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Indigenous women-led climate crisis solutions: A decolonial perspective from the Garo Indigenous community in Bangladesh

Ranjan Datta ^{a,*}, Arifatul Kibria ^b

^a Community Disaster Research, Indigenous Studies, Department of Humanities, Mount Royal University, AB, Canada

^b American International University-Bangladesh (AIUB), Canada



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ABSTRACT

This paper explores the critical impact of climate change on land-based culture and patriarchy within the Garo Indigenous Community in Bangladesh. Using a decolonial perspective, we explored how Garo Indigenous women are deeply rooted in land-based traditions and social structures and face unprecedented challenges. Through a decolonial lens, we explore intersections between climate change, land-based practices, and the patriarchal land-based practice. It shows the Garo Indigenous community's land-based adaptive strategies and resilience in climate change. This paper emphasizes the importance of centering Indigenous perspectives in climate discourse, advocating for decolonization as a crucial framework for understanding and addressing the multifaceted impacts of climate change on land-based cultures and patriarchy.

By providing decolonial analysis from the Garo Indigenous land-based perspective, this research contributes to a broader understanding of the effects of climate change on Indigenous communities, creating a decolonized and traditional land-based approaches to climate adaptation and mitigation policies. The paper calls for action to recognize Indigenous land-right, traditional patriarchy family leadership to safeguard the unique cultural heritage and gender dynamics of the Garo Indigenous community while addressing the broader implications for global climate justice.

1. Introduction

Overexploitation, deportation, unfairness, and underrepresentation of women are facing Indigenous communities around the world (Stephens et al., 2006; Dobson & Brazzoni, 2016). Indigenous women are deeply interconnected to their land, land-based cultural customs, and understanding of spirituality (Burgess et al., 2005; Dylan et al., 2016; Mack & Na'Puti, 2021). Many Indigenous communities, particularly women's communities, are negatively impacted by the expansion of extractive industries into their lands and the increasing economic

rewards of resource development (Morales, 2009).

The Garo ¹ Indigenous women in Bangladesh have witnessed human-introduced climate change impacts, leading to a crisis of self-recognition and self-esteem permeating various facets of their lives, i.e. alienation (Kabir, 2022). Land alienation is one of the major problems that have come up, both in Garo Hills and the plain areas. To make the restriction on the alienation of tribal land more effective, the Garo Hill District sought to restrict the transfer of land from tribal to non-tribal. ² Despite the law being present to safeguard tribal land transfer, it still occurs due to unscrupulous means or forceful occupation in bordering areas

* Corresponding author.

E-mail addresses: rdatta@mtroyal.ca (R. Datta), arifatul.kibria@aiub.edu (A. Kibria).

¹ The Garo Indigenous peoples in Bangladesh are an ethnic group that belongs to the Bodo sub-sect of the Tibeti-Burman sect within the Mongoloid race. Additionally, they inhabit the Indian state of Meghalaya (Gain, 2008). The etymology of the word 'Garo' and their extensive migration traditions are crucial for comprehending the Garos' way of life. The original habitat of the Garo people is situated in the Xinjiang province, which is in the north-western region of China. They departed from this location many millennia ago and relocated to Tibet. Subsequently, they migrated once more to the north-eastern Indian Hill tracts and Northern Bangladesh approximately 4500 years ago. Ultimately, they settled in the greater Mymensingh area and established a modest feudal kingdom (Playfair, 1975; [1909, pp 4).

² Article 169 of the Convention of the International Labor Organization defines tribes as groups whose social, cultural, and economic situations distinguish them from other parts of the national community. These tribes' status is determined by their traditions, customary practices, or specific laws. On the other hand, Non-tribal refers to individuals or entities that are not connected to, derived from, or engaged with a tribe.

(Queenbala, 2011). On the other hand, Indigenous women-led communities have continuously tried to preserve their environment, prevent deforestation, protect mineral, oil, and gas resources, promote sustainable production and consumption practices, and act as effective stewards, particularly in supporting Indigenous women (United Nations, 2021). Despite facing challenges, their dedication remains strong. However, Garo Indigenous women communities became especially vulnerable because of climate challenges such as lack of Indigenous women-led family recognition, women-led cultivation and governance, and Indigenous land rights (IPMPCC, 2011). Remarkably, there is a noticeable evolution in the traditional role of female headship within the indigenous Garo society and a concurrent increase in the male counterpart's involvement in family affairs (Rashid et al., 2022).

The Garo Indigenous people, like many other ethnic groups, have a rich historical tradition of practicing women-led shifting farming, also known as "jhum," as their primary means of sustenance. In addition to practicing Jhum farming, they also cultivate wetlands to support their livelihood. However, despite the growing number of these individuals over time, Garo Indigenous environmental sustainability has changed due to the reduction of Garo Indigenous women-led cultivation (Burgess et al., 2005; Dylan et al., 2016; Mack & Na'Puti, 2021)

Enforced male-oriented colonial spirituality impacted Garo Indigenous sustainabilities. For instance, many of the Garo Indigenous people have embraced Christianity, predominantly Roman Catholicism or Baptism, abandoning their traditional religion known as "Sangsarek." This shift towards Christianity is of profound significance to them and has become an integral part of their cultural identity (Bleie, 2005). As they seek better livelihoods, many Garo Indigenous people are relocating to the capital city of Dhaka. However, their transition to city life exposes them to challenges, including heatwaves and the demands of urban living.

Garos Indigenous inheritances follow a matrilineal pattern, meaning they are passed down from mothers to daughters. Nevertheless, during a woman's lifetime, her husband possesses exclusive control over her possessions (Queen, 2011). Garo women could take on domestic duties and employment outside their homes to augment their earnings. But there is no reason to believe that women in the Garo community have the same rights as males or that they can influence family decisions in the way that they see fit (Das, 2005). It is evident that, male dominance is prevalent worldwide, particularly in Bangladesh, where the homes of mainstream Bengali individuals adhere to patriarchal norms. Many Garos Indigenous gets indirect forced through Bangladeshi main steam male dominated governing structures, mainstream culture. Hence, it is logical for them to be swayed by the patriarchal principles upheld by most of the Bengali society (Jalil, 2012). The family of Garo Indigenous community is matriarchal line in nature. Women are the head of the family and owners of family property. According to Playfair (1909) in his Mothers Right in India book, the above scenario was available throughout the ancient India. Certain distinguishing characteristics of probable or certain matriarchal descent can be found all over India and within all diverse ethnic, cultural, linguistic, racial, and religious groups, albeit to varying degrees. The same matriarchal 'quality of form' has been found in the North-East (Khasi and Garo) area, too (Ehrenfels, 1941). On the other hand, the matrilineal framework of Garo customs means that inheritance goes to the woman, and the mother's side determines the children's nomenclature and descent (Mohammed et al., 2011). So, the terms 'matriarchy' and 'matrilineal' dispute evolve as a matter of marginalization of women in the community.

The Garo Indigenous people are currently experiencing enormous obstacles in maintaining both their women-led traditional ways of life and their ability to adapt to modern living (Imrul, 2012). The Garo Indigenous community dealt with their economic life in many sections. In the domestic life section, they are agriculturists and have experienced a shift in farming practices for their subsistence. In another section, they used hunting and gathering methods (Maaker, 2019). The hill people

have been cultivating orchards more and more in place of Jhum,³ and they now rely mostly on cash crops. The cultivation technique of Jhum (burning and digging at least three times from planting the seeds to collecting the crops) has been done by women which was diminishing due to landlessness which causes as an impact of climate change (Perucca, 2012). There are now more disparities in wealth and education, and many Garo people migrated to towns and cities for survival (Datta & Kibria, in-press). Many Garo women Indigenous have converted to Christianity over time due to poverty, lawlessness, Indigenous identity rights, and ongoing discrimination indirectly forcing them to convert their spirituality. Now, most of the Garo Indigenous people in Bangladesh belong to Christianity, although some have converted to Islam. Now, the situation is that those who follow the traditional 'Sangsarek' religion are regarded as backward people. (Bal, 1999). It is also said that 'Christianity offered East Bengal's Garos a way to maintain a long run, Christianity proves an important factor in the unification of the lowland Garos' (Bal, 2000, p. 155).

Land alienation from Garo Indigenous women has become a critical challenge that the Garo Indigenous community is now facing both in Garo Hills and the exterior areas (Adnan, 2004). It has been observed that land transfers made possible by exploitative means or by forceful occupation in the bordering area have occurred as the land was the community property, so they were hardly ever aware of individual property rights (Mohsin, A. 1997).

This paper focuses solutions that were on the impact of climate change that occurred due to decline the land-based culture and revisits the myth of matriarchy and matrilineal line of ancestry and its impact on their spirituality and the community-driven solutions that initiated and led by the Indigenous community in Bangladesh with an emphasis on Garo women. To assert their right and due recognition, particularly in terms of rightful claims to their ancestral—our primary objectives of the study are:

1. To investigate the climate change impact on land-based culture
2. To revisit the matriarchy and its impact on Garo Indigenous women
3. Garo Indigenous women suggested climate change solutions.

In this study, we used anti-racist relational theoretical reflection and decolonial meaning of climate change's impact on women-led land-based culture by focusing on feminist perspectives on Garo Indigenous women who are also in crisis of changing authoritative impact and away from spirituality derived from land-based culture. Developing practices and policies for the Garo Community in Bangladesh and the other Indigenous peoples in the region to reestablish their land connection and relationship through place-based opportunity. To achieve the objectives of this study, at the very outset, we clarify our positionality and then the theoretical framework. After that, we discussed our research methodology and how we conduct the research. Further, we present the data analysis and findings. Therefore, we formulated our results, categorized into center, main, and sub-theme. Finally, and with the help of our research findings, we tried to thematize the challenges and suggested solutions and recommendation reported by Indigenous women educators, Garo Indigenous community leader. At last, we reviewed our learning reflection and how we can improve that.

We hope this study will significantly impact the Garo Indigenous community, as well as other Indigenous communities, minorities, mainstream society, and people worldwide. We will be examining Garo Indigenous traditional cultural practices and livelihood patterns, which are closely tied to land-based rituals that have been affected by the impacts of climate change. Given that climate change is a worldwide issue, researchers must be aware of Garo Indigenous women community-based solutions.

³ Shifting cultivation.

2. Researcher positionality

In Indigenous research, it is important to acknowledge researcher positionality, their visions, and community's benefits of the research (Wilson, 2008). Researcher positionality is also critical to creating and validating knowledge (Smith, 2012). This section discussed our positionality as researchers who approach our work from a relational, decolonial, and feminist perspective (Datta, 2018). Engaging in self-reflection regarding our roles as researchers is essential while conducting research within Indigenous communities (Datta, 2018).

Author-1, Dr. Ranjan Datta, is a minority and decolonial scholar specializing in land-based, community-driven research. His work focuses on community disaster research, fostering accountability in anti-racist and decolonial methodologies, advancing critical studies on Indigenous land-based climate change resilience, and promoting cross-cultural community research collaborations. He views research as a lifelong responsibility for transformation.

Author 2, Dr. Arifatul Kibria, is a feminist and decolonial scholar dedicated to using research as a transformative tool to decolonize her responsibility for centering Indigenous needs and perspective in research. Despite her mainstream identity Backspace, she sees research as responsibility of advocating for and centering Indigenous needs, justice, and their land rights. With extensive experience co-learning with Indigenous and minority peoples, Dr. Kibria employs relational and Indigenous methodologies to elevate Indigenous knowledge systems, ensuring they are both implemented and respected in meaningful ways.

To address decolonial perspectives in Indigenous research, it is crucial to consider our own positionality. We have revised our research agenda to ensure that it fully aligns with the needs of the Garo Indigenous community.

3. Theoretical framework and methodology

To understand the impact of climate change on land-based culture, spirituality, and patriarchy, we used relational and decolonial feminist theoretical frameworks in our study. We choose the relational research framework as it focuses on receiving Indigenous knowledge/knowing in a respectful manner (Dei, 2011). Whereas western methods have often ignored Indigenous participants' spiritual relationship and traditional experiences as sources of research knowledge (Kovach, 2009). The relational theoretical framework helps to learn through concepts of relational hybridity, otherness, and scientific knowledge. It focuses on relationships and spirituality to explain actors and action (Datta, & Kibria, 2015). It also helps to include Indigenous knowledge to realize the research mainly emphasis on and prioritizes relationality and building impactful connections with Indigenous People (Datta, 2022). On the other hand, like relational theoretical framework, decolonial feminist methodology is also transformative method to academic study that questions and disrupts the mainstream Western knowledge system and colonial legacies. (Chapola & Datta, 2023; Datta, 2023; Make et al., 2021; Starblanet, 2018). It acknowledges the interconnectedness of systems of power and oppression, carrying gender as well as race, class, integrity, and other intersecting axes of identity (Boonzaier & Van Niekerk, 2019). Decolonial feminist approach promotes inclusive, emancipatory, and transformational knowledge by actively engaging in reflexivity, confronting power dynamics, and creating collaborative partnerships with communities (Zaragocin, S., & Caretta, 2021).

Together, relational and decolonial theoretical frameworks serve a platform for conducting Indigenous research that challenges colonial paradigms, focus on Indigenous voices, and collaborate a respectful and non-discriminatory relationship. These approaches helped us to understand Indigenous Peoples' history of exploitation and marginalization in research contexts that also fostering Indigenous self-determination, knowledge reclamation, and the promotion of social justice within academia and society. They also underline the importance of researchers' recognizing their own positionality and biases while actively

working to minimize suffering and uphold ethical research practices (Smith, 2012).

Following the relational and decolonial theoretical frameworks, we engaged in deep listening and Indigenous story telling techniques as a critical and meaningful research tool from September to November 2023 where we involved in the practice of learning stories from the 20 community members (i.e., 12 women and 8 men) urban residing Garo Indigenous community people and leaders from the community. We learned from both men and women within the community, as they felt more comfortable sharing their perspectives in a family collective setting rather than as individuals. These collective insights were essential for understanding the significance of Indigenous patriarchy within Garo communities, especially in contrast to the dominant male-centered family structures prevalent in mainstream Bangladeshi culture. Through these conversations, we heard powerful stories of resilience and leadership, particularly from Garo women, who have upheld their families' sustainability for centuries. These women have consistently resisted the pressures of mainstream cultural practices, standing firm to protect their environment and preserve their way of life. Their leadership not only highlights the central role of Indigenous women in family and community life but also underscores their critical contributions to environmental stewardship and cultural survival in the face of ongoing challenges. Taking into consideration that Indigenous stories are intrinsically linked to the land, characterized by the land, and the essence of the people, storytelling plays a vital role in reestablishing a connection with land-based learning (Datta, 2018, 2022). Succeeding the traditional Indigenous rituals, ceremonies, and hereditary line of authority, we also tried to establish meaningful relationships with Indigenous communities. Along with deep listening and Indigenous storytelling, we adapt reflective writing to engage in more in-depth consideration of our study findings and experiences. We preserve these records to recognize our clarity and the freedom to engage in unhindered reflection. Our firm commitment to upholding ethical protocols was evident in our relentless dedication to preserving the privacy and confidentiality of the participants.

The Garo Indigenous people are an ethnolinguistic group residing in the Garo Hills region, as well as in certain areas of Goalpara and Mymensingh area in Bangladesh. They also inhabit the Khasi hills and the northeastern region of India (Perucca, 2012). We listened to recorded stories several times during this study, with an emphasis on the transformations that the women of the Indigenous Garo Community underwent. Moreover, engaging in introspection following attentive listening during storytelling sessions and upon revisiting the recordings played a substantial role in enhancing our learning journey. These personal reflections enhanced our comprehension in a considerate manner. For this study, we interacted with Indigenous Garo Community women and leaders who currently dwell in Dhaka city, having moved from their native locations of habitation due to different circumstances. Bangladesh has experienced a significant increase in population in Dhaka, certain localities, like Kalachandpur Baridhara, and Shyamoli have acquired the vernacular designation of "Garo locality". Many wealthy Garo migrants have made financial investments in small enterprises, constructed new residences, obtained land, and played a role in the development of their native towns. The fast change in population has significantly transformed the rural environment. On the other hand, there are a huge number of Garos who migrated to town for their survival because of landlessness and poverty.

We repeatedly listened to the recorded accounts, examining various parts of these narratives, paying particular attention to the transformations undergone by the women of the Indigenous Garo Community. In addition, the process of Indigenous reflection, which involved carefully listening to the recordings of story-sharing sessions, greatly enhanced our learning. Furthermore, it offered us a distinctive comprehension of the subject matter that diverged from the reading script. These unique insights enhanced our comprehension in a respective manner. The emotions of the listener are approached in a distinct

and heightened manner. Indigenous women expressed their emotions and recounted their experiences in our educational narratives, which frequently evoked intense anguish and deep emotions. The selection of quotes and anecdotes to include is frequently influenced by personal preferences. We mostly select quotations that are memorable, easily recalled, and crucial to contemplate and commit to memory.

We created center theme, main theme, and sub-theme as a continuous form of listening and reflective learning (Figure-1). The center theme is climate change impact and under the center theme the main themes are, first, land-based culture and its marginalization, second, matriarchy athwart patriarchy and finally suggested solutions.

In our engagement with the community, we learned many women-led climate change solutions. While investigating the impact of climate change on land-based culture and matriarchal practices, we focused on the specific information outlined below. The community particularly emphasized these details, reflecting the focal points of their discussions.

4. Impact of climate change on the land-based culture of Garo Indigenous community

The influence of climate change on the land-based culture of the Garo community, particularly those residing in urban areas, can be characterized in a multifaceted manner. It can be described as an event that occurs over a specific time and is not usual and as continuous changes from a long-term perspective. These impacts are defined by frequent and unforeseeable natural calamities, significant outcomes include:

Impacts of Climate Change. The Garo Indigenous women, like the rest of the community, have been impacted by heatwaves resulting from the shifting weather patterns. Nevertheless, this indigenous population is particularly susceptible because of their traditional rural way of life, which is closely intertwined with environment and has undergone significant transformation. A female respondent belonging to the Garo Indigenous community reported that July and August of 2023 were the warmest months of the year, aligning with the highest recorded temperatures in Bangladesh. She highlighted that the escalating temperatures, ascribed to environmental alterations and heightened carbon dioxide levels, are inducing heatwaves. The occurrence can be attributed to several factors, including overpopulation, increased transportation levels, and industrial activity, as well as potential supernatural

influences.

Migration to City and Occupation change: Many Garo Indigenous community people have been compelled to relocate from their ancestral habitat because of insufficient land and limited work prospects. The motivation for this movement is to alleviate poverty and thus, seek alternate livelihoods. A female respondent stated that, as domestic workers, they are specifically impacted by the ongoing heatwave. This affects the modification of their way of life. Relocation necessitates modifying one's lifestyle, encompassing their employment, residential circumstances, and religious practices. Additionally, it results in the migration of populations into metropolitan regions due to climate change, inadequate rainfall for agricultural purposes, and land degradation. The management of migration is crucial to effectively address the issues and potential solutions related to climate change, and to meet the specific needs of the community.

5. Matriarchy athwart patriarchy

In this section, we tried to understand the socio-economic structure of Garo community whether the family form is authoritative or matrilineal line of ancestry. This structural pattern impacts their land-based culture, spirituality, and ancestral form of authority. Below is the scenario of them:

Spirituality: As the Garo Indigenous community explained, the term spirituality is deeply grounded in 'Songsarek,' which has undergone a substantial metamorphosis. A substantial segment of the population has adopted Christianity, decreasing the practice of traditional ceremonies. In regions where terrestrial civilization continues to flourish, the indigenous spiritual beliefs and practices remain unaltered. The advent of Christianity has transformed cultural mores and established a patriarchal framework, hence influencing societal conventions and the roles of women within the community. This transition threatens the previously dominant matrilineal residency pattern, in which husbands would relocate to their wives' households upon marriage. This spiritual shift has resulted in a significant deterioration of traditional rituals, property rights, and the standing of women in society.

Matriarchy athwart patriarchy: At the interview session, we inquired about the matriarchal way of life and whether they could adapt well to the altered circumstances. We received responses from both male and female respondents in a two-dimensional format. Female respondents emphasized their acceptance of matriarchy, while male respondents expressed their opposition, citing the absence of any official documentation on the matter and their current lack of desire for it. They believed that visiting the bride's residence carried a negative connotation, which was the primary factor contributing to their decline. They reject this system and instead seek assimilation into the mainstream patriarchal structure of authority. The land-based and nature-centric culture and livelihood pattern developed from this thinking dimension may result in the marginalization of individuals from their ancestral roots, especially women.

They believe that maintaining their ancient hereditary system can aid in reclaiming their land and mitigating the effects of climate change. Regarding this issue, whenever we go to seek further information, one Garo community leader said the reversed statement might come from some individual opinion that they want to keep the traditional practices.

6. Garo Indigenous women suggested climate change solutions

To tackle the issue of the Garo Indigenous people becoming marginalized in terms of their land-based culture and matriarchy because of climate change issues, it is necessary to implement adaptation strategies that are driven by the local community as well as to resolve the land dispute. These strategies should empower indigenous groups, enabling them to make more effective decisions. This entails allocating resources to local institutions to strengthen their capabilities and sharing information about climate hazards in languages the local

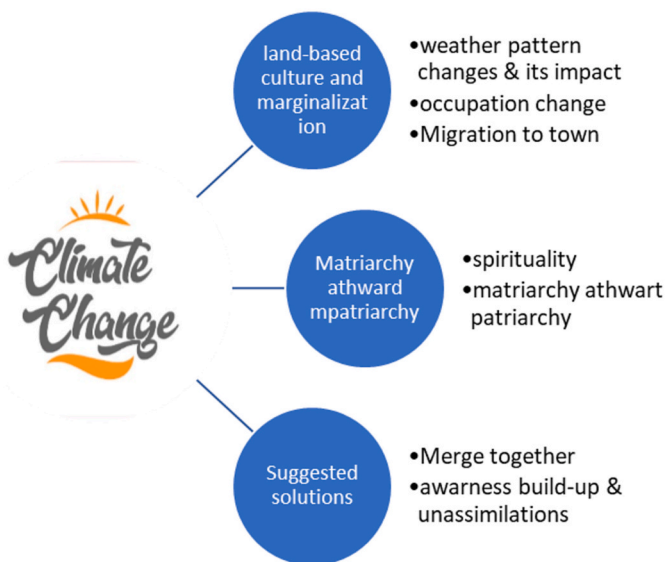


Figure-1. Center, Main theme & Sub-theme. Findings: Garo Indigenous Communities perspectives on Climate Change and Matriarchy.

population speaks. Multiple recommendations have been generated:

Collective Solidarity: Considering the urgent requirement for solidarity, Garo Indigenous women have proposed cooperative endeavors with benefactors, international non-governmental organizations (INGOs), non-governmental organizations (NGOs), private enterprises, scholars, schools, and institutions. They believe communal action is crucial in tackling climate change and its repercussions. Incorporating traditional and indigenous knowledge, matriarchal and matrilineal practices alongside scientific methods and technologies can augment the involvement of indigenous populations in tackling climate-related difficulties.

Awareness buildup: The Garo Indigenous community prioritizes the dissemination of knowledge and understanding across society to counteract the impacts of climate change and save their cultural legacy, which include land-based traditions and a matriarchal system of inheritance. Providing youngsters with knowledge about nature-based careers and fostering their sense of environmental responsibility is widely recognized as an essential element. Education has a crucial impact in bringing about change and teaching young people about climate change through schools and NGOs can be highly influential in this matter. Publicity campaigns are suggested to efficiently distribute knowledge and information.

We learned from our study that climate change disproportionately impacts the health of Garo Indigenous women through heatwaves, shifting weather patterns, and the erosion of land-based cultural practices. Traditional women leaders can foster adaptation by revitalizing their land-based knowledge and community governance, empowering sustainable practices to mitigate health and environmental challenges in both rural and urban settings.

7. Discussion and conclusion

While this article extensively discusses the impact of climate change on the Garo Indigenous community living in Dhaka city, their land-based cultural degradation, matriarchal line of ancestry, spirituality, and the community-driven solutions proposed by both men and women within the community, the concluding remarks revolve around three primary points of learning:

Recognizing Land Rights, Culture, and Spirituality: Indigenous communities view their lands and territories as intrinsically connected to survival, involving distinct spiritual and material relationships (Shangam, S, 2010; Dylan et al., 2016). This study also highlights the intense spiritual bond that the Garo Indigenous group has with their land and their traditional way of life, which relies on sustenance. The study advocates for the strengthening and advancement of indigenous rights within both domestic and global contexts, which can be accomplished by empowering legal mechanisms. The text underscores the importance of incorporating advocacy campaigns in acknowledging and validating these rights (Rashid, 2022). Legal measures should explicitly recognize the communal rights of indigenous people to their land.

Respecting the inheritance system: The study examines the phenomenon of the Garo Indigenous population migrating to urban areas in search of better living standards, motivated by climate change and the loss of land. It emphasizes that conventional matriarchal systems have gradually declined as their spirituality has diminished because of the impact of alternative belief systems. The Garo Indigenous community's sensitivity to global warming has been exacerbated by implementing fertilizers and pesticides, government-led deforestation, and the relinquishment of authority over local resources, among other historical factors (Perucca, 2012). The study also emphasizes the need of increasing awareness among the population of Bangladesh regarding cultural variety and the necessity of mutual respect for the community's ancestral lineage and authority structure.

Reciprocity and Dissemination of Ancestral knowledge: The study proposes the revival of the Garo Indigenous community's traditional knowledge, rituals, festivals, and cultures as their existence is

currently under risk (Reyes, G. et al., 2019) assert that Indigenous individuals play a crucial role in restoration initiatives, including the preservation of traditional practices, restoring land that has been harmed by external forces, collaborating with external organizations, and working towards the restoration of ecosystems, among other tasks. The dissemination and celebration of this knowledge are essential to facilitate the learning of mainstream society and convert Garo Indigenous community members about their traditional way of life. Furthermore, creating networks can play a crucial role in mitigating the impacts of climate change. Developing this network is reciprocal, as the Garo Indigenous population is present in mountainous regions and metropolitan areas. Metropolitan residents could instruct their rural relatives on climate change adaptation and, if chances exist, potentially relocate them to metropolitan regions. Moreover, the community can support individuals who desire to relocate from urban areas back to their rural communities. Achieving these goals is a challenging endeavor that requires cooperation between national-level assistance and non-governmental groups to exchange knowledge and establish networks.

From this study, we learned insight into the significant impact of climate change on the Garo Indigenous population residing in Dhaka, the capital city of Bangladesh. The study examines their difficulties, including heatwaves, modified weather patterns, health concerns, and cultural changes, as they adjust to urban living resulting from climate-induced land loss. The research emphasizes the need to acknowledge Indigenous rights, safeguard spirituality, and foster traditional knowledge transmission. The approach promotes cooperative endeavors that encompass government, non-governmental organizations, academia, and the private sector to empower the community and incorporate indigenous knowledge into initiatives for climate resilience. Our study on relational ontology and decolonization highlights the distinct difficulties presented by heatwaves, changing weather patterns, and health issues, land-based cultural degradation, and authoritative structure which further exacerbate the hardships faced by indigenous populations that have relocated to metropolitan regions in pursuit of employment opportunities because of land displacement caused by climate change. This study highlights the imperative to acknowledge the entitlements of Indigenous communities, the safeguarding of their land-based culture, spirituality, and the significance of transmitting traditional knowledge. Moreover, it promotes the idea of a collaborative endeavor involving government agencies, non-governmental organizations, academic institutions, and the private sector to empower the Garo Indigenous community and integrate their traditional knowledge into climate-resilient strategies, thus facilitating a more sustainable and inclusive future. Therefore, it is recommended that the focus should be on reclaiming traditional land-based traditions and spirituality, as well as considering the consequences of community-driven climate change solutions involving all parties involved.

CRedit authorship contribution statement

Ranjan Datta: Conceptualization, Funding acquisition, Investigation, Methodology, Writing – original draft, Writing – review & editing.
Arifatul Kibria: Writing – original draft.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

References

- A Jalil, M., et al. (2012). The family structure and cultural practice in Bangladesh: An overview. *Himalayan Journal of Sociology & Anthropology*.
- Bal, E. (2000). They ask if we eat frogs, Garo Ethnicity in Bangladesh. *Eburon Delft*.
- Blieie, T. (2005). *Tribal peoples, nationalism, and the human rights challenge*. The Adivasis of Bangladesh'' The University Press Limited.
- Boonzaier, F., & Van Niekerk, T. (2019). *Introducing decolonial feminist community psychology* (pp1-10). Springer International Publishing.
- Burgess, C. P., Johnston, F. H., Bowman, D. M. J. S., & Whitehead, P. J. (2005). Healthy country: Healthy people? Exploring the health benefits of indigenous natural resource management. *Australian & New Zealand Journal of Public Health*, 29, 118–119.
- Chapala & Datta. (2023). Indigenous perspective on climate change and decolonial learning journey. *Keynote speaker of annual lecture on right of indigenous people, organized by center on law and social transformation*.
- Das, D. T. K. (2005). Psycho-social dimension of ethnicity: The situation of the Garo community in Bangladesh. *Journal of Ethnic Affairs*, 1(1), 5–10.
- Datta, R. (2018). Traditional storytelling: An effective indigenous research methodology and its implications for indigenous research. *An International Journal of Indigenous People*, 14(1), 35–44.
- Datta, R. (2022). Indigenous trans-systemic research approach. *Qualitative Inquiry*, 28(6), 694–702.
- Datta. (2023). Land-based environmental sustainability: A learning journal from an indigenist researcher. *Polar Geography*, 46(1), 3–17.
- Datta, R., & Kibria, A. (2015). *R. A relational theoretical framework and meaning of land, nature, and sustainability for research with Indigenous communities, Local Environment* (Vol. 20, pp. 102–113). Routledge, 1.
- Datta, R., & Kibria, A. (2023). *Climate crisis, impact and community-led suggested solutions: A study with urban Garo community in Bangladesh*.
- Dobson, & Brazzoni, R. (2016). Land-based healing: Career first Nations' addiction recovery program. *Journal of Indigenous Well-being*, 1(2), 9–17.
- Dylan, A., et al. (2016). Land-based spirituality among the Cree of the mushkegowuk territory. *Journal of Religion and Spirituality in Social Work: Social Thought*, 35(1–2), 108–119.
- Ehrenfels, B. O. R. (1941). *Mother right in India*. Humphery Milford: Oxford University Press.
- Gain, P. (2008). *Culture of adivasis in Bangladesh*. Dhaka: SEHD.
- Imrul, K. (2012). Livelihood pattern in Garo community: A study on a village in Tangail District. *Quest Journal: Journal of Research in Humanities and Social Science*, 10(9), 90–94.
- IPMPCC. (2011). Indigenous peoples, marginalized populations and climate change: Vulnerability, adaptation and traditional knowledge, compilation of presented abstract. *Mexico City, Mexico*.
- Kovach, M. (2009). *Indigenous methodologies: Characteristics, conversions and contexts*. Toronto, ON: University of Toronto Press.
- Mack, A. N., & Na'Puti, T. R. (2021). "Our bodies are not terra nullius": Building a decolonial feminist resistance to gendered violence. In # *MeToo* (pp. 84–107). Routledge.
- Mohammed, et al. (2011). A case study on the Garo ethnic people of the sal (Shorea Robust) forest in Bangladesh. *International Journal of Social Forestry*.
- Mohsin, A. (1997). *Garo community: Assimilated with mainstream* (Vol. 64, p. 73). Somaj Nirikhon, Dhaka University.
- Perucca, C. (Ed.). (2012). *Garo women's traditional knowledge a a response to climate change*, BARCIK.
- Perucca, C. (2012). *Garo women's traditional knowledge as a response to climate change*, Dhaka, Bangladesh.
- Queenbala, M. (2011). Revisiting playfair's the Garos: A century age. *Man in India*, 91, 517–527.
- Rashid, H., et al. (2022). Indigenous Garo women's role in family transformation in Bangladesh. *International Journal of Social Science Research & Review*, 5(9), 175–191.
- Reyes, G., et al. (2019). The contribution of indigenous peoples and local communities to ecological restoration. *Restoration Ecology*, 27(1), 3–8.
- Dei. (2011). Introduction. In G. J. S, & Dei (Eds.), *Indigenous philosophies and critical education: A reader*, NY: Peter, lang (p. 3).
- Smith, L. T. (2012). *Decolonizing methodologies: Research and indigenous peoples*. Otago University Press.
- Starblanket, G. (2018). Complex accountabilities: Deconstructing "the Community" and engaging Indigenous feminist research methods. *American Indian Culture & Research Journal*, 42(4), 1–20.
- United Nations. (2021). Challenges and opportunities for indigenous peoples' sustainability. *UN DSA*, 1(101), 1–6. <https://www.un.org/development/desa/dspd/2021/04/indigenous-peoples-sustainability>.
- Zaragocin, S., & Caretta, M. A. (2021). Cuerpo-territorio: A decolonial feminist geographical method for the study of embodiment. *Annals of the American Association of Geographers*, 111(5), 1503–1518.