, both frameworks fail to acknowledge climate-induced gender-based violence (GBV) as a specific category of climate damage (Desai & Mandal, 2021; UN Women, 2021). All the existing measures primarily relate to the procedural aspect, namely participation and representation, while lacking any substantial provision for protecting individuals from violence (Gevers et al., 2020; UNFCCC, 2019). Finally, there is no obligation compelling States to integrate GBV prevention measures into disaster management, adaptation planning, or displacement governance (Desai & Mandal, 2021; Gevers et al., 2020).

An ecofeminist analysis reveals this weakness, claiming that climate governance mechanisms are overly technocratic and environmentally fragmented (Gaard, 2015; Datar, 2011). The ecofeminist perspective stresses the idea that climate impacts people through socially embodied reality, namely, marginalized women suffering from environmental disruption (Agarwal, 1992; Kelkar & Nathan, 1991). In this sense, climate-related "loss and damage" is not limited to the destruction of the environment but entails violence, exploitation, trafficking, and coercion resulting from the destruction of the environment (Gevers et al., 2020; Desai & Mandal, 2021). Adding GBV protections to NDCs and climate adaptation measures can thus be seen as a more just reading of international climate law (UNFCCC, 2015; Desai & Mandal, 2021).

4.2.2. CEDAW and General Recommendation No. 37

Convention on the Elimination of All Forms of Discrimination against Women, CEDAW (1979) is still the most significant international legal instrument on women's rights (CEDAW, 1979; True, 2016). The third General Recommendation of CEDAW focuses explicitly on the gender-specific aspects of DRR and climate change (CEDAW, 2018; UN Women, 2021). CEDAW recommends states to establish gender-sensitive approaches to disaster management, safeguard women from violence during disasters, and secure the participation of women in climate governance systems (CEDAW, 2018; OHCHR, 2023).

General Recommendation No. 37, however, is not legally binding

(CEDAW, 2018; True, 2016). It does not sufficiently cover issues like climate-induced trafficking, child marriages, and displacement from one country to another across the borders within regions like South Asia (Gevers et al., 2020; Desai & Mandal, 2021). In addition to this, the lack of compliance results mainly from states' inability to integrate CEDAW principles into their national disaster and climate legislation (UN Women, 2020; Desai & Mandal, 2021).

Under the ecofeminist analysis, CEDAW should be considered more structural (Gaard, 2015; Agarwal, 1992). Violence against women is linked intrinsically with the issues of environmental dispossession, economic disempowerment, and ecological volatility (Desai & Mandal, 2021; Kelkar & Nathan, 1991). As such, ecofeminism extends the scope of CEDAW to include a broader preventive aspect of addressing the underlying causes of climate-induced violence (Datar, 2011; Desai & Mandal, 2021).

4.2.3. The Sendai Framework for Disaster Risk Reduction

According to the Sendai Framework for Disaster Risk Reduction (UN, 2015), women are vital stakeholders in disaster governance and advocates for inclusive disaster risk reduction policies (UN, 2015; Gevers et al., 2020). The Sendai Framework highlights the significance of resilience development, involvement of communities in decision-making, and safeguarding of vulnerable groups (Gevers et al., 2020; UN Women, 2020).

However, the Sendai Framework fails to mention GBV as an issue that occurs during disasters (UN, 2015; Masson et al., 2019). It lacks any requirements related to safety standards in refugee camps, prevention of sexual abuse, and gender-inclusive infrastructure in case of forced migration (GBV AoR, 2018; UN Women, 2020). This failure resulted in severe implications for women's bodily integrity and dignity following the Cyclone Amphan incident and the Pakistani flood (UN Women, 2020; Rezwana & Pain, 2021).

Using ecofeminism, one can point out that the Sendai Framework tends to emphasize infrastructure resilience and overlooks issues of human security and vulnerability (Johnson, 2022; Gaard, 2015). Thus, a gender-sensitive perspective on the Sendai Framework should include mandatory GBV risk assessment and gender-sensitive camp design along with accountability measures for any forms of GBV that happen in a disaster setting (Desai & Mandal, 2021; Gevers et al., 2020).

4.2.4. SAARC convention on trafficking

The South Asian Association for Regional Cooperation (SAARC) Convention on Preventing and Combating Trafficking in Women and Children for Prostitution (2002) is a regional legal instrument combating trafficking in South Asia (Gevers et al., 2020; UN Women, 2021). This Convention aims at fostering regional cooperation,

criminalizing trafficking practices, and ensuring rehabilitation services for victims (Gevers et al., 2020; Desai & Mandal, 2021).

Unfortunately, the Convention neglects the issues of climate change and displacement caused by it as factors that might lead to the increased vulnerability to trafficking (Desai & Mandal, 2021; Gevers et al., 2020). This negligence is especially problematic considering that there is an observed increase in cases of trafficking after natural catastrophes like the Nepal earthquake and Cyclone Aila (OHCHR, 2023; UN Women, 2021). The Convention addresses the phenomenon of trafficking from the perspective of criminal justice while ignoring the structural causes of environmental and economic instability (Gevers et al., 2020; Desai & Mandal, 2021).

In light of the ecofeminist approach, the Convention should consider the issue of ecological dispossession and climate change as potential sources of vulnerability to trafficking (Gaard, 2015; Datar, 2011). It can foster prevention programs in climate vulnerable areas and regional monitoring systems for trafficked women and girls (Gevers et al., 2020; UN Women, 2021).

While there are global legal instruments that address the effects of climate change on women, there are no legal tools specifically designed to address climate change and women's rights in South Asia (IUCN, 2020). This is a huge worry, given that this region specially compromising to climate change, and women suffer severe risks and problems as a result of climate change. This study is highly relevant for South Asian countries with their large and diverse populations and complex socio-ecological systems. The broad spectrum of South Asia contributes to a lack of focused legal tools. South Asian countries have diverse social, economic, and cultural foundations, making it challenging to develop a legal structure that applies to all of them (True, 2016). Furthermore, not all nations in South Asia are signatories to international legal instruments, making it difficult to coordinate efforts and reach regional consensus.

4.3. South Asian country specific case studies

4.3.1. Bangladesh

The significant risks to Bangladesh posed by cyclones, river erosion, and salinity contribute to making women more vulnerable to climate induced displacement and GBV (Ahmed et al., 2019; Rahman, 2014). The problems associated with shelter during cyclone related disasters range from logistical problems (such as lighting, sanitation, and privacy) to cultural factors that encourage women to avoid using public shelters even if their lives depend on it (UN Women, 2020; Rezwana & Pain, 2021).

According to empirical research conducted in the coastlands of Bangladesh, girls and women living in families that are under stress due to adverse weather conditions will be forced to either consent to or be

victims of early marriages, intimate violence, or exploitative labor arrangements (Gevers et al., 2020; Desai & Mandal, 2021). This supports the claim made by ecofeminists regarding how dispossession and patriarchal hierarchies produce climate related GBV (Agarwal, 1992; Gaard, 2015).

4.3.2. India

Climate related stress can be observed through agrarian distress, high temperatures, and water shortages related livelihood stresses in India. Quantitative research on the relationship between temperature and intimate partner violence (IPV) shows there is a clear correlation between the temperature of the day and an increase in IPV cases in South Asia, India included (Zhu et al., 2023). The interpersonal impact of climate change is further exacerbated by gender property relations and the lack of credit and livelihoods that prevent women from leaving abusive households (Agarwal, 1992; Hindin, 2006).

Women who live in the relief camps after the floods in Uttarakhand and elsewhere experience harassment, lack of sanitation, and exclusion from disaster relief committee meetings, thus reproducing gender hierarchies even within times of disaster (UN Women, 2020; Agarwal, 1992). This indicates that a legal framework that addresses these issues and creates disaster management guidelines with gender considerations is necessary instead of voluntary gender sensitivity frameworks within current disaster laws (Desai & Mandal, 2021; Gevers et al., 2020).

4.3.3. Nepal

The post-disaster trafficking and GBV incidents in Nepal have revealed the nature of trafficking and GBV as structural issues rather than individual cases (OHCHR, 2023; UN Women, 2021). Studies on trafficking in the Indo-Nepal border areas following the earthquake in 2015 have found that girls and women who were displaced and did not have access to formal housing, education, or job opportunities were disproportionately more vulnerable to being trafficked (Gevers et al., 2020; UN Women, 2021). Similar findings have been observed in regional and international studies, where disasters increase the "space" for traffickers through disrupting the social safety nets in place (Gevers et al., 2020; Masson et al., 2019).

From an ecofeminist standpoint, the case study on Nepal also demonstrates how disruptions to the environment can undermine women's traditional rights to utilise the land and forests, resulting in women becoming increasingly dependent on male relatives or informal networks (Gaard, 2015; Kelkar & Nathan, 1991).

4.3.4. Pakistan

For Pakistan, the 2022 floods exposed the way in which climate-related GBV functions due to interlinked vulnerabilities of displacement, loss

of livelihood, collapse of health infrastructure, and poor enforcement of gender-related laws (UNFPA, 2022; UN Women, 2021). Studies conducted in the provinces of Sindh and Balochistan confirm that women who are displaced avoid seeking assistance due to stigmatization, absence of mechanisms to report incidents in confidence, and fear of exclusion from the society (UN Women, 2021; OHCHR, 2023). Such observations have been made in other parts of South Asia and suggest that climate crises alone are not responsible for generating GBV but merely make people more vulnerable to it (Gevers et al., 2020; Masson et al., 2019).

4.4. An Eco-feminist framework for climate and gender justice

Eco-feminism is an important critical theory approach which focuses on understanding the relationship between the subjugation of nature by patriarchy and the oppression of women within a patriarchal order. The movement has gained significant attention over the decades since the 1970s and 1980s, as researchers suggest that similar systems which are responsible for environmental degradation through domination, extraction, hierarchy, and control also lead to gender discrimination and violence towards women (Shiva, 1989; Warren, 2000). Unlike traditional approaches to environment which view ecological disasters primarily from a scientific perspective, ecofeminism recognizes the social and political consequences of environmental destruction and how it leads to gender discrimination due to the reliance of oppressed women on natural resources for survival (Agarwal, 1992).

According to UNEP's 2016 Global Gender and Environment Outlook, scientists, especially social scientists, researchers, scholars and civil society entities, have acknowledged the strong relationship between gender and the environment since early 1970 (UNEP, 2016). Eco-feminism's goals have been incorporated into the United Nations framework. UNEP's 2016 assessment, "The Global Gender and Environment Outlook," was launched at the second session of the UN Environment Assembly and included gender as a legal concern (UNEP, 2018). The UNFCCC's Improved Lima Work Program on Gender and Gender Action Plan were affirmedin2019 (decision 3) at COP25 (UNFCCC, 2019).

Ecofeminism provides a critical lens linking environmental degradation with systems of patriarchal domination over women's bodies, labour, and land (Gaard, 2015; Datar, 2011). In South Asia, women's roles in water related labour, forest based subsistence, and agriculture make them central to climate adaptation processes, yet they are often excluded from decision making, reproducing their vulnerability to both environmental harm and gender based violence (Agarwal, 1992; Kelkar & Nathan, 1991). Ecofeminist scholars on India and South Asia further argues that climate related policies which ignore women's land rights, communal resource access, and care labour

reproduce structural violence even when they are framed as "gender sensitive" (Johnson, 2022; Gaard, 2015). This approach critiques the technocratic bias in much climate policy literature, which privileges hardware (walls, dams, early warning systems) over the social infrastructures of care, safety, and gender justice that are essential for preventing GBV in climate related crises (Desai & Mandal, 2021; UN Women, 2020).

4.5. Strengthening legislative responses: Actionable recommendations

Legal systems in South Asia may not be faced with the problem of lack of laws but rather the problem of fragmentation among the systems for climate governance, disaster management, and gender justice (Desai & Mandal, 2021; Desai & Bharat, 2019). Consequently, reforms ought to be geared toward merging the systems for law that already exist (Gevers et al., 2020; UN Women, 2021).

It is recommended that in India, the Disaster Management Act, 2005 be amended to introduce mandatory gender responsive infrastructure for disaster management, which will comprise provision of toilets, sufficient lights, and gender protection officers at the relief camps (UN Women, 2014; 2020). The existing protection measures introduced through the Protection of Women from Domestic Violence Act, 2005 may be operationalized for emergency responses in climate disasters, informed by studies demonstrating climate-induced increases in IPV (Zhu et al., 2023; Desai & Mandal, 2021).

For instance, in Bangladesh, the Standing Orders on Disaster and Bangladesh Climate Change Strategy and Action Plan must include obligatory provisions for women's security in cyclone shelters (UN Women, 2020; Rahman, 2014). Moreover, regular gender audits and monitoring systems at the district level might enhance accountability within the disaster management process, based on ecofeminism arguments against gender-blind implementation of climate policies (Gaard, 2015; Datar, 2011).

Post-disaster sites in Nepal need to be officially declared high-risk zones for trafficking victims via anti-trafficking laws (OHCHR, 2023; Gevers et al., 2020). Coordination at border areas along with collaboration with bodies like Maiti Nepal will have to become obligatory after the occurrence of a large-scale calamity (UN Women, 2021; Masson et al., 2019). In Pakistan, GBV-specific standard operating procedures should be adopted by each province as a part of its disaster response plans with rapid complaint mechanisms, women-led monitors, and provision of legal assistance (OHCHR, 2023; UN Women, 2020). Recent studies on disaster management in South Asia indicate that such operational measures are essential and should be mandatory, not just "guidelines," for climate change adaptation (Desai & Mandal, 2021; Gevers et al., 2020).

At the regional level, the South Asian Association for Regional

Cooperation Convention on Preventing and Combating Trafficking in Women and Children should be expanded through an additional protocol recognizing climate displacement as a trafficking risk factor (UN Women, 2021; Desai & Mandal, 2021). Cross border cooperation in climate hotspots such as the Sundarbans and Indo Nepal border regions would strengthen preventive protections for displaced women and girls (Gevers et al., 2020; UNEP, 2016). Finally, South Asian States should integrate climate induced GBV into Nationally Determined Contributions (NDCs) under the United Nations Framework Convention on Climate Change and establish gender disaggregated data systems documenting violence in disaster settings (UNFCCC, 2015; Gevers et al., 2020). Without institutional recognition and systematic data collection, climate induced GBV will remain legally invisible despite its increasing prevalence (UN Women, 2021; Zhu et al., 2023).

5. Conclusion

The empirical findings analyzed from cases in Bangladesh, India, Nepal, and Pakistan suggest that climate-induced gender-based violence is not an emerging humanitarian issue but a critical legal issue and institutional problem in South Asia (Desai & Mandal, 2021; Gevers et al., 2020). The disasters caused by Cyclone Amphan, the Nepal earthquake in 2015, the floods in Uttarakhand in 2013, and the floods in Pakistan in 2022 indicate some of the common issues like trafficking, insecure displacement centers, forced marriages, domestic abuse, and institutional neglect (UN Women, 2020; Masson et al., 2019). These findings are in line with various comparative studies on gender-based violence linked to climate change in low-income and middle-income countries where climate shocks tend to accentuate rather than create new forms of gender-based violence (Gevers et al., 2020; Zhu et al., 2023).

Despite an increase in recognition of gender vulnerability in climate change governance, these frameworks still see environmental damage and gender based violence as distinct legal issues to be regulated separately (UNFCCC, 2015; CEDAW, 2018). Legal systems, thus, do not take into account climate-induced GBV as a foreseeable form of harm that could have been avoided through preventive measures (Desai & Mandal, 2021; UN Women, 2021). An ecofeminist approach serves as a remedy for this failure by bringing to light the connection between environmental degradation, patriarchal structures, and violence against women's bodies (Gaard, 2015; Agarwal, 1992). An integrated legal framework that goes beyond procedural participation and gender mainstreaming is what is called for by ecofeminist theory because it recognizes the inseparability of climate and gender justice (Gevers et al., 2020; Desai & Mandal, 2021). Unless this step is taken, South Asian laws will continue addressing separate instances of violence without attending to the root cause of the vulnerability of women and girls in times of environmental crises (UN Women, 2020; Gaard, 2015).

Conflict of interest
The author declared no conflicts of interest.

Author Contributions
Tanni Ganguly: Conceptualization, methodology, formal analysis, writing original draft, and editing;
Dr. Aaratrika Pandey: Supervision, review, and editing;
Dr. Kanu Priya: Conceptual guidance, review, and Methodology develop.

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The author has completely considered ethical issues, including informed consent, plagiarism, data fabrication, misconduct, and/or falsification, double publication and/or redundancy, submission, etc. This article was not authored by artificial intelligence.

Data availability
The dataset generated and analyzed during the current study is available from the corresponding author on reasonable request.

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