

Policy Brief

Women's Rights and Resilience in Coastal Areas Amid Regulatory and Climate Changes

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Executive Director: Tunggal Pawestri

Authors: Sandra Winarsa, Energy & Climate Advisor; Miranda, Project Manager of Fisherfolk Empowerment for Climate Resilience and Sustainability (FOCUS); Sutriyatmi, GESI Specialist of FOCUS; Nisrina Rahman, Project Manager of Connect, Defend, Act! (CDA).

Reviewer: Dr. Dedi S. Adhuri, Research Center for Society and Culture, National Research and Innovation Agency

Interview: Andi Misbahul Pertiwi, Researcher, Ph.D. Candidate, University of Leeds

Layout and Graphic Design: Zulfikar Arief

Humanis Policy Brief provides independent analysis and recommendations on various systemic issues related to Gender Equality, Diversity and Inclusion, Civil Rights in the Digital Era, and Climate Justice.

This policy brief is grounded in the ongoing efforts of Humanis and its partners under the Fisherfolk Empowerment for Climate Resilience and Sustainability (FOCUS) program. Funded by Norad, FOCUS aims to strengthen coastal management to address climate change and disaster risks while promoting a sustainable food system for fishing communities in Central Java. The program seeks to enhance the participation of coastal populations in decision-making processes related to resource planning. It advocates for a sustainable balance between the utilization and conservation of marine resources, including mangroves, and supports the improvement of local value chains.

Key Messages



Coastal ecosystems, including mangroves, coral reefs, and seagrass beds, are vital for food and nutrition security, livelihood opportunities, and coastal protection. However, human activities and natural disasters are degrading these ecosystems, threatening biodiversity and increasing vulnerability to climate change.



Indonesia faces significant coastal threats, such as tidal flooding, land subsidence, and sea-level rise, which damage infrastructure and endanger coastal economies. Human activities like coastal reclamation and pollution exacerbate the degradation of ecosystems, impacting fishers' livelihoods and reducing productivity.



Indonesia's fisheries resources have immense potential, but overfishing has affected several fish species. A significant portion of mangroves and coral reefs are damaged or deforested. Despite their critical ecological role, mangroves have been extensively lost due to land conversion and pollution.



Women in coastal areas play crucial roles in fisheries but often lack formal or social recognition for their contributions. Women are actively involved in fishing, aquaculture, and marketing seafood but are rarely acknowledged in policies or professional recognition.



Government policies often fail to protect coastal ecosystems, permitting activities like reclamation and resource exploitation without considering environmental and social impacts. Current regulations inadequately address the protection of women fishers and mangrove ecosystems, which are essential for food security and community well-being.



Inclusive, gender-responsive policies are needed to recognize the roles of women fishers and ensure they have equitable access to protection and economic benefits. Integrating gender perspectives into coastal policies can strengthen women's roles in environmental management and climate resilience, creating sustainable solutions for coastal communities.



Background

Coastal ecosystems hold significant ecological, social, and economic value for communities. They are crucial for the fisheries sector, serving as breeding grounds for fish while ensuring food security and livelihood opportunities. These areas — comprising mangroves, coral reefs, and seagrass beds — play an essential role in nutrient cycling, shoreline protection, and pollutant filtration. Coastal ecosystems also offer opportunities for recreation, education, and research. Furthermore, they act as natural buffers against disasters such as storms and tidal waves, providing livelihoods to millions of fishers and coastal communities across Indonesia.

Mangroves, for instance, play a pivotal role in maintaining ecological balance, providing fish habitats, serving as natural disaster barriers, and offering livelihood opportunities for coastal communities.

Indonesia, with over 17,504 islands and 108,000 km of coastline, is rich in coastal ecosystems, including mangroves, coral reefs, and seagrass beds with high biodiversity. With approximately 3 million hectares of mangroves, Indonesia accounts for 23% of the world's total mangrove ecosystem, making it the largest mangrove ecosystem globally (Abdullah, 2022). In the fisheries sector, data from the Ministry of Marine Affairs and Fisheries (2022) highlights a sustainable fishing potential of 12.01 million tons annually. However, these ecosystems face significant pressure and contradictions.

For example, between 1975 and 2005, approximately 40% of mangroves were lost due to land conversion for shrimp farming, reclamation, and oil pollution. Similar destruction has occurred in coral reef ecosystems, which, despite their high biodiversity, have suffered extensive damage due to destructive fishing practices and coastal development (Abdullah, 2022).

Indonesia's fisheries are also under strain. Although the overall potential remains high, overfishing of specific fish species has limited production growth. This paradox reflects the intense pressure on Indonesia's rich yet fragile coastal ecosystems (Adhuri, 2020).

Human activities in Indonesia's coastal regions are the primary cause of ecosystem degradation. Major threats include marine pollution, mangrove and coral reef destruction for development, overfishing, and climate change impacts such as tidal flooding, coastal erosion, and sea-level rise. Research by Anugrah, Kamilah, & Rahman (2022) indicates that coastal reclamation in areas like Benoa Bay, Bali, and the northern coast of Central Java exacerbates ecosystem damage, causing mangrove loss, altered currents, erosion, and heightened flood risks. Natural threats such as tropical cyclones, climate fluctuations, and flooding add to the strain on these ecosystems. The combination of natural and human-induced threats presents significant challenges for the sustainability of Indonesia's coastal ecosystems (Young, 2019).

Coastal ecosystem degradation threatens species reliant on these habitats, reduces fish and shrimp pond productivity, and lowers coastal community incomes. It also worsens vulnerability to natural disasters like floods and coastal erosion.

According to a Bappenas (2021) study, potential economic losses from the coastal and marine sectors due to climate change from 2020–2024 are estimated at IDR 81.53 trillion annually. Coastal areas in Java and Sulawesi face the highest risks, primarily from tidal flooding, land subsidence, and sea-level rise (Syahputra, 2022).

Beyond economic impacts, coastal ecosystem damage creates social crises, such as loss of livelihoods, disruption of cultural rituals, and increased vulnerability for certain groups, including women and other marginalized communities (Anugrah, 2022).



The Role and Challenges Faced by Coastal Women

In Indonesia's coastal communities, women play a central role in the fisheries value chain and aquatic food systems. They not only assist with fishing preparations but are also involved in fishing, aquaculture, processing, marketing, and household financial management. Despite their significant contributions, women's roles often go unrecognized, and they have limited access to economic resources and government support (Napitupulu, 2020).

Women face heightened vulnerability due to climate change and coastal ecosystem degradation. In several regions, women join their husbands in fishing activities, facing the same risks and dangers but without the rights and protections granted to male fishers. Flooding and erosion, for instance, directly affect women working in post-harvest and aquaculture sectors. It is crucial to integrate a gender perspective into coastal ecosystem policies and programs to ensure women's equal rights in access, control, and participation in natural resource management.

Gender equality and justice in coastal ecosystem management are also emphasized in international frameworks like the FAO's Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries¹. Recognizing women's roles and encouraging their participation in environmental management can contribute to sustainable solutions for Indonesia's coastal communities.

¹ Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication, FAO, 2015, <https://openknowledge.fao.org/server/api/core/bitstreams/edffbf8c-81e5-4208-a36f-334ff81ac10f/content>



In Purworejo and Morodemak, as many as 30 women have obtained ID cards with a work status as fishers, which allows them to receive KUSUKA Cards. However, another challenge emerged because the expected assistance was not provided, despite the women having KUSUKA cards. In fact, in the midst of a climate crisis, female fishers urgently need access to social security and assistance. Moreover, the process of changing the occupation listed on the ID cards takes a long time, which discourages other female fishers from updating their IDs. The views of religious leaders, community leaders, and local governments regarding the existence and contribution of female fishers are still limited. 'Women who go to sea are often seen as only helping their husbands, not as workers. There is a perception that fishing is a male-dominated activity, so it is considered inappropriate for women.'

Andi Misbahul Pertiwi,
Researcher, Ph.D.
Candidate, University
of Leeds.

Gaps in Policy and Practice

1. Unrecognized Contributions of Women Fishers

Indonesian laws, such as **Law No. 7 of 2016 on Fisher Protection and Empowerment**, define fishers broadly as “any person” (Article 1 paragraph 3) yet often exclude explicit recognition of women. The term “fisher families” appears in contexts like education and training (Article 45, and 46) but fails to address gender disparities in practice. This gender-neutral language enables biases, as fishing is predominantly perceived as a male occupation.

As a result, many women actively involved in the fisheries value chain, from pre-production to post-production, are not formally recognized. Their roles are often categorized as “supportive” or part of household activities, rather than professional contributions. This gender bias is reflected in the interpretations by village heads and legislators who do not acknowledge women fishers. Consequently, women fishers struggle to access social protections and government programs, such as insurance, Fisher Cards, KUSUKA Cards, fuel subsidies, and training.

The KUSUKA Card, based on the Regulation of the Minister of Maritime Affairs and Fisheries of the Republic of Indonesia Number 42/PERMEN-KP/2019, is an official identity card for main actors in the maritime and fisheries sector, such as fishermen, fish farmers, and other related business actors with the following benefits:



Card holders can get government subsidies, such as fuel subsidies, as well as various other assistance that supports sustainable livelihoods.



This card simplifies the administrative process, so that marine and fisheries business actors can carry out operational activities more efficiently.



Ownership of a KUSUKA Card provides official recognition of the status of actors in the marine and fisheries sector, which can increase access to resources and opportunities.

2. Harmful and Ineffective Regulations

Policies aimed at managing marine and coastal resources often permit ecologically and socially harmful practices. For instance, **Government Regulation No. 26 of 2023** reauthorized sea sand exports, previously banned since 2003. This policy exacerbates environmental degradation and jeopardizes fishers' livelihoods. Similarly, **Government Regulation No. 27 of 2021** allows core conservation zones to be altered for national strategic projects, increasing risks to coastal ecosystems (Walhi, 2023).

Existing policies remain extractive, prioritizing resource exploitation over sustainability. While mangroves are vital for food security and coastal resilience, policies lack enforcement mechanisms to prevent deforestation and ensure restoration. Weak legal frameworks further undermine the protection of vulnerable coastal ecosystems and communities. Although there is awareness of the importance of coastal ecosystems, the current policies have been ineffective in addressing land conversion or protecting ecosystems like mangroves. Mangroves play a vital role in supporting food security for coastal communities, particularly for reproductive-age women and children who are vulnerable to malnutrition, through the stability of small-scale fishery catches. However, the Draft Government Regulation (RPP) on the Protection and Management of Mangrove Ecosystems, introduced in 2022, has not provided strong protection guarantees, including strict sanctions for those who damage mangroves (Ridwanuddin, 2023). The loss of mangroves will reduce fishers' income, access to nutritious food, and the health of coastal communities, worsening their vulnerability.

Policies that focus on exploitation without a holistic, data-driven approach neglect ecosystem protection and its impact on the well-being of coastal communities.

3. Gender Mainstreaming and Social Inclusion Gaps

Women and youth in Indonesia's coastal communities often face heightened marginalization due to a combination of regulatory exploitation, climate crisis, and gender-based discrimination. For instance, in the northern coast of Jakarta, the phenomenon of child marriage has increased, with many young girls marrying due to economic pressures worsened by climate change, which limits their options for employment and life choices. Additionally, women in coastal communities bear a double burden, balancing family economic responsibilities while still performing invisible domestic tasks (Yanuar, 2024)



Development in Indonesia is still primarily focused on land, while coastal and marine areas have not been made a priority. Coastal communities often face challenges such as waste management, access to clean water, and tidal flooding, all without government support. Although climate adaptation policies and coastal sustainability management frameworks exist, they are frequently lacking political commitment and budget allocations for implementation. Moreover, extractive national strategic projects (PSN), such as reclamation, toll road construction, and sea sand mining, further exacerbate ecological damage and the livelihoods of women in coastal areas. Additionally, global climate adaptation policies remain biased in favor of the interests of Northern countries.

Andi Misbahul Pertiwi,
Researcher, Ph.D.
Candidate, University
of Leeds.

In Demak's villages, which are isolated due to tidal flooding, there has been a rise in cases of gender-based domestic violence. This isolation creates significant psychological stress and limited access to essential services, which ultimately increases the risk of violence against women and often goes unnoticed by many parties (Abifathan, 2023). This situation reflects that existing policies have yet to address the realities and specific needs of women and youth in coastal areas.

To tackle these inequalities, more serious and integrated actions are required to ensure gender mainstreaming across all aspects of national development, both physical and non-physical, as mandated by **Presidential Instruction No. 9 of 2000**. However, despite the policy being in effect for over two decades, its implementation remains weak and has not resulted in significant change. One of the root causes is the government's low capacity to implement and monitor these policies. The absence of a systematic monitoring mechanism and lack of cross-sectoral coordination further exacerbate the gap, preventing policies from being optimized to address marginalization, particularly in vulnerable coastal communities.

4. Gaps in Community Involvement in Decision-Making

The lack of involvement of coastal communities, especially women, youth, and vulnerable groups, in decision-making is one of the key gaps in coastal management policies. Large-scale projects, such as reclamation and sea sand mining, are often carried out without adequate consultation with affected communities. This not only deprives communities of the opportunity to engage, but also increases their vulnerability to climate change impacts and limits access to basic rights like land and employment. An example of this is the prolonged conflict surrounding the Batang coal-fired power plant (PLTU) development in Central Java, which was triggered by a positivist legal approach that was unresponsive to the social context and local values, exacerbating community tensions (Abidin, 2018).

Several policies have provided a legal framework to ensure community involvement, such as:

- **Law No. 32/2009** on Environmental Protection and Management, which guarantees the public's right to participate in environmental management.
- **Ministry of Environment and Forestry Regulation No. 17/2012** on Community Involvement in Environmental Impact Assessment (AMDAL), which mandates public consultation during the AMDAL process.

However, weak implementation, inadequate oversight, and a lack of cross-sectoral coordination have caused these policies to fail in fostering inclusive decision-making. There is a need for more participatory, dialogue-based policies that respect local values to ensure coastal development not only achieves economic goals but also protects the rights and well-being of affected communities.



Recommendations

- 1. Revision of Law No. 7 of 2016** to explicitly recognize the role of women fishers as an integral part of the fisheries sector. It is essential to formally recognize the role of women fishers to prevent gender-biased interpretations and ensure they have equal access to government assistance, training, capital, and social protection. A gender-inclusive approach should be integrated into policies by enhancing capacity building based on needs, involving women in policy formulation, and ensuring equal access to training, technology, and capital. Additionally, the collection of specific data and in-depth analysis on the contributions of women in fisheries should be improved to support gender-responsive and equitable policies.
- 2. Temporary suspend and reassess Government Regulation No. 26 of 2023.** This regulation primarily facilitates the exploitation of coastal resources through industrial activities such as sea sand mining, which negatively impacts coastal ecosystems and the livelihoods of local communities. Strengthening legal protection for coastal communities and preventing corporate exploitation is crucial. It is important to ensure that major projects, such as sea sand mining or reclamation, undergo a transparent environmental impact assessment (AMDAL) that actively involves the affected communities. This ensures that the environmental impact and the rights of the communities are fairly considered. Additionally, expanding legal support by increasing access to legal aid and providing training to coastal communities on environmental rights and laws can empower them to advocate for justice and reduce their vulnerability to exploitative actions.
- 3. Revision of Articles 3-7 of Government Regulation No. 27 of 2021** to include clauses that strengthen the criteria and requirements for changes in core conservation zones. The revision should focus on protecting biodiversity, ecosystem services, and the livelihoods of local communities. It is essential to ensure that there is adequate study, multi-stakeholder involvement, and meaningful, active participation from communities including vulnerable groups in the process of changing the status of core zones. Oversight and the enforcement of laws must be just and effective during implementation. Additionally, the national mangrove restoration program should be expanded to compensate for damage caused by strategic projects, with funding provided by the project developers. Priority should be given to environmentally friendly technologies and methods to support the restoration of mangrove ecosystems.

The Law No. 32 of 2024 on the Conservation of Biological Natural Resources and Their Ecosystems, which was recently enacted, covers fundamental elements of conservation. However, clauses that tighten the criteria for changes in core zones, ensure meaningful participation, and establish justice-based oversight still require further regulation through implementing rules or policy revisions. This is crucial to ensure more effective protection of biodiversity, ecosystem services, and the livelihoods of local communities.

- 4. Integration of ecosystem protection into data-driven policies involving communities.** The security of land rights for local communities needs to be strengthened to enable their active involvement in the protection and restoration of coastal ecosystems. A collaborative approach that involves various stakeholders, including indigenous communities with traditional governance practices such as *Sasi*² and *awig-awig*³, should be protected, supported, and strengthened to support ecosystem conservation and restoration. Incentives for mangrove restoration activities can also enhance ecosystem protection effectiveness while strengthening the resilience of

² Sasi is a traditional custom that prohibits the harvesting of natural resources, both on land and at sea, for a certain period. Sasi is a form of local wisdom that is still widely practiced in eastern Indonesia, particularly in Maluku.

³ Awig-awig refers to rules made by the traditional village community (krama Desa Adat Bali) and/or the traditional Banjar community (Krama Banjar Adat), serving as guidelines for the implementation of Tri Hita Karana—the harmony between humans and God, the harmony between humans, and the harmony between humans and the natural environment

coastal communities and preventing uncontrolled land conversion. Stakeholders need to understand the crucial role of mangroves in climate disaster mitigation and coastal livelihoods. Policies should be evaluated to ensure community involvement and environmental sustainability.

5. Strengthening government capacity and cross-sector collaboration.

The gap in gender mainstreaming and social inclusion in Indonesia's coastal areas demands serious efforts to enhance government capacity in implementing and overseeing existing policies, such as Presidential Instruction No. 9 of 2000. The following measures are necessary:

- a. Specialized training for government officials to design, manage, and monitor policy implementation more effectively and inclusively. Training and mentoring from relevant institutions like the Ministry of Women's Empowerment and Child Protection (MoWECP) will improve government officials' understanding of the importance of gender-based data in policy and program design, as well as decision-making. This ensures that the policies implemented are more inclusive and responsive to the needs of women and other vulnerable groups in coastal communities.
- b. Improvement in economic empowerment programs and skills training tailored to local needs through gender-based data analysis mapping, especially for women with dual roles, is critical to improving the welfare of coastal communities. This includes providing access to training, mentoring, and reproductive health services to reduce early marriages driven by economic pressures. Developing women's skills in the fisheries food system, including product processing, financial literacy, and understanding of food security and nutrition from aquatic products, will enhance family food and nutrition resilience. An inclusive, local needs-based approach strengthens women's contributions to sustainable coastal development.
- c. Cross-sector collaboration at national and local levels, involving ministries such as MoWECP, the Ministry of Social Affairs, the Ministry of Maritime Affairs and Fisheries, and relevant local agencies like the Fisheries and Marine Affairs Office and the Community Empowerment and Village Office at local level, alongside civil society and the private sector, is crucial. Opening cross-sector coordination forums that engage multiple stakeholders can bridge gaps in decision-making processes and transparency. These forums must ensure that inputs from affected communities, particularly marginalized groups, are valued and accommodated.



Incentives can be a game changer in mangrove rehabilitation if other issues, such as waste management, knowledge about mangroves, ecosystem restoration, social inclusion, and gender justice, are also addressed. In coastal villages, mangrove ecosystems are often damaged due to a lack of knowledge and support for the community to implement sustainable mangrove management. Incentives for communities will be more equitable if provided holistically, from pre-planting, planting, to post-planting stages. This means that incentive programs should not only support and measure the number of mangroves planted and surviving but also focus on coastal ecosystem restoration and the social-economic sustainability of coastal communities, including issues related to women.

Andi Misbahul Pertiwi,
Researcher, Ph.D.
Candidate, University
of Leeds.



6. Ensuring meaningful public consultation and monitoring mechanisms in every development project. Strengthen the implementation of Law No. 32/2009 and Ministerial Regulation No. 17/2012 by ensuring that the public consultation process is transparent, inclusive, and respects local values as an integral part of the permitting requirements. Furthermore, education that enhances coastal communities' understanding of their rights and the relevant legal framework for development projects is essential. Strengthening monitoring mechanisms, such as involving communities in project oversight through multi-stakeholder forums, will help ensure accountability and reduce potential conflicts. This will ensure that large projects, such as reclamation and offshore sand mining, do not threaten the basic rights of the community.



Photo by Ruhaina Zulfian/humanis, 2024.

Conclusion

The challenges faced by coastal and small island communities in Indonesia require more inclusive and collaborative policy reforms to ensure long-term justice and resilience. Women are key actors in coastal management and the fisheries sector. Therefore, recognizing the profession of female fishers, protecting and empowering women, youth, and other vulnerable groups, as well as safeguarding ecosystem integrity, are essential steps toward creating a just maritime future. Policies that enable the exploitation of natural resources, such as permits for offshore sand mining and coastal reclamation for commercial activities, exacerbate environmental degradation and reduce ecosystem resilience. Consequently, policy revisions are needed to integrate environmental protection, acknowledge the role of women, and ensure the active involvement of coastal communities in decision-making processes. Through a data-driven and inclusive approach, as well as strengthened legal protections, it is hoped that coastal communities will be better equipped to face climate change and create sustainable solutions for the future.




Photo by Ruhaina Zulfiani/Humanis, 2024.

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 18 Office Park, 15th floor, Unit B.
Jl. TB Simatupang No. 18
Jakarta Selatan 12520 Indonesia

 T: +62-21 27876233

 F: +62-21 27876242

 info@humanis.foundation

 <https://humanis.foundation>