# Environmental Issues, Climate Change, and Gender in Post-Tsunami Aceh

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A B S T R A C T

*The massive 2004 Indian Ocean earthquakes and tsunami devastated Aceh in Northern Sumatra took place twenty years ago. Physical reconstruction has been completed; new infrastructures have been in place. Most efforts and programs for reconstruction and rehabilitation ended around 10 years ago. However, long-term environmental impacts affecting women and other marginalized groups do not receive sufficient attention. This paper addresses the continuing environmental impacts and women's activism in addressing the problems within the context of the precarious Acehnese social and political environments that elevate the risk for women. Using the concept of riskscapes and Feminist Political Ecology approach to analyze the multidimensional risks affecting women's positions and abilities to address climate change and environmental issues, we argue that Acehnese women continue to struggle in reconstructing their positions and agency. Based on the interviews with Acehnese women activists in 2022 and during the reconstruction era between 2004-2014, this paper also discusses the complex interconnections of the long-term impacts of political conflicts, disasters, and women's environmental activism in a society where Sharia law has been implemented.*

Keywords: Aceh, climate change, environmental justice, women's agency.

## 1. Introduction

Reports show that the environmental impacts of the earthquake and tsunami in Aceh did not receive major attention during the reconstruction period (UNEP, 2007) in 2004-2014, however, these disasters also created major environmental destruction. Crops, farmlands, forests including mangrove forests, coastal wetlands, and coral reefs were among the casualties. The reconstruction process focused on building and rebuilding infrastructure resulting in further deterioration of the environment. As an example, the rate of deforestation increased between 2006 to 2013 during the process of rehabilitation and reconstruction (Mongabay, 2023). The Leuser-Ulu Masen ecosystem, the largest and the most important natural forest area and biodiversity resources in Sumatra and even the world has been endangered and impacted by the disasters. This degradation affects the livelihoods of many Acehnese communities. Significant damage to the forest and other natural resources increased the risks and vulnerability of

people in Aceh to additional disasters such as flash flooding and landslides, increasing erosion and siltation of downstream irrigation and drainage channels, as well as silt deposition on coral reefs that diminish the productivity of fisheries. Such damage sacrifices biodiversity as well as the social and cultural values of the people of Aceh (UNEP 2007:5).

In response and based on the stipulation of the Peace Agreement, the Acehnese Legislative Bodies passed Environmental Law No. 2, 2011. In addition, the Peace Agreement mandated Aceh's local government to establish programs and policies to prevent and reduce the risk of disaster to protect the people of Aceh from potential future disasters. To implement this mandate, a local regulation, Qanun number 5, 2010 was established. This law obligates the provincial, district, and other local institutions to follow the regulations. At the end of 2020, the provincial legislative bodies ratified a regulation (Qanun) on Disaster Education requiring that educational institutions from elementary school and beyond integrate a curriculum on disaster,

including training and efforts for disaster risk reduction. The regulation also includes mandates for ensuring that part of the provincial funding will be allocated for the implementation of this law. The educational programs also include non-formal and informal education at community levels so community groups, non-governmental organizations, and religious groups are required to implement this mandate as part of their activities.

The formation of these regulations was the first step in developing measures to protect and conserve the environment and reduce disaster risk, yet without political commitment and engagement of multiple layers of both government and non-government actors, these regulations will not result in effective outcomes. The rules and regulations may create bureaucratization and centralize the power of environmental and disaster policies and programs on government and legislative institutions. Even though district governments have also followed up with similar regulations at the district levels, it is apparent that these have not prevented further environmental degradation and effective disaster risk reduction stemming from climate change or other natural or human-made disasters, such as illegal logging, mining, and forest fires. Studies (Swainson and Mahanty 2018: 286; Ridwansyah 2022:218) show that economic and political vested interests hamper environmental initiatives and policies for disaster risk reduction.

## 2. Focus, Theory, and Method

This paper focuses on women's responses and struggles to address the multilayered problems after the formal reconstruction period ended in 2014. Women are affected by the disasters and reconstruction process, but they also play active roles in addressing environmental issues. However, we cannot separate their environmental activism from their other struggles and activism. Hegemonic gender ideology affects their position and their ability to express their agency and activism. It also creates limitations for their movements and efforts to reconstruct both their social and cultural positions. The concept of riskscapes (Muller-Mahn et al. 2018) helps us analyze both the multiple risks and agency that Acehnese women have in dealing with environmental, social, and political factors. We combine this concept with the Feminist Political Ecology theory to better understand the interconnections of risk, resilience, and women's rights, responsibility, and activism in dealing with climate change and environmental issues.

This paper is based on studies using observations and interviews both during the reconstruction period (2004-2014) and interviews (10 interviews) conducted in 2022 after most of the funding for reconstruction was depleted and many women's organizations also had to deal with the Pandemic impacts. In the latter interviews, we also addressed the impacts of the new Qanuns (local regulations) on their activism and roles.

## 3. Gendered Riskscapes and Moving Forward

The concept of "riskscape" encompasses the nexus of spatial, temporal, and social factors that denote the nature of the risk for whom, and critically, where it is located. Riskscapes are "landscapes of risk that exist in relation to practice" (Muller-Mahn et al. 2018:197). They form the geopolitical territory of hazard and the social construction of vulnerability and resilience. They provide a setting for shared understanding and collective practices formed by social relations that are characterized by dynamic processes rather than structures and boundaries. Muller-Mann and colleagues (2018) lay out the dimensions of riskscapes as composed of six components: temporalities, subjectivities and social groups, spatiality, plurality, power relations, and practice. It is particularly with the last two dimensions that this paper is concerned, we focus mainly on how these components intersect with gender relations and women's positions within this context. This presentation focuses on the case of Aceh and identifies factors that create and perpetuate the riskscapes faced by Acehnese women and society. The six dimensions of riskscapes interact and intersect with each other within the spatial and temporal spaces continuing to infiltrate the process of re-construction and rehabilitation after the major disasters. Subsequent disasters including those created by climate change, environmental destruction, and the pandemic follow similar patterns as long as the main structural foundations that create and perpetuate gender inequalities remain intact (Tickamyer and Kusujiarti 2020).

In Aceh, hegemonic masculinity along with disaster capitalism and corrosive communities created in the aftermath of the disaster affect the connection between community and the environment. Natural resources are viewed as the source of capital; mining and other resource extractions create environmental destruction. The reconstruction process was hijacked by a political gambit to seize economic and political power. These elite groups utilize control over natural resources as part of their main sources of capital. They commodify natural resources as part of their bargaining power and ways to maintain their positions. This is exacerbated by the focus on rebuilding and expanding physical infrastructure without significant consideration of the impact on the environment and communities living around the forested areas and other natural resources.

Gender relations became the site of continuing struggles where women were positioned as a symbol of local cultural and religious identities and were trapped in this process of power struggle. Multiple types of violence including symbolic, physical, political, and social violence against women became rampant and are part of a process that has disempowered women. Control over the environment and natural resources are integral parts of the power relations.

These types of violence serve and are used as ways to demonstrate power for the new elites struggling to justify their newly acquired positions in the transitional period following the disasters. It continued even after physical reconstruction ended because more integrated reconstruction based on gender and social justice principles failed to happen. Acehnese women have actively responded to their disempowerment; they express their agency and resilience and are actively involved in creating ecological justice. Yet they are also caught in the cultural and political crosshairs and have to continuously defend themselves against the accusation that they fail to support local cultural and religious identities. They have to publicly prove that they have not been indoctrinated by foreign ideas of gender and feminism. They constantly have to assert that their struggles are part of these larger social, cultural, and political fights that all Acehnese face. This creates new risks that reinforce their vulnerabilities in the Aceh riskscapes This presentation provides analyses of these complex and multidimensional riskscapes relating to gender relations and the position of women in addressing environmental issues and larger issues related to reconstructions.

Moving forward, public dialogue or discussions where various societal elements can express their concerns, interests, and roles for the future of Acehnese societies will be necessary and instrumental. It is a challenging process, but women have started this social reconstruction and dialogue through their All-Acehnese Women's Congress (*Duek Pakat Ureung Inong Aceh*) where they have created a space for women's groups to come together to discuss and develop some agreements. They have established *Balai Syura Ureung Inong Aceh*, a coalition of grassroots women's organizations. This coalition has been instrumental in addressing both social and ecological injustices.

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