

Women with Disabilities, Climate Justice, and Community Resilience in Indonesia: GEDSI and Ecofeminist Perspectives

Tika Pustika Fersari ^{a,1,*}, Sri Kusmala ^{b,2}

^a Puskemas Pangkalbalam, Jl. RE Martadinata, Pangkalpinang, 33129, Indonesia

^b Dinas Sosial, Pemberdayaan Masyarakat dan Desa, Jl. Pulau Lepas, Pangkalpinang, 33684, Indonesia

¹ fersaritika@gmail.com*; ² srikusmala@gmail.com

*corresponding author

ARTICLE INFO

Article history

Received: May 24, 2026

Revised: July 27, 2026

Accepted: July 30, 2026

Published: July 31, 2026

Keywords:

climate justice,
community resilience,
ecofeminism,
GEDSI,
woman with disabilities

ABSTRACT

Climate-related disasters increasingly intensify social inequalities, particularly for women with disabilities who experience intersecting vulnerabilities related to gender, disability, and limited access to resources. This research examines the roles of women with disabilities in disaster management, the implementation of Gender Equality, Disability and Social Inclusion (GEDSI) principles, and the relevance of climate justice and ecofeminist perspectives in Indonesia. Using a qualitative literature review approach, this research analyzes academic articles, policy documents, institutional reports, and advocacy publications published between 2020–2025. The findings reveal that women with disabilities continue to face structural barriers in accessing disaster information, evacuation systems, healthcare services, and decision-making processes. However, they also possess significant adaptive capacities through local knowledge, informal social networks, caregiving practices, and grassroots solidarity initiatives that strengthen community resilience. The research further demonstrates that GEDSI implementation in Indonesia remains uneven due to weak technical regulations and limited institutional capacity. Integrating climate justice, ecofeminism, and GEDSI perspectives provides a more inclusive framework for disaster governance by recognizing women with disabilities not merely as vulnerable groups but as active agents of resilience. Community solidarity and local collaboration are therefore essential foundations for building inclusive and sustainable climate resilience in Indonesia.

This is an open access article under the [CC-BY 4.0](#) license.



1. Introduction

Climate change has emerged as one of the most pressing global challenges of the 21st century, not only because of its impact on ecosystems but also due to its profound consequences on social, economic, and political dimensions. As Sultana (2022) argues, the climate crisis is essentially a crisis of justice, wherein the most vulnerable groups bear the heaviest burdens despite contributing the least to the problem. In the context of disaster management, women with disabilities are among the most marginalized groups as they face layered vulnerabilities, resulting from patriarchy, limited access, and social stigma (Crawford et al., 2023).

The theory of environmental feminism introduced by Agarwal provides a crucial conceptual framework for understanding women's position within power relations toward the environment

(Arya & Singh, 2024). This theory emphasizes that women, particularly those from vulnerable groups, often have distinct and direct experiences in facing disasters and environmental crises, and therefore their voices must be accommodated in decision-making. In line with this, the framework of Gender Equality, Disability and Social Inclusion (GEDSI) in disaster management underscores that disaster risk reduction can only succeed if gender, disability and social inclusion perspectives are embedded at the core of policies, as discussed in the Siap Siaga Issue Brief (D. Arifin, 2024).

In Indonesia, climate change exacerbates the situation for women with disabilities. The climate crisis not only disrupts livelihoods but also intensifies discrimination against women with special needs or disabilities, who are frequently overlooked in disaster planning (Candraningrum, 2025). Research by Pertiwi et al. (2020) further demonstrates that people with disabilities are often positioned merely as aid recipients rather than active actors in disaster management. In contrast, recent studies highlight that women with disabilities possess strong social capacities to build community resilience through informal networks and social solidarity (Dewi & Wongkar, 2022).

Within the Southeast Asian context, exclusionary practices remain prevalent. According to a Nguyen et al. (2020) report, women in Southeast Asia, particularly those living with disabilities, face significant barriers in accessing emergency information, evacuation procedures, and post-disaster recovery. This finding resonates strongly with the Indonesian context, where hydrometeorological disasters such as floods, droughts, tidal waves, and coastal abrasion occur with increasing frequency, yet climate adaptation policies have not fully mainstreamed intersectional gender and disability perspectives (Mulyadi, 2023).

Disaster issues in Indonesia are becoming increasingly complex as the frequency and intensity of hydrometeorological disasters rise due to the climate crisis. Floods, droughts, tidal surges, and coastal erosion not only result in material losses but also expose profound social inequalities in vulnerability and adaptive capacity. Within this landscape, women with disabilities are among the most severely affected communities. They experience double vulnerability physical limitations combined with social barriers exacerbated by gender-based discrimination, which frequently marginalizes their voices in disaster decision-making processes.

Unfortunately, both academic discourse and formal policy in Indonesia tend to frame women with disabilities as passive victims rather than as subjects with significant adaptive capacities. Yet, in practice, women with disabilities often develop survival strategies, social networks, and valuable local knowledge that contribute to building community resilience. This potential is particularly important in the context of climate justice, where risks and disaster impacts are never evenly distributed but instead disproportionately borne by marginalized groups with the least access to resources.

Community solidarity and local collaboration also play essential roles in strengthening climate resilience, particularly among vulnerable communities. Women with disabilities frequently rely on informal support networks, neighborhood associations, disability communities, and grassroots initiatives to survive climate-related disasters. These collective practices demonstrate that resilience is not solely institutional but also socially constructed through inclusive participation, mutual support, and community-based collaboration. In many local contexts, solidarity becomes an important mechanism for overcoming limited state capacity and inaccessible disaster services, while simultaneously reinforcing adaptive capacities at the community level.

At both the global and national levels, there is growing momentum to mainstream the principles of Gender Equality, Disability, and Social Inclusion (GEDSI) in disaster management. These principles emphasize ensuring the equal participation of vulnerable groups, including women with disabilities, throughout the disaster risk reduction cycle (Zailani, 2023). However, GEDSI implementation in Indonesia still faces serious challenges, ranging from the lack of derivative regulations to limited institutional capacity in realizing truly inclusive policies. From a theoretical perspective, the environmental feminism approach offers a lens through which the interrelation between women, the environment, and disasters can be understood. Women are often the most affected by ecological degradation while simultaneously possessing critical local knowledge for adaptation (Kusuma et al., 2024). This perspective aligns with GEDSI's emphasis on social inclusion and is further reinforced by climate justice theory, which highlights equitable distribution

of risks and benefits, protection of vulnerable groups, and recognition of the rights of marginalized communities. Integrating these three frameworks paves the way for a new understanding: that women with disabilities should not merely be positioned as objects of protection but rather as key actors in strengthening social resilience grounded in climate justice.

Several online writings reinforce this argument. For example, Farah (2025) notes that women with disabilities are increasingly positioning themselves not merely as victims but as guardians of life, actively engaging in community-based climate action. Similarly, Shafiq (2024) emphasizes that social inclusion cannot remain rhetorical; it must be operationalized in early warning systems, evacuation planning, and post-disaster recovery. However, both studies reveal persistent limitations particularly women with disabilities' restricted access to formal participation spaces and the lack of recognition of their roles in disaster policy. Against this backdrop, the urgency of this research lies in bringing a climate justice perspective into disaster management discourse, particularly by positioning women with disabilities as active subjects rather than passive objects. Previous studies have primarily emphasized the general vulnerabilities of women or persons with disabilities but rarely addressed the specific experiences of women with disabilities in the context of disaster. This research therefore seeks to fill that gap.

Based on these social realities and theoretical foundations, two major research questions emerge: (1) what roles and levels of participation do women with disabilities hold in climate disaster management in Indonesia; and (2) to what extent have disaster risk reduction policies and practices integrated GEDSI perspectives and climate justice principles? This research therefore aims to analyze the position of women with disabilities within disaster governance, examine the implementation of GEDSI principles in policy and field practices, and explore how solidarity and community-based resilience contribute to inclusive climate adaptation. By integrating ecofeminism, climate justice, and GEDSI perspectives, this study seeks to contribute both theoretically and practically to the development of more participatory, inclusive, and equitable disaster governance in Indonesia.

2. Research Method

This research employs a qualitative approach with a literature review design. The method was selected to obtain an in-depth understanding of the vulnerabilities, resilience, and agency of women with disabilities within the framework of climate justice-based disaster risk reduction. Qualitative research is particularly appropriate for examining complex social realities, lived experiences, and intersectional dimensions related to gender, disability, and environmental crises (Sugiyono, 2022). A literature review approach was utilized because it enables the systematic exploration, evaluation, and synthesis of findings from various scholarly and policy-based sources relevant to the research topic.

The data sources consisted of primary and secondary literature obtained from Scopus, ScienceDirect, and Google Scholar databases. Primary sources included peer-reviewed journal articles published between 2020 and 2025 that addressed disability inclusion, gender studies, disaster risk reduction, climate change adaptation, and climate justice. Secondary sources included reports from international organizations such as UN Women, UNDP, WHO, and relevant Indonesian government policy documents. Publications from research institutions and civil society organizations were also included to provide contextual insights and policy perspectives. The use of multiple databases and document sources enhanced the breadth and credibility of the literature reviewed.

Data collection was conducted through a systematic literature review process following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework. Literature searches were performed using keywords including "women with disabilities," "inclusive resilience," "disaster risk reduction," "climate justice," and "intersectionality". The inclusion criteria were publications written in English or Indonesian, published between 2020 and 2025, and directly relevant to the study objectives. Articles lacking full-text access, duplicate records, or limited relevance to the research topic were excluded. The initial search identified 50

records, of which 30 articles met the eligibility criteria and were included in the final analysis. The article selection process is presented in a PRISMA flowchart to ensure transparency and replicability.

The data were analyzed using thematic analysis, which is effective for identifying recurring patterns, meanings, and relationships across qualitative data sources (Braun & Clarke, 2022). The analysis began with familiarization through repeated reading of the selected literature. Relevant findings were then coded and organized into broader thematic categories. The themes were subsequently reviewed and refined to identify relationships among disability, gender, climate vulnerability, and resilience. Finally, an interpretative narrative was developed to synthesize the findings and generate conceptual insights relevant to climate justice-based disaster risk reduction.

To ensure the validity and credibility of the findings, source triangulation was applied by comparing evidence from academic journals, institutional reports, policy documents, and advocacy publications (Flick, 2022). Comparisons focused on identifying similarities, differences, and recurring patterns across sources regarding vulnerability, resilience, and inclusion of women with disabilities. When conflicting findings were encountered, priority was given to peer-reviewed and empirically supported evidence while considering the contextual factors underlying the discrepancies. The final interpretation was developed through a synthesis of convergent findings and critical examination of divergent perspectives. Researcher reflexivity was also maintained throughout the analysis process to minimize interpretative bias and strengthen analytical consistency.

3. Results and Discussion

3.1. Involvement of Women with Disabilities in Disaster Management

Previous studies across various regions of Indonesia reveal that women with disabilities often face structural barriers in participating in disaster management processes. In a study conducted by Abdillah et al. (2025) in the Special Region of Yogyakarta, community initiatives led by people with disabilities successfully established a simple technology-based emergency communication forum, highlighting the substantial potential of women with disabilities as agents of change. Similarly, Sakina et al. (2021) document the critical role of *Difabel Siaga Bencana (Difagana)* in Yogyakarta in building community capacity. Through inclusive disaster education and training, women with disabilities not only became better prepared to face disaster threats, but also contributed to fostering social awareness within their communities. These findings underscore how inclusive disaster education can shift the role of women with disabilities from passive recipients of aid to active agents.

In Central Java, Farah (2025) found that women with disabilities continue to be positioned as aid recipients rather than decision-makers. Physical barriers such as inaccessibility to evacuation sites and social barriers such as gender stereotypes and disability stigma further reinforce their marginalization. Yuwanto (2023), examining the context of the 2018 Lombok earthquake in West Nusa Tenggara, identified additional challenges facing women with disabilities, including limited access to early warning information. Disaster information is often disseminated in visual or audio-only formats that are inaccessible to many, compromising the ability to evacuate in time. Nevertheless, some women with disabilities initiated informal warning networks with neighbors, which proved effective even without governmental facilitation.

Contrastingly, Yuwanto (2023) on the same earthquake observed that women with disabilities not only faced challenges in accessing information and evacuation facilities but were also actively involved in coordinating preparedness, evacuation processes, and socio-economic rehabilitation. Although often conducted informally, these initiatives demonstrate the real and ongoing involvement of women with disabilities, despite a lack of formal institutional structures. In Jakarta, research by Wannewitz & Garschagen (2021) shows that local NGO-led initiatives have started to create space for women with disabilities to participate in flood evacuation simulations. However,

these contributions remain in the informal domain and are not yet fully integrated into the official structures of the Regional Disaster Management Agency. Informal recognition of their participation is emerging, but formal legitimacy remains lacking.

Recent studies demonstrate that women, including women with disabilities and other marginalized groups, play significant roles in community-based disaster preparedness and climate adaptation. Research in Asia and the Pacific highlights how women contribute to resilience initiatives through community organizing, disaster response coordination, and the development of adaptation strategies grounded in local knowledge and social networks (*Tran & Downes, 2023*). In Indonesia, however, women with disabilities are still often excluded from formal disaster management decision-making processes. Despite these limitations, studies on Disabled People's Organisations (DPOs) in Indonesia show that women with disabilities have actively organized information dissemination, evacuation strategies, and advocacy for disability-inclusive disaster policies (*Pertiwi et al., 2020*). These findings indicate that strengthening institutional support and formal participation mechanisms is essential to enhance the role of women with disabilities in disaster risk reduction and climate resilience efforts.

Likewise, *Jerin et al. (2023)* in Bangladesh document similar patterns: women with disabilities in flood-prone areas face heightened vulnerability due to limited access to transportation and communication. However, when provided with inclusive emergency response training, they play significant roles in disseminating disaster information within their communities. This indicates that participation transcends mere representation and hinges on empowerment through capacity building. At the national policy levels, Bappenas (through a 2025 workshop) emphasized the importance of the roles of women and persons with disabilities in disaster risk reduction, citing data indicating that women are up to 14 times more likely to become disaster victims than men. This aligns with the stance of the Bali BPBD, which stresses that inclusive and accessible disaster information can transform women with disabilities into active actors rather than passive recipients (*Prambadi, 2025*).

Collectively, these findings highlight a significant gap between the potential of women with disabilities as resilience actors and the reality of marginalization in disaster management. While their experiences offer invaluable knowledge for adaptation strategies, this capacity remains underutilized without inclusive policy frameworks. These findings align with the theory of Gender Equality, Disability and Social Inclusion (GEDSI), which emphasizes that the participation of vulnerable groups is often hindered by social and institutional factors rather than solely by individual limitations (*Rokhmah & Ro'fah, 2021*). In the cases of Central Java Province and West Nusa Tenggara Province, the marginalization of women with disabilities arises due to the absence of formal mechanisms that guarantee their involvement in decision-making.

However, studies from Yogyakarta and the Philippines demonstrate that when given space, women with disabilities can actively contribute, for example by managing emergency communication forums or logistics distribution. This reinforces the assumption of ecofeminism, which highlights that women with disabilities possess adaptive capacities derived from their proximity to the everyday needs of communities (*Chinsya, 2024*). Such active participation not only broadens the definition of resilience actors but also shows that the local knowledge of women with disabilities is highly relevant in disaster contexts.

From the perspective of climate justice, the involvement of women with disabilities is not merely an issue of representation but a matter of fair rights distribution. The risks of disasters and climate change are not equally distributed, and vulnerable groups such as women with disabilities disproportionately bear heavier burdens (*Engelman et al., 2022*). Thus, enhancing their participation in disaster management represents a step toward correcting structural injustices. Findings from Bangladesh confirm this: when women with disabilities were involved through training, the overall community capacity increased.

Furthermore, the Nussbaum Capability Approach in Harnacke (2021) is also relevant to explain the importance of involving women with disabilities. According to this approach, social justice should be measured by the extent to which each individual has the “capabilities” to live with dignity and participate in society. In the context of disaster management, the involvement of women with disabilities not only enhances policy effectiveness but also expands their capabilities as equal citizens.

Additionally, Putnam's Social Capital Theory in Imran (2025) demonstrates that social networks and community participation are critical assets in facing disasters. Women with disabilities often act as connectors within their communities due to their close ties to informal networks, such as neighborhood groups, women's associations, or disability communities. By recognizing and strengthening this role, disaster management can become more inclusive while simultaneously building stronger social resilience.

Within the framework of Intersectionality, the issues faced by women with disabilities in disaster management must also be understood as resulting from the intersections of gender, disability, social class, and geographic location (Crawford et al., 2023). For instance, women with disabilities in rural areas face double vulnerabilities due to limited access to transportation and health services, in contrast to women with disabilities in urban areas who experience institutional stigma. Through an intersectional approach, disaster policies should not adopt a “one-size-fits-all” model but must be adapted to the specific contexts of each community.

In other words, the theories of GEDSI, ecofeminism, climate justice, the capability approach, social capital, and intersectionality complement one another in explaining that the involvement of women with disabilities is not merely a moral imperative but a practical necessity for building resilience. The continuing barriers to participation in various regions of Indonesia show that formal policies alone are insufficient to ensure substantive inclusion. Therefore, empowerment strategies, capacity building, and formal legitimacy are urgent steps to position women with disabilities as equal actors in disaster management.

3.2. Implementation of Gender Equality, Disability and Social Inclusion (GEDSI) Principles in Policy and Field Practices in Indonesia

In the formulation of disaster management policy in Indonesia, the principles of Gender Equality, Disability and Social Inclusion (GEDSI) enjoy normative recognition. The Disaster Management Law (Law No. 24 of 2007) explicitly mandates the protection of vulnerable groups, including persons with disabilities. This legislative intent is reinforced by the Disability Law (Law No. 8 of 2016), Government Regulation No. 42 of 2020 on Accessibility in Housing, Public Services, and Protection from Disasters for Persons with Disabilities, and BNPB Regulation No. 14 of 2014 on Guidelines for Disaster Relief Volunteers. Nevertheless, several studies assert that these regulations have not yet ensured substantive involvement of women with disabilities across the disaster management cycle including planning, emergency response, and recovery (Wahyuningroem & Fitriyah, 2024).

In West Java, Arifin et al. (2021) found that derivative documents such as contingency plans remain generic and do not explicitly mention mechanisms for women with disabilities to participate. As a result, their involvement in field operations tends to be merely formalistic. A similar pattern emerged in Central Sulawesi, where Kurniawan et al. (2021) observed that aid distribution and relocation following the 2018 Palu earthquake overlooked the fundamental needs of women with disabilities such as accessible restrooms, private spaces, and disaster-related information in accessible formats. The absence of clear, technical regulations led field officers to rely on ad hoc decisions, thereby preventing consistent internalization of GEDSI principles.

Nonetheless, several commendable local initiatives are emerging. Rimbawan & Nurhaeni (2024) observed that communities in Bali had developed early warning systems rooted in local wisdom, which actively involved women with disabilities in disaster simulations. While these initiatives are not yet fully embedded in formal policy, they demonstrate grassroots potential for

innovation. In South Kalimantan, Erlina et al. (2022) reported that women with disabilities still faced discrimination in evacuation prioritization during the severe flooding of 2021 highlighting a disjunction between inclusive intentions in planning documents and actual implementation.

Comparative perspectives further underline this implementation gap. In Japan, as examined by Kawasaki et al. (2023), inclusive principles have been effectively integrated into evacuation systems through stringent technical regulations such as wheelchair-friendly evacuation routes and multilingual information (audio, braille, digital). Japan's success underscores that political will and binding technical frameworks are essential for effective GEDSI implementation. In Southeast Asia, Thailand has initiated evacuation guidelines responsive to vulnerable groups Bharadwaj (2022), although inter-agency coordination remains weak. Meanwhile, reports from Vietnam indicate that, despite the existence of inclusive regulations, women with disabilities often remain unable to access evacuation centers due to transportation barriers and persistent social stigma. This demonstrates that challenges in implementing GEDSI principles are not limited to Indonesia but represent structural problems faced by many developing countries (Tran & Downes, 2023).

The findings of this research highlight a significant gap between normative regulations and field practices. Although Law No. 24 of 2007 recognizes the importance of protecting vulnerable groups, the implementation of Gender Equality, Disability and Social Inclusion (GEDSI) principles remains sporadic and largely dependent on local capacity (Arifin et al., 2021). This phenomenon reflects the policy implementation gap described by Selepe (2023), in which there is a substantial difference between policy provisions and their realization in practice.

In the Indonesian context, the limited inclusion of women with disabilities in disaster governance is influenced by uneven institutional capacity, inadequate disability-disaggregated data, and sociocultural barriers that restrict their participation, positioning them more often as aid recipients than active contributors to disaster risk reduction. The 2018 Central Sulawesi earthquake illustrates this gap, where the absence of inclusive technical standards resulted in inaccessible evacuation routes and limited disaster information formats for persons with disabilities (Kurniawan et al., 2021). In contrast, Japan demonstrates that GEDSI-based disaster management can be strengthened through political commitment, binding regulations, accessible infrastructure, multi-format information systems, and inclusive evacuation practices (Kawasaki et al., 2023). These comparisons highlight that disability inclusion requires not only normative commitments but also measurable policy frameworks, institutional capacity, and consistent implementation mechanisms.

From an ecofeminist perspective, neglecting the experiences of women with disabilities also means overlooking the ecological knowledge they have developed through their daily interactions with local environments. In Indonesia, this knowledge is closely linked to *kearifan lokal* (local wisdom), which distinguishes the country from many other contexts by embedding disaster preparedness and climate adaptation within community traditions and practices. In Bali Rimbawan & Nurhaeni (2024) found that integrating local wisdom community-based early warning systems, with the active involvement of women with disabilities, improved the accessibility and effectiveness of disaster information dissemination. Their experiences in interpreting environmental signals, maintaining social networks, and communicating risk information demonstrate that local wisdom functions not only as a cultural value but also as a practical resource for disaster risk reduction and climate resilience. However, without formal recognition within disaster governance frameworks, these contributions remain underutilized and insufficiently reflected in national policy.

Within the framework of climate justice, the gap between regulation and practice reinforces unequal risk distribution, placing women with disabilities who face barriers to evacuation, emergency transportation, and disaster information among the most vulnerable groups during crises. As (Engelman et al., 2022) argue, climate justice requires not only fair distribution of risks but also acknowledgment of diverse experiences and meaningful involvement in decision-making. Therefore, integrating GEDSI principles into disaster policies is essential to promote more equitable protection, participation, and access to resources amid escalating climate challenges.

Accordingly, the implementation of GEDSI in disaster policy in Indonesia must focus on bridging the gap between existing normative commitments and practical implementation. At the constitutional and human rights levels, Indonesia has established a legal foundation for equality and non-discrimination, including the recognition of every citizen's right to protection and equal treatment under the 1945 Constitution, as well as commitments reflected in Law No. 8 of 2016 on Persons with Disabilities and the ratification of the Convention on the Rights of Persons with Disabilities (CRPD) through Law No. 19 of 2011.

However, these frameworks require stronger operational mechanisms within disaster governance. First, technical regulations should be strengthened through binding inclusive standards at the national level to ensure that all stages of disaster management incorporate accessibility principles rather than depending on inconsistent local practices. Second, the participation of women with disabilities should be institutionalized through formal disaster governance forums involving Local Disaster Management Agencies, positioning them as active actors in planning, implementation, and evaluation rather than merely recipients of assistance. Third, community-based and local wisdom approaches should be formally integrated into disaster policies to ensure that implementation is not only administratively compliant but also socially and culturally responsive.

From the perspective of climate justice, these strategic measures represent efforts to redistribute protection, participation, and access to resources more equitably, recognizing that marginalized groups, particularly women with disabilities, experience disproportionate impacts from climate-related disasters. In Indonesia, this vulnerability is reflected in the limited availability of disability-disaggregated disaster data and the persistent accessibility barriers faced by persons with disabilities during emergencies. The 2018 Central Sulawesi earthquake and tsunami demonstrated that inaccessible evacuation facilities, limited disability-inclusive information systems, and insufficient preparedness mechanisms increased risks for persons with disabilities (Kurniawan et al., 2021).

Similarly, data from the National Team for the Acceleration of Poverty Reduction (TNP2K) indicate that persons with disabilities face higher risks of poverty and social exclusion, conditions that reduce their adaptive capacity toward climate impacts. From an ecofeminist perspective, these inequalities also reveal the marginalization of women's environmental knowledge, including the adaptive practices developed through everyday interactions with ecosystems and local resources. Studies on community-based adaptation in Indonesia show that local knowledge, when integrated with formal disaster governance, can strengthen early warning systems, resource management, and community resilience. Therefore, integrating GEDSI principles, climate justice, and ecofeminist perspectives can transform disaster policies from merely protective approaches into inclusive governance frameworks that recognize women with disabilities as knowledge holders and active agents in building sustainable climate resilience.

3.3. Justice and Ecofeminism Perspectives in Disaster Management

There is a close interrelation between climate justice, ecofeminism, and the role of women with disabilities in disaster management. Research conducted by Manoby et al. (2023) in Papua Province shows that Indigenous women with disabilities play an important role in preserving forests as natural buffers against ecological disasters through their traditional ecological knowledge, sustainable resource management practices, and long-standing interactions with local ecosystems. These contributions strengthen community resilience by reducing environmental degradation and enhancing local adaptive capacity to climate-related risks.

However, despite their significant ecological role, their knowledge and experiences remain largely excluded from formal environmental governance and disaster mitigation policies due to structural inequalities, gender-based discrimination, disability-related barriers, and limited participation in decision-making processes. This situation reflects the central argument of ecofeminism, which emphasizes that the marginalization of women particularly Indigenous women

with disabilities is closely linked to broader patterns of environmental injustice, resulting in the underrecognition of their contributions to climate adaptation, ecosystem conservation, and disaster risk reduction.

A similar pattern was found in the research by Suriastini et al. (2023) in Aceh Province, examining the post-2004 tsunami context. The research revealed the participation of women with disabilities in developing local knowledge, particularly evacuation techniques based on natural signs. Although this knowledge is rarely officially recognized in formal policies, such practices are passed down and remain relevant within communities. This fact underscores that the so-called “marginal knowledge” of women with disabilities can actually strengthen resilience grounded in climate justice.

In the global context, Jenkins & Kalsi (2025) demonstrate that women with disabilities in coastal India face heightened climate vulnerability due to the intersection of gender inequality, disability exclusion, and poverty. However, they also function as important agents of adaptation by developing community-based farming practices that respond to environmental changes. Their adaptive capacity is shaped by continuous interaction with local ecosystems, enabling them to develop practical ecological knowledge and context-specific solutions for sustaining livelihoods and food security. These findings reinforce ecofeminist perspectives that recognize women with disabilities as holders of valuable environmental knowledge and contributors to community resilience. Nevertheless, their experiences and innovations remain insufficiently integrated into formal climate adaptation, environmental governance, and disaster risk reduction policies.

Corburn (2022) in Kenya also emphasized that climate justice requires recognition of the unequal distribution of risks. Women with disabilities in semi-arid regions more often lose access to clean water during droughts, exacerbating their health vulnerabilities. However, inclusive GEDSI-based programs successfully provided them with priority access to clean water while also involving them in resource management committees. These findings demonstrate that integrating GEDSI with climate justice principles can reduce structural vulnerabilities.

Furthermore, Ngcamu (2023) research in Australia highlighted good practices in integrating women with disabilities into community-based climate change policy planning. The result was more responsive policies that not only protected vulnerable groups but also strengthened collective resilience. This model can serve as a reference for Indonesia to reinforce climate justice perspectives in disaster management.

Overall, studies from both domestic and international contexts reveal that climate justice and ecofeminism perspectives provide new insights into the position of women with disabilities. They are not merely victims, but also holders of local knowledge, resource managers, and strategic actors in strengthening community resilience. However, recognition of these capacities remains weak within Indonesia’s formal policy framework, indicating the urgent need to integrate ecofeminist and GEDSI perspectives into national disaster management policies.

Climate justice and ecofeminism provide strong analytical frameworks for understanding the position of women with disabilities in disaster management. Climate justice theory Engelman et al. (2022) emphasizes the fair distribution of risks, vulnerabilities, and adaptive capacities across social groups. Within this framework, women with disabilities are systematically burdened with greater risks due to limited access, policy exclusion, and structural barriers. Meanwhile, ecofeminist theory Chinsya (2024) highlights the close connection between the oppression of women and ecological degradation. Ignoring the voices of women with disabilities therefore means disregarding both ecological and social dimensions that are crucial in disaster mitigation.

Studies in India (Jenkins & Kalsi, 2025) and Aceh (Gartrell et al., 2020) demonstrate that women with disabilities possess adaptive local knowledge ranging from climate-resilient agricultural practices to the ability to interpret natural signs for evacuation. However, such knowledge is often relegated to a “secondary” status compared to formal technocratic approaches.

Ecofeminist critique helps explain this dynamic, as dominant epistemologies remain biased against community knowledge and tend to privilege formal expertise.

Findings from Kenya (Corburn, 2022) and Australia (Ngcamu, 2023) show that integrating GEDSI (Gender Equality, Disability and Social Inclusion) principles within climate justice frameworks strengthens collective resilience. For instance, the involvement of women with disabilities in clean water management or community-based climate planning not only reduces their personal vulnerability but also enhances the adaptive capacity of entire communities. This resonates with the capability approach of Nussbaum in (Harnacke, 2013), which asserts that justice should be measured by the extent to which each individual has the opportunity to develop their basic capabilities on an equal footing. Participation of women with disabilities in disaster management thus becomes a pathway to expand such capabilities.

From the perspective of climate justice, this situation underscores the importance of equitable risk distribution and access. Climate-induced disasters disproportionately affect marginalized groups, making the recognition and inclusion of women with disabilities an integral part of redistributing protection and benefits more fairly. A study in Papua by Manoby et al. (2023), highlighting the role of Indigenous women with disabilities in forest stewardship, illustrates that they act as ecological guardians and agents of resilience. However, the absence of formal recognition in policy frameworks leaves their capacities marginalized and at risk of being excluded from national governance systems.

Through the ecofeminist lens, the marginalization of women with disabilities can be understood as a result of patriarchal and technocratic systems that dominate decision-making. Such paradigms often regard women with disabilities not as knowledge actors but as burdens. Yet, best practices in Japan Kawasaki et al. (2023) and other countries prove that integrating women with disabilities in the design of evacuation and disaster mitigation strategies produces more inclusive adaptive innovations.

Therefore, the integration of climate justice, GEDSI, and ecofeminism is not merely a conceptual framework but also a practical strategy for building disaster governance that is more just, inclusive, and adaptive. This approach calls for a shift from reactive to preventive and systemic paradigms, where the voices of women with disabilities are not only acknowledged but also embedded as foundations in policy formulation.

4. Conclusion

This research confirms that women with disabilities experience intersecting vulnerabilities in climate-related disaster contexts in Indonesia, shaped by the interaction of gender inequality, disability exclusion, and structural barriers. The discussion demonstrates that these vulnerabilities are reflected in limited accessibility of disaster infrastructure, inadequate availability of disability-inclusive information, and insufficient involvement of women with disabilities in disaster planning and decision-making processes. However, the findings also emphasize that women with disabilities are not merely passive victims of disasters; they possess adaptive capacities, local knowledge, and social networks that support preparedness, response, and recovery processes within their communities.

The analysis further shows that Indonesia has established important normative foundations for disability inclusion and equality through constitutional guarantees, human rights frameworks, Law No. 8 of 2016 on Persons with Disabilities, and the ratification of the Convention on the Rights of Persons with Disabilities (CRPD). Nevertheless, the discussion identifies a persistent gap between regulatory commitments and implementation, particularly regarding accessible disaster infrastructure, disability-disaggregated data, and institutional mechanisms for meaningful participation. Comparative experiences from Bangladesh, Japan, and Australia illustrate that effective inclusive disaster governance requires not only legal recognition but also operational standards, accessible facilities, participatory mechanisms, and sustained political commitment.

Furthermore, this research highlights that community solidarity and grassroots collaboration play significant roles in strengthening climate resilience among women with disabilities. The discussion indicates that informal support networks, family systems, community initiatives, and local knowledge practices often become essential resources when formal disaster systems remain insufficiently inclusive. These experiences demonstrate that resilience is not only an institutional outcome but also a socially constructed process developed through collective action, mutual support, and community participation.

Theoretically, the integration of climate justice, ecofeminism, and GEDSI perspectives provides a more comprehensive understanding of the role of women with disabilities in climate disaster governance. The findings discussed in this research demonstrate that women with disabilities should be recognized not only as groups requiring protection but also as knowledge holders and active contributors to adaptive strategies and community resilience. Therefore, disaster governance in Indonesia requires a shift from reactive and assistance-oriented approaches toward inclusive, participatory, and justice-based frameworks that recognize the agency, experiences, and contributions of women with disabilities in addressing escalating climate risks.

5. Acknowledgment

The authors would like to express sincere gratitude to all scholars, institutions, and organizations whose publications and research contributed significantly to this research. Special appreciation is extended to researchers and advocacy groups working on disability inclusion, gender equality, climate justice, and disaster risk reduction in Indonesia and globally. The authors also acknowledge the valuable insights provided by previous studies that helped enrich the theoretical and analytical framework of this research.

6. References

- Abdillah, A., Widianingsih, I., Buchari, R. A., & Nurasa, H. (2025). Inclusive Resilience in Indonesia: Case of Disability Anticipation within Inclusive Development. *Discover Social Science and Health*, 5(1), 40. <https://doi.org/10.1007/s44155-025-00190-9>.
- Arifin, S., Wicaksono, S. S., Sumarto, S., Martitah, M., & Sulistianingsih, D. (2021). Disaster Resilient Village-Based Approach to Disaster Risk Reduction Policy in Indonesia: A Regulatory Analysis. *Jambá: Journal of Disaster Risk Studies*, 13(1), a1021. <https://doi.org/10.4102/jamba.v13i1.1021>.
- Arifin, D. (2024). Menggandeng Inklusi Disabilitas sebagai Bagian Penting dalam Penanggulangan Bencana. *Bnpb.go.id*. <https://www.bnpb.go.id/index.php/berita/menggandeng-inklusi-disabilitas-sebagai-bagian-penting-dalam-penanggulangan-bencana>.
- Arya, M. P., & Singh, D. (2024). An Eco-Feminist Study in the Select Works of Bina Agarwal. *International Journal of Research in English*, 6(2), 436-438. <https://doi.org/10.33545/26648717.2024.v6.i2g.263>.
- Bharadwaj, P. (2022). Gender and Child Inclusion in Policies on Climate Change in Southeast Asia. *CANSA, Climate Action Network South Asia*. <https://resourcecentre.savethechildren.net/document/gender-and-child-inclusion-in-policies-on-climate-change-in-southeast-asia>.
- Braun, V., & Clarke, V. (2021). *Thematic Analysis a Practical Guide*. New York: SAGE Publications. https://doi.org/10.1007/978-3-319-69909-7_3470-2.
- Candraningrum, D. (2025). Krisis Iklim, Keadilan Gender dan Diskriminasi pada Perempuan Difabel. *Suarakeadilan.org*. <https://www.suarakeadilan.org/id/publikasi/36-suara-keadilan/653-krisis-iklim-keadilan-gender-dan-diskriminasi-pada-perempuan-difabel>.

- Chinsya, B. A. D. (2024). Women and Nature: An Ecofeminist Study of Environmental Conservation Sustainability. *An-Nisa: Journal of Gender Studies*, 17(2), 165-180. <https://doi.org/10.35719/annisa.v17i2.309>.
- Corburn, J. (2022). Water And Sanitation for All: Citizen Science, Health Equity, and Urban Climate Justice. *Urban Analytics and City Science*, 49(8), 2044-2053. <https://doi.org/10.1177/23998083221094836>.
- Crawford, T., Chang, K. J., Nila, F., Subramaniam, P., Bethune, L., Parkinson, D., & Villeneuve, M. (2023). The Intersectionality of Gender, Sexual Identity, and Disability in Disaster Risk Reduction in OECD Countries: A Rapid Scoping Review. *Disabilities*, 3(4), 562-578. <https://doi.org/10.3390/disabilities3040036>.
- Dewi, Y. P., & Wongkar, E. E. L. T. (2022). Membangun Resiliensi dari Bawah: Perempuan dengan Disabilitas dan Keadilan Iklim di Indonesia. *Jurnal Perempuan*, 27(3), 191-201. <http://dx.doi.org/10.34309/jp.v27i3.723>.
- Engelman, A., Craig, L., & Iles, A. Global Disability Justice in Climate Disasters: Mobilizing People with Disabilities as Change Agents. *Health Affairs*, 41(10), 1496-1504. <https://doi.org/10.1377/hlthaff.2022.00474>.
- Erlina., Hanifah, L., Fitria, E., & Firdausy, G. A. (2022). The Urgency of Internalization of Women's Problems and Experiences in Natural Resources Regulation in South Kalimantan. *International Journal of Law Environment and Natural Resources*, 1(2), 81-88. <http://dx.doi.org/10.51749/injurlens.v1i2.17>.
- Farah. (2025). Perjuangan Perempuan dan Difabel Hadapi Krisis Iklim: “Kami Bukan Korban, Tapi Penjaga Kehidupan”. *Pwmjateng.com*. <https://pwmjateng.com/perjuangan-perempuan-dan-difabel-hadapi-krisis-iklim-kami-bukan-korban-tapi-penjaga-kehidupan/>.
- Flick, U. (2022). *Doing Triangulation and Mixed Methods*. London: SAGE Publications.
- Gartrell, A., Calgaro, E., Goddard, G., & Saorath, N. (2020). Disaster Experiences of Women with Disabilities: Barriers and Opportunities for Disability Inclusive Disaster Risk Reduction in Cambodia. *Journal Global Environmental Change*, 64:102134. <http://dx.doi.org/10.1016/j.gloenvcha.2020.102134>.
- Harnacke C. (2021). Disability and Capability: Exploring the Usefulness of Martha Nussbaum's Capabilities Approach for the UN Disability Rights Convention. *Journal of Law, Medicine & Ethics*, 41(4), 768-780. <https://doi.org/10.1111/jlme.12088>.
- Imran, M. F. (2025). *Membangun Komunitas dalam Perspektif Teori Modal Sosial: Social Capital Theory*. Purwokerto: Eureka Media Aksara.
- Jenkins, O., & Kalsi, K. (2025). Informal Economy Women Workers on the Frontline of the Climate Crisis: Insights from Over 1,100 Women Working in India's Informal Economy. *Social Development Direct and SEWA Bharat*. <https://www.sddirect.org.uk/sites/default/files/2025-04/Informal%20Women%20Workers%20On%20The%20Frontline%20Of%20The%20Climate%20Crisis%20Report.pdf>.
- Jerin, T., Azad, M. A. K., & Khan, M. N. (2023). Climate Change-Triggered Vulnerability Assessment of the Flood-Prone Communities in Bangladesh: A Gender Perspective. *International Journal of Disaster Risk Reduction*, 96, 1035851. <https://doi.org/10.1016/j.ijdrr.2023.103851>.
- Kawasaki, H., Cui, Z., Kurokawa, M., & Sonai, K. (2023). Current Situation of Disaster Preparedness for Effective Response in Japanese Special Needs Schools. *Disaster Medicine and Public Health Preparedness Journal*. <http://dx.doi.org/10.1017/dmp.2023.98>.
- Kurniawan, A., Maarif, S., & Rahardi, C. S. (2021). The Role of Women in Community Development after Earthquake, Tsunami, and Liquefaction in Central Sulawesi, Indonesia.

- Ganaya: Jurnal Ilmu Sosial Dan Humaniora*, 4(2), 722–742. <https://doi.org/10.37329/ganaya.v4i2.1420>.
- Kusuma., Wilopo., Amiruddin, M., Marta, D. J., Bakti, D. C., Raid, F., Argo, H. J. W., & Haryadi. (2023). *Bencana dan Risiko Perubahan Iklim (Seri Manajemen Bencana Kontemporer Buku Tiga)*. Bandung: Indonesia Emas.
- Manoby, W. M., Siscawati, M., & Dewi, K. H. (2023). Papua Special Autonomy in Engagement with Gender, Generations and Deforestation: Insight from Feminist Political Ecology. *Jurnal Bina Praja*, 15(2), 431-442. <https://doi.org/10.21787/jbp.15.2023.431-442>.
- Mulyadi, T. (2023). BNPB Perkuat Pelibatan Penyandang Disabilitas dalam Penanggulangan Bencana yang Inklusif. *Bnpb.go.id*. <https://bnpb.go.id/berita/bnpb-perkuat-pelibatan-penyandang-disabilitas-dalam-penanggulangan-bencana-yang-inklusif/>.
- Ngcamu, B. S., (2023). Climate Change Effects on Vulnerable Populations in the Global South: A Systematic Review. *Journal Natural Hazards*, 118, 977-991 (2023). <https://doi.org/10.1007/s11069-023-06070-2>.
- Nguyen, H., Pross, C., Han, C. J. Y., Perkins, M. (2020). Review of Gender-Responsiveness and Disability-Inclusion in Disaster Risk Reduction in Asia and the Pacific. *UN Women Asia and the Pacific*. <https://asiapacific.unwomen.org/en/digital-library/publications/2020/10/ap-review-of-gender-responsiveness-and-disability-inclusion-in-drr>.
- Pertiwi, P., Llewellyn, G., & Villeneuve, M. (2020). People with disabilities as key actors in Pertiwi, P., & Llewellyn, G., & Villeneuve, M. (2020). People With Disabilities as Key Actors in Community-Based Disaster Risk Reduction. *Disability & Society*, 34(9-10), 1453-1478. <https://doi.org/10.1080/09687599.2019.1584092>.
- Prambadi, G. A. (2025). Pentingnya Peran Perempuan dan Penyandang Disabilitas dalam Pengurangan Risiko Bencana. *News.Republika.co.id*. <https://news.republika.co.id/berita/stiok2456/pentingnya-peran-perempuan-dan-penyandang-disabilitas-dalam-pengurangan-risiko-bencana>.
- Rimbawan, I. P. D., & Nurhaeni, A. (2023). Gender Equality, Disability and Social Inclusion Approach to Disaster Management Policy: The Case of the Bali Disaster Response Authority. *Jurnal Ilmu Sosial dan Ilmu Politik*, 13(2), 169-191. <https://doi.org/10.15575/jispo.v13i2.28396>.
- Rokhmah, I. I., & Ro'fah, R. (2021). Positioning Isu Disabilitas dalam Gerakan Gender dan Rokhmah, Islamiyatur Islam, and Ro'fah Ro'fah. Positioning Isu Disabilitas dalam Gerakan Gender dan Disabilitas. *Musāwa Jurnal Studi Gender dan Islam*, 20(1), 31-44. <http://dx.doi.org/10.14421/musawa.2021.201.31-44>.
- Sakina, A. W., Rahmadi, R. Y. G., & Widati, W. (2021). Mainstreaming Disabilitas Dalam Sistem Manajemen Bencana Inklusif di Daerah Istimewa Yogyakarta. *Jurnal Academia Praja*, 4(1), 1-22. <https://doi.org/10.36859/jap.v4i1.291>.
- Selepe, M. (2023). The Evaluation of Public Policy Implementation Failures and Possible Solutions. *EUREKA: Social and Humanities*, 1(1), 43-53. <https://doi.org/10.21303/2504-5571.2023.002736>.
- Shafiqa, A. (2024). Perempuan Penyandang Disabilitas: Menuju Inklusi Sosial. *Bincangperempuan.com*. <https://bincangperempuan.com/perempuan-penyandang-disabilitas-menuju-inklusi-sosial/>.
- Sugiyono. (2022). *Metode Penelitian Kualitatif*. Bandung: Alfabeta.
- Sultana, F. (2021). Critical Climate Justice. *Geographical Journal*, 188(1), 1-7. <https://doi.org/10.1111/geoj.12417>.
- Suriastini, N. W., Wijayanti, I. Y., Sikoki, B., & Sumantri, C. S. (2023). Measuring Disaster Recovery: Lessons Learned from Early Recovery in Post-Tsunami Area of Aceh, Indonesia. *Sustainability*, 15(24), 16870. <https://doi.org/10.3390/su152416870>.

- Tran, H. K., & Downes, N. K. (2023). Narratives of Women's Resilience to Flood Risks in Ho Chi Minh City, Vietnam. *Environment and Urbanization ASIA*, 14(1), 90-103. <https://doi.org/10.1177/09754253231168693>.
- Wahyuningroem, S. L., & Fitriyah, I. (2024). A Policy Study on Disability Inclusivity in National Disaster Management. *Aspirasi: Jurnal Masalah-Masalah Sosial*, 15(1), 1-15. <https://doi.org/10.46807/aspirasi.v15i1.3650>.
- Wannewitz, M., & Garschagen, M. (2021). Review Article: Mapping the Adaptation Solution space-lessons from Jakarta. *Natural Hazards and Earth System Sciences*, 21(11), 3285–3322. <https://doi.org/10.5194/nhess-21-3285-2021>.
- Yuwanto, L. (2023). Faktor Penghambat Perempuan Penyandang Disabilitas Dalam Partisipasi Pengurangan Risiko Bencana: Studi Kasus Penyintas Bencana Gempa Lombok. *Ad-Dariyah: Jurnal Dialektika Sosial dan Budaya*, 3(2), 16-32. <https://doi.org/10.55623/ad.v3i2.131>.
- Zailani, L. (2023). Kerangka GESI untuk Ketahanan Iklim. *Geotimes.id*. <https://geotimes.id/opini/kerangka-gesi-untuk-ketahanan-iklim/#:~:text=Kerangka%20GESI%20menawarkan%20strategi%20mengatasi%20kerentan%20akibat%20perubahan,penyandang%20disabilitas%20dan%20kelompok%20marginal%20di%20sisi%20lainnya>.