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Precarity, Power, and Quiet Resilience: Women and Young People Navigating Climate-Driven Coastal Change in Indonesia

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Abstract

This paper reframes the widely celebrated 'resilience' of women and young people – young men and women (ages 15 to 30) in Indonesia's coastal communities as 'quiet resistance' shaped by structural exclusion. Drawing on qualitative research in Nusa Tenggara Barat (NTB) and Riau Province, this study shows how climate pressures intersect with gender norms and governance gaps, resulting in livelihood precarity and limited participation. Women's and young people's economically vital contributions—such as fish processing, weaving, seaweed harvesting, and eco-tourism—remain undervalued. At the same time, climate impacts increase burdens and restrict opportunity pathways. Despite demonstrating everyday agency through micro-enterprises and environmental guardianship, women and youth remain marginalised from decision-making spaces. Our findings show that despite women and youth having the ability to adapt to climate change, their survival strategies emerged in response to a lack of structural support and underscore the need for inclusive, equity-driven coastal governance that addresses systemic inequalities.

Keywords: Climate change, coastal livelihoods, gender inequality, youth exclusion, quiet resilience, Indonesian

Introduction: Rethinking 'resilience' in coastal Indonesia

When I began my participatory discussions and fieldwork in remote coastal villages in West Nusa Tenggara (NTB) and Riau, one of the most common phrases voiced by women was: 'Everything is uncertain. Sometimes the catch is enough, sometimes it's not. We endure it, but nothing is ever guaranteed.' Young people also echoed this sentiment differently, emphasising that opportunities to participate in ocean-related management at the village level are extremely limited and often reserved for certain groups.

These statements highlight two key points. First, they reveal the precarity shaping the everyday lives of coastal women and young people in Indonesia. Second, they show how their voices are often absent from the management of coastal resources. This stands in stark contrast to dominant understandings of 'resilience,' which is often framed in climate and development discourse as the ability of individuals or communities to adapt to shocks, cope with change, and sustain their livelihoods despite disruption.[1] While this framing highlights adaptive capacity, it often assumes that resilience is inherently positive and desirable.

Feminist scholars have cautioned that these narratives often romanticise women's labour while masking the exclusions and inequalities that shape their lives. As Seema Arora-Jonsson explained, women's resilience is praised in ways that romanticise their labour and

[1] Henrik Thoren, Resilience as a Unifying Concept,' *International Studies in the Philosophy of Science* 28, no. 3 (2014), https://doi.org/10.1080/02698595.2014.953343.

silence their exclusion from decision-making.[2] Resilience and adaptation approaches can obscure the structural drivers of vulnerability when they focus primarily on coping capacities rather than the systemic inequities and power relations that produce vulnerability in the first place.[3]

These contradictions form the starting point of our inquiry. Our study begins with the assumption that climate pressures, structural inequalities, gender norms and cultural barriers, and governance gaps intersect to produce layers of precarity. While 'adaptation' is commonly framed in climate discourse as the set of strategies which individuals and communities employ to adjust to environmental change, anthropological scholarship has long challenged its apparent neutrality. Rather than being a purely technical or apolitical response, adaptation is shaped by existing social relations, cultural norms, and power structures that determine who can adapt, how, and at what cost.[4] From this perspective, adaptation is not experienced evenly but is deeply differentiated, often reproducing or even intensifying existing inequalities.[5]

Building on these debates, I introduce the concept of 'quiet resilience' to describe the everyday, improvised forms of adaptation through which women and young people sustain households and communities despite persistent exclusion from formal systems of governance and support. Quiet resilience does not imply empowerment or transformative change. Instead, it captures forms of agency that emerge through necessity, constrained choices, and the ongoing labour of maintaining everyday life under conditions of precarity. By foregrounding these practices, I then shift attention from resilience as an outcome to the unequal social and political conditions through which resilience is produced.

This raises the central question guiding our research: How do gender norms, cultural expectations, and power relations shape coastal women's and young people's access to resources, decision-making, and their own futures? To explore this, I draw on qualitative fieldwork conducted across coastal communities in Indonesia, combining participatory discussions, interviews, and periods of immersion. The methodological approach and research design are discussed in more detail in the following section.

The remainder of the paper proceeds as follows. I outline the conceptual framework, elaborate on resilience, precarity, and the notion of quiet resilience, followed by a description of the research methods. The coastal contexts and everyday realities of the study sites are then introduced. I examine the gendered dimensions of precarity in coastal livelihoods and discuss the governance dynamics that shape exclusion and participation. My final section

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[2] Seema Arora-Jonsson, 'Virtue and Vulnerability: Discourses on Women, Gender and Climate Change,' *Global Environmental Change* 21, no.2 (2011), https://doi.org/10.1016/j.gloenvcha.2011.01.005.

[3] Nitya Rao et al., 'Gender, Climate Change, and the Politics of Vulnerability,' in their *Engendering Climate Change* (Routledge, 2021), https://doi.org/10.4324/9781003142409-1; Farhana Sultana, 'Climate Change, COVID-19, and the Co-Production of Injustices: A Feminist Reading of Overlapping Crises,' *Social & Cultural Geography* 22, no. 4 (2021), https://doi.org/10.1080/14649365.2021.1910994.

[4] Susan Crate, 'Climate and Culture: Anthropology in the Era of Contemporary Climate Change,' *Annual Review of Anthropology* 40 (October 2011), https://doi.org/10.1146/annurev.anthro.012809.104925; Kirsten Harstrup, 'Anthropological Contributions to the Study of Climate: Past, Present, Future,' *WIREs Climate Change* 4, no. 4 (2013), https://doi.org/10.1002/wcc.219; Silja Klepp Rodriguez and Liliana Chavez, *A Critical Approach to Climate Change Adaptation: Discourses, Policies and Practice* (Routledge, 2018).

[5] Eriksen, Siri H.et al., 'Reframing Adaptation: The Political Nature of Climate Change Adaptation,' *Global Environmental Change* 35 (November 2015), https://doi.org/10.1016/j.gloenvcha.2015.09.014.

focuses on quiet resilience as a form of agency from the margins, and I conclude with reflections on the implications for more inclusive and equitable coastal governance.

Conceptualising resilience, precarity, and quiet resilience

In climate and development literature, resilience is commonly understood as the capacity of individuals and communities to absorb disturbances, adapt to change, and sustain livelihoods in the face of environmental and socio-economic pressures.[6] Within this framing, resilience is often treated as inherently positive, and associated with adaptability strength and successful adjustment.

However, feminist and critical scholarship has challenged this interpretation by demonstrating how resilience can obscure the structural conditions under which adaptation takes place. Rather than signalling empowerment, resilience may reflect the need to endure ongoing hardship in the context of inequality and limited institutional support.[7] In this sense, resilience can function as a depoliticised concept that shifts responsibility onto individuals and communities, leaving issues relating to broader systems of power and resource distribution unaddressed.

To engage more critically with these dynamics, this paper situates resilience within conditions of precarity. Precarity has been widely used to describe forms of structural insecurity characterised by unstable livelihoods, limited access to resources, and the absence of social protection.[8] In coastal contexts such as NTB and Riau, precarity is not only economic but also social and political, shaped by gender norms, unequal access to governance, and environmental pressures that constrain available livelihood options.[9]

As I demonstrate in this study, women and young people navigate conditions where income is uncertain, opportunities are limited, and participation in decision making is restricted. These intersecting pressures require them to continuously adjust, combine, and reconfigure different forms of labour to sustain everyday life. Precarity, therefore, is not simply a condition of vulnerability, but an ongoing process through which livelihoods are made and remade under constraint.

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[6] Neil W. Adger, 'Social and Ecological Resilience: Are They Related?' *Progress in Human Geography* 24, no. 3 (2000), https://doi.org/10.1191/030913200701540465; Brian Walker et al., 'Resilience, Adaptability and Transformability in Social–Ecological Systems,' *Ecology and Society* 9, no. 2 (2004), 5, https://doi.org/10.5751/ES-00650-090205; Carl Folke, 'Resilience: The Emergence of a Perspective for Social–Ecological Systems Analyses,' *Global Environmental Change* 16, no. 3 (2006), https://doi.org/10.1016/j.gloenvcha.2006.04.002; Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, 2022).

[7] Arora-Jonsson, 'Virtue and Vulnerability,' 745; Rao et al., 'Gender, Climate Change,' 2; Sultana, 'Climate Change, COVID-19,' 450.

[8] Guy Standing, *The Precariat: The New Dangerous Class* (Bloomsbury Academic, 2011); Judith Butler, *Frames of War: When is Life Grievable?* (Verso, 2009); Kathleen Millar, 'Toward a Critical Politics of Precarity,' *Sociology Compass* 11, no. 6 (2017), https://doi.org/10.1111/soc4.12483.

[9] Edward H. Allison and Frank Ellis, 'The Livelihoods Approach and Management of Small-scale Fisheries,' *Marine Policy* 25, no. 5 (2001), 377, https://doi.org/10.1016/S0308-597X(01)00023-9; Christophe Bene, 'When Fishery Rhymes with Poverty: A First Step Beyond the Old Paradigm on Poverty in Small-scale Fisheries,' *World Development Elsevier* 31, no. 6 (2003), 950, https://doi.org/10.1016/S0305-750X(03)00045-7; Sarah Coulthard, 'What Does the Debate around Social Wellbeing Have to Offer Sustainable Fisheries?' *Current Opinion in Environmental Sustainability* 4, no. 3 (2012), 363, https://doi.org/10.1016/j.cosust.2012.06.001.

Building on these critiques, I define the concept of quiet resilience as every day, small-scale, and often invisible activities that women and young people take on to sustain their households and communities under structural constraints. These practices include diversifying income sources, managing fluctuating household economies, engaging in informal and home-based enterprises, and maintaining social relations that enable survival.

Drawing on participatory mapping and discussions, women in both NTB and Riau demonstrated detailed, practice-based knowledge of seasonal cycles, market dynamics and labour distribution within households and communities. They continuously make decisions about what to produce, when to sell, and how to allocate limited resources, while simultaneously managing care responsibilities and domestic work.

Importantly, quiet resilience does not include transformation at the structural level. While quiet resilience practices can stabilise households and create limited economic opportunities, their effects remain largely confined to the micro-level. Women's and young people's contributions rarely translate into formal recognition, access to resources, or influence over governance processes.[10] In this sense, quiet resilience describes a form of agency that is both meaningful and constrained—transformative in sustaining everyday life, yet insufficient to alter the broader systems that produce precarity. By foregrounding quiet resilience, this paper shifts the analytical focus away from celebratory narratives of adaptation and towards a more grounded understanding of how resilience is lived, negotiated, and unevenly distributed. It highlights the need to move beyond individualised accounts of coping and instead address the structural conditions that shape who can adapt, how, and at what cost.

Methods

I draw on qualitative fieldwork conducted in 2025 across four coastal villages in two provinces—two in West Nusa Tenggara (NTB) and two in Riau—selected after an initial scoping study in mid-2025. All four communities sit within ecologically important seascapes and rely heavily on small-scale fisheries and coastal livelihoods, yet each carries its own socio-ecological rhythm. The NTB sites reflect a mix of marine-based and seasonal agricultural labour, while the Riau sites combine fisheries with informal and land–sea blended forms of work shaped by broader environmental pressures. Together, these locations offer contrasting yet interconnected perspectives on how gender and generation shape participation, access, and everyday life in Indonesia's changing coastal landscapes.

Our research combined semi-structured interviews with community leaders, village governments, and women's and youth groups, as well as field-based observations, engaging a total of 70 participants across both sites, including women, youth (both young men and women), and other community members. In addition, I conducted a series of participatory focus group discussions (FGDs) and livelihood mapping exercises involving 86 participants from women's and youth groups. This allowed for a more in-depth exploration of gendered and generational dynamics in coastal livelihoods. The FGDs with women's and youth groups were conducted separately. Women participants represented a range of age groups, including young women (18–30 years), middle-aged women (31–55 years), and older women (60 years

[10] Naila Kabeer, 'Resources, Agency, Achievements: Reflections on the Measurement of Women's Empowerment,' *Development and Change* 30, no. 3 (1999): 462, https://doi.org/10.1111/1467-7660.00125; Andrea Cornwall, 'Unpacking "Participation": Models, Meanings and Practices,' *Community Development Journal* 43 no. 3 (2008), https://doi.org/10.1093/cdj/bsn010.

and above). The youth groups included both young men and young women aged 15–30 years. These methods were designed to capture everyday experiences, labour dynamics, and local knowledge systems related to coastal livelihoods and climate change. Participants were engaged through collaboration with local partners and community networks, enabling access to diverse groups while remaining attentive to existing social dynamics.

Our position as researchers affiliated with the World Resources Institute (WRI) Indonesia and working closely with local facilitators shaped both the research process and the interpretation of findings. While our institutional role facilitated entry and trust-building, I recognise that power relations inherent in research settings may influence whose voices are heard and how experiences are represented. Efforts were made to create inclusive discussion spaces for women and young people, although existing gender and generational hierarchies continued to shape participation.

The qualitative data were analysed using thematic analysis. Interview and focus group transcripts were systematically coded to identify recurring patterns, shared experiences, and divergent perspectives across participant groups. Codes were then organised into broader themes, with particular attention to gendered and generational dimensions of coastal livelihoods, labour, and climate change.

Coastal realities: Everyday life amid climate pressures

In the two coastal villages located in Sumbawa, NTB, coastal livelihoods are anchored in small-scale fisheries, but women's daily work extends well beyond the sea. Alongside processing fish and supporting fishing activities, women also take on seasonal agricultural labour—most commonly as corn field workers—reflecting the layered and often precarious nature of income sources in these communities. Their roles include domestic responsibilities and informal economic activities such as producing *kerupuk* (fish crackers), *abon* (shredded fish), and other small-scale processing efforts. Ecologically, communities here face increasingly unpredictable monsoon patterns, fluctuating fish stocks, and more frequent rough seas, all of which intensify the uncertainty of their income and daily routines.

Young people in NTB navigate a different set of pressures. Many complete only high school, with higher education financially out of reach for most families. Local informants noted that wealthier households often encourage their children to migrate for education or work, reducing the pool of young people available to participate in village initiatives. Those who remain encounter limited training opportunities and restricted access to capital, which curtails their potential to engage in tourism, conservation, or other livelihood innovations.

In the two coastal villages located in Riau, coastal life is shaped by small-scale fisheries, informal labour, and, in some cases, the blending of marine and land-based work. Here, unlike in NTB, women's economic contributions also include strong service-based activities—producing traditional woven fabrics, *kerupuk sagu* (sago crackers), salted fish products, and other home-based enterprises. Ecologically, the Riau coastline faces persistent sedimentation, coastal erosion, and the impact of nearby plantations—particularly oil palm expansions—which contribute to land-use change, increased runoff, and water pollution that affect coastal ecosystems and reshape access to marine spaces and fishing patterns.

One of our key findings in these Riau villages is the limited involvement of young women in village development and coastal resource management compared to young men, partly due to educational migration and social expectations that prioritise domestic roles over public engagement. As one participant in a focus group discussion noted, 'Young women here

usually stay at home. Even if there are activities, we are not always informed or invited.'[11] This exclusion is further entrenched by village politics that privilege established male figures and undervalue women's informal leadership and entrepreneurial efforts. Participants described how decision-making spaces are dominated by older men, with one respondent explaining that 'meetings are usually attended by the *bapak-bapak* (men), and we just follow what is decided.'[12] Women are rarely consulted in broader planning or strategic decision-making, even concerning initiatives that directly benefit from women's labour, such as eco-tourism programs involving craft markets or culinary tours.

Despite the different gendered and generational dynamics across these regions—and their contrasting landscapes—one underlying similarity kept reappearing: uncertainty. Both NTB and Riau show how climate change intensifies gender norms and shapes the everyday decisions of women and youth. One woman in NTB explained: 'With the sea and fish catches so unpredictable, we have to adapt quickly. We just do what we can—*pintar-pintar mengolah hasil tangkapan* (finding ways to process whatever we catch).'[13] In a village in Riau, a young man echoed this sentiment: 'We're all basically unemployed here, *Mbak*. There's no steady work. It depends on the day—sometimes I help my father at sea, sometimes I do *kerja serabutan* (odd jobs).'[14]

Another striking pattern across both provinces is how hidden labour and care work keep households afloat. In both NTB and Riau, women's daily routines extend across multiple overlapping roles that blur the boundaries between domestic and economic life. In one coastal village in Sumbawa, NTB, for instance, women described their work as *'kerja yang tidak pernah selesai'* (work that never ends)—moving continuously between preparing food, caring for children, processing fish, and managing household finances.

Similarly, participatory livelihood mapping in Riau revealed that women are consistently engaged in post-harvest and value-adding activities—cleaning, drying, packaging, and selling fish products—while also sustaining home-based enterprises such as weaving, snack production, and small-scale trading. These activities are performed daily or seasonally, depending on fishing cycles, and are critical to maintaining household income despite being categorised as supplementary or informal.

Beyond these visible economic roles, observational fieldnotes also highlighted how women simultaneously manage care responsibilities and community obligations—such as participation in religious gatherings, village events, and mutual support activities—and income-generating work. These layered responsibilities sustain both household survival and community continuity yet remain largely unrecognised in formal economic and governance systems. These everyday practices illustrate how what I describe as quiet resilience and survivorship emerge not from empowerment narratives, but from the constant negotiation of labour, care, and uncertainty in contexts where structural support is limited. Taken together, these stories reveal how uncertainty operates through gendered and generational lines, producing quiet but persistent forms of precarity. I now turn to gendered dimensions of vulnerability and how they shape livelihood choices, mobility, and agency.

[11] Salwa, Floating House at Bengkalis, 16 September 2025

[12] Ali, Floating House at Bengkalis, 16 September 2025.

[13] Ibu Ama, Local House at Bengkalis, 17 September 2025

[14] Andi, Local's House at Bengkalis, 18 September 2025.

Gendered precarity in coastal livelihoods

In this section I examine the gendered dimensions of precarity that shape how women and young people navigate uncertainty and explore the structural forces that underpin and reinforce their everyday realities.

From the brief portraits of the villages in NTB and Riau, it becomes clear that gendered and generational inequalities—especially in the lives of coastal women and young people—are not accidental. They are structurally produced, visible in the limited options available to them and the adaptations they must make constantly. Women adjust how they process fish depending on whatever catch or stock is available; young people rely on unstable *kerja serabutan* (informal, irregular work); and families navigate inconsistent income sources. These patterns show how restricted access, gender norms, and uneven burdens shape the choices women and youth (young men and women), are able to make, and how their labour is often undervalued despite sustaining both the domestic and economic spheres of their households.

Women's precarity in coastal livelihoods

Although women in both NTB and Riau sustain the everyday functioning of their households, much of their labour continues to be categorised as supplementary rather than central by local norms and institutional frameworks. This framing is not accidental: it is the outcome of gendered norms that define what counts as 'real' economic activity and who is recognised as a worker, a pattern also observed in coastal contexts elsewhere.[15]

In NTB, for example, even though women are deeply involved in multiple stages of fish production, the primary actors are still assumed to be men. Women actively participate in both pre- and post-harvest activities: preparing supplies for their husbands at sea; processing and selling fish; and even repairing and making fishing nets. The repair and production of nets, which women execute almost daily, pays around Rp100,000–150,000 (approximately AUD10–15) per piece. Yet despite their extensive contributions, the definition of 'fisher' remains masculine, restricted to men who go out to sea.[16] Women working in pre- and post-harvest roles are not seen as participating in fisheries at all. As a result, access to fisheries-related assistance and support is often limited to men, a pattern also documented nationally where state-recognised categories of *nelayan* (fishers) exclude women from formal support and protection.[17] This exclusion is reinforced through administrative systems such as the *Kartu Kusuka-Kartu Pelaku Usaha Kelautan dan Perikanan* (Marine and Fisheries Business Actor Card), which serves as the primary registry for fisheries' actors and is used to determine eligibility for government assistance, insurance schemes, training, and other support programs. Because many women are not formally recognised as *nelayan* or registered as eligible fisheries' actors, they face barriers to accessing benefits and legal protections.[18] These

[15] Cohen S. Lawless et al., 'Gender norms and relations: implications for agency in coastal livelihoods,' *Maritime Studies* 18 (2019), https://doi.org/10.1007/s40152-019-00147-0.

[16] Nireka Weeratunge et al., 'Gleaner, Fisher, Trader, Processor: Understanding Gendered Employment in Fisheries and Aquaculture,' *Fish and Fisheries* 11, no. 4 (2010), https://doi.org/10.1111/j.1467-2979.2010.00368.x.

[17] KIARA, *Perempuan Nelayan Berhak Mendapatkan Perlindungan dan Pemberdayaan dari Negara* (Koalisi Rakyat untuk Keadilan Perikanan, 2015), 1.

[18] Andi Misbahul Pratiwi, 'Perempuan Nelayan di Tengah Perubahan Iklim,' *Kompas,* 16 May 2021, https://www.kompas.id/artikel/perempuan-nelayan-di-tengah-perubahan-iklim.

breadwinner norms push women into undervalued roles and erase the significance of their work. Because they are not considered *nelayan*, women become trapped in low-income and informal jobs that carry high precarity and offer no protection, mirroring wider gendered wage gaps documented in Indonesia's fisheries sector.[19]

A similar pattern appears in Riau. Women's labour—processing fish, running small-scale home enterprises, selling products, and maintaining domestic responsibilities—reveals a significant gendered burden that remains largely unrecognised and unpaid. Participatory livelihood mapping in Riau, showed that women are consistently involved in post-harvest activities such as cleaning, drying, packaging, and selling fish products, alongside managing household finances and domestic work. These tasks, performed daily, are critical to sustaining household income yet are still framed as 'supplementary' to men's roles in capture fisheries. Women's contributions are economically crucial but socially undervalued, reflecting broader structural inequalities seen in small-scale fisheries across regions.[20]

Climate change and human-related pressures expand women's workload, and the unpredictability of these conditions intensifies households' dependence on feminised labour, a pattern also noted in broader studies of women in small-scale fisheries. In NTB, for instance, women described how declining fish catches and environmental degradation have directly reshaped their daily routines and livelihood strategies. During participatory discussions, women recalled that fishers once brought home catches in large quantities—including up to 15 baskets of *rajungan* (blue swimming crab)—whereas today catches have dropped significantly, making income increasingly uncertain. Community members link this decline to destructive practices such as blast fishing, as well as broader ecological changes affecting marine habitats. These changes translate into expanded and intensified labour for women. In one of the coastal villages in NTB, for example, women described waking early to complete domestic responsibilities before engaging in physically demanding work such as seasonal agricultural labour or fish processing, often with uncertain returns. At the same time, the loss of supplementary livelihoods—such as seaweed harvesting due to sedimentation and environmental degradation—has further narrowed their income options, requiring them to constantly adjust and combine multiple forms of work to sustain their households. In this context, women's labour becomes a critical buffer against ecological and economic shocks, absorbing the impacts of climate variability and environmental change at the household level.

Economic pressures have intensified this situation. Fish prices have fallen from Rp60,000–70,000/kg (approximately AUD 6–7/kg) to around Rp37,000/kg (AUD 3–4/kg) over the past five years, while environmental degradation linked to corn plantation expansion and chemical runoff has further damaged coastal ecosystems. Women used to collect seaweed as an additional livelihood source, using *sampan* (small boats) but, since 2022, seaweed can no longer grow in these waters. Seaweed production has declined sharply, almost to the point of being non-existent. This means that women's livelihood choices have also narrowed, as one of the few income-generating activities available to them has disappeared.[21]

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[19] Indah Aini, 'Gender Wage Gaps in Indonesia's Fisheries Sector,' *Jurnal Sosial Ekonomi Kelautan dan Perikanan* 17, no. 1 (2022), https://doi.org/10.21580/sa.v17i2.13554.

[20] Sangeeta Mangubhai et al., 'Exploring gender inclusion in small-scale fisheries management and development in Melanesia,' *Marine Policy* 123 (January 2021), https://doi.org/10.1016/j.marpol.2020.104287.

[21] Natasha Stacey et al., 'Enhancing coastal livelihoods in Indonesia: an evaluation of recent initiatives on gender, women, and sustainable livelihoods in small-scale fisheries,' *Maritime Studies* 18 (June 2019), https://doi.org/10.1007/s40152-019-00142-5

A similar pattern appears in Riau. Families organise their daily and monthly routines around wind seasons and fishing seasons, where even minor shifts in weather directly affect catches. It is women who navigate these constant fluctuations: re-adjusting schedules for fish processing, reorganising the household's labour division, and thinking through strategies to stabilise income despite unpredictable conditions. In this sense, women become the buffer zone—absorbing shocks and managing the volatility that climate change brings into the household economy.[22]

These experiences show how limited options translate into constrained 'choices,' where women are pushed into whatever forms of work remain possible under changing ecological conditions.[23] Climate unpredictability intensifies dependence on feminised labour, while gender norms restrict women's ability to pursue better paid or more stable work. In both NTB and Riau, climate pressures deepen labour segmentation and reinforce the expectation that women will absorb these shocks—mirroring patterns widely observed across climate-affected fisheries.

Youth precarity and generational constraints

Youth precarity also emerges not from individual choices, but from structural constraints that restrict mobility, aspirations, and access to opportunities.[24] In both NTB and Riau, youth migration shapes everyday life. This migration is not simply a matter of personal preference but a response to local economies that offer very limited career pathways.[25] Village contexts provide few viable jobs, leaving young people, young men and women, with little choice but to leave.

Those young people who cannot migrate face unstable and unpredictable livelihoods. Young men often rely on odd jobs, while young women—who experience double constraints and stronger social restrictions—have even fewer options to pursue work or mobility.[26] In NTB, for instance, young men who do not continue schooling typically work as traditional fishers or as labourers in mining sites. In Riau, many undertake work as crew on *kapal tongkang* (barges transporting timber) for pulp industries, or casual labour depending on who calls them. Meanwhile, in both NTB and Riau, young women said they mostly remain at home due to limited employment opportunities and the lack of social spaces for participation. One young woman from Riau, explained: 'If I want to migrate for work or school, my parents won't allow me to go far. They're worried and afraid. So I just work here in the village.'[27]

This stagnation is also generational. In Riau, many teenagers drop out of school by age 16 or 17, pulled into extractive survival economies—forms of short-term, low-paid labour that

[22] Nozomi Kawarazuka et al., 'Bringing analysis of gender and social-ecological resilience together in small-scale fisheries research: Challenges and Opportunities,' School of International Development (WorldFish, 2016).

[23] Mangubhai, 'Exploring Gender Inclusion,' 9.

[24] Christina Griffin et al., 'The persistence of precarity: youth livelihood struggles and aspirations in the context of truncated agrarian change, South Sulawesi, Indonesia.' *Agriculture and Human Values* 41, no. 1(2024), https://doi.org/10.1007/s10460-023-10489-5.

[25] Ben White, 'Indonesian Rural Youth Transitions: Employment, Mobility and the Future of Agriculture,' in *Land, Livelihood, The Economy and Environment in Indonesia*, ed. Anne Booth, Chris Manning, and Thee Kian Wie (Yayasan Pustaka Obor Indonesia, 2012).

[26] Lawless, 'Gender norms and relations,' 352; Griffin, 'The persistence of precarity,' 294.

[27] Tasniah, Local's House at Sumbawa, 18 July 2026.

prioritise immediate income over long-term stability, such as assisting in informal construction, or leaving for low-wage labour in Pekanbaru or Malaysia—patterns especially common among young men. As in NTB, young women in Riau are concentrated in informal and low-paid sectors. What emerges is a quiet reproduction of precarity, with little long-term investment in youth or the capacity of the community itself.[28] Many young people prioritise quick income, reinforcing cycles of low educational attainment and ongoing dependence on informal, precarious work.[29] Gendered labour vulnerabilities also remain stark: young women largely occupy informal and low-paid roles, while technical or mobile positions are dominated by young men.

Collectively, these findings illustrate that precarity is not only experienced by young people but also reproduced across generations.[30] It is reflected in limited access to education, training, capital, and viable livelihood pathways that constrain opportunities for more secure futures. Gendered norms further shape these experiences differently for young women and men, while persistent income insecurity narrows their future possibilities.[31]

Taken together, these findings suggest that early school leaving is not merely an outcome of economic hardship but also a mechanism that reproduces generational precarity.[32] For many young people, leaving school reflects immediate household economic pressures rather than individual choice. Yet by limiting access to further education, vocational training, and more secure employment, it narrows future livelihood opportunities and increases dependence on informal and unstable work. Consequently, constrained educational pathways reduce young people's opportunities for upward social and economic mobility, making it more difficult to break the cycle of insecurity being experienced across generations.[33]

Exclusion, governance gaps, and the politics of adaptation

From the section on gendered precarity, it is already clear that the everyday precarity, which women and young people experience, and their quiet resilience, do not occur in a vacuum. Their experiences are rooted in uneven power relations and the exclusion of their voices in formal governance systems. The constrained choices women face as they adapt to limited livelihood options under changing ecological conditions, and the generational precarity experienced by youth due to limited access to almost everything, show that although they actively sustain livelihoods, they do not hold formal power. Instead, they must navigate marginal spaces on their own to survive.

Women and youth, from the two villages in Riau, described how *musyawarah desa* (village meetings) were some of the key village governance processes they simply cannot access. At the community level, decision-making spaces such as *musyawarah desa* (village

[28] Griffin, 'The persistence of precarity,' 305.

[29] Food and Agricultural Organisation of the United Nations (FAO), *Youth and Agriculture: Key Challenges and Concrete Solutions* (FAO, 2009); White, 'Changing Youth Transitions,' 243–44.

[30] Ben White, 'Agriculture and the Generation Problem: Rural Youth, Employment and the Future of Farming,' *IDS Bulletin* 43, no. 6 (2012): 15–16, https://doi.org/10.1111/j.1759-5436.2012.00375.x; Griffin, 'The persistence of precarity.'

[31] Stacey, 'Enhancing Coastal Livelihoods,' 360; Griffin, 'The persistence of precarity,' 295.

[32] White, 'Indonesian Rural Youth Transitions,' 243–46.

[33] Griffin, 'The persistence of precarity,' 295, 302–4.

meetings) remain dominated by male elites. While youth organisations do exist—such as *pokdarwis* (tourism awareness groups) and other informal youth networks—their involvement in governance processes remains limited. In one coastal village in Riau, for instance, youth are actively engaged in eco-tourism initiatives and community activities, yet their participation is largely confined to implementation rather than decision-making. Leadership structures within these groups are also predominantly male, and their connection to formal village governance processes is weak. Women and youth, therefore, have almost no meaningful access to formal decision-making spaces, with women's representation primarily channelled through the *Pembinaan Kesejahteraan Keluarga* (PKK)—family welfare movement. This limited and mediated form of participation reinforces the exclusion of broader voices and perspectives.

These patterns reflect a deeply gendered and generational hierarchy of decision-making—one that grants men symbolic authority over major economic and community matters, while assigning women the practical and moral work of sustaining household life, and leaving young people largely unheard.[34] In practice, these governance spaces become 'adult-only' domains, dominated by male elders and formal representatives. As a result, women and youth do not simply lack access; they are structurally positioned outside the boundaries of who is considered legitimate in village governance.

A similar form of exclusion was described by young people in Sumbawa, NTB. In the development of eco-tourism initiatives, youth voices were rarely taken seriously within formal planning processes. Their ideas circulated only within youth groups, and the implementation of their ideas depended almost entirely on their own initiative. Village government support arrived slowly, and usually after pressure from external actors. In one coastal village in Riau, for example, progress emerged only after a local champion stepped in and actively pushed for youth recognition. Without such individual advocacy, young people felt their contributions remained invisible within formal decision-making structures. Young people are also often positioned as executors yet excluded from the planning itself.[35]

These dynamics also reveal a pattern of tokenism, where presence does not translate into influence. Women may be 'represented' through PKK delegates, and youth may be invited into eco-tourism groups, but their roles remain peripheral, restricted to execution rather than strategy. Their labour is valued, yet their knowledge is not. This gap between participation and decision-making power reinforces the broader governance hierarchy that limits whose expertise is considered legitimate.[36] As one participant put it: 'Oh, *Musyawarah Desa* (village meetings) are for the men. And even if there's a woman representative, it's only someone from the PKK.'[37]

A significant governance gap also emerges in how women's and young people's knowledge is recorded—or more accurately, not recorded—within formal systems. During livelihood mapping sessions in both NTB and Riau, it became clear that women hold extensive knowledge of coastal, agricultural, and service-based economies. In a coastal village in Riau, for example, a women's group collectively listed more than 150 types of commodities across

[34] Griffin, 'The persistence of precarity,' 294.

[35] Coral Triangle Initiative (CTI), *Unlocking the Potential of Women and Youth in Small-scale Fisheries in the Indo-Pacific Regions* (CTI, 2024).

[36] Cornwall, 'Unpacking Participation,' 281; Kabeer, 'Resources, Agency,' 461; Lawless, 'Gender Norms and Relations,' 353.

[37] Ibu Maryam, Local's House at Bengkalis, 17 September 2026.

ocean-based, land-based, and service-based sectors, and they could clearly identify the roles played by women, men, and young people within each sector. This knowledge is not abstract but grounded in everyday practice. Women described how they organise production around fishing cycles (such as *pasang besar* (high tides)); distinguish between commodities that provide daily income and those that are seasonal; and make decisions based on market value (*nilai jual*) and household needs. They are also able to map who participates in each stage of production—from preparation and processing to selling—based on lived experience.

Yet these forms of expertise never appear in village statistics or fisheries datasets, which continue to centre on male fishers. This data gap effectively erases women's and young people's contributions from the institutional landscape, reinforcing the perception that they are peripheral to coastal and marine sectors, when their labour is central.[38]

Gaps in access to support further reinforce these exclusions. Assistance programs, equipment support, and job training opportunities—whether for fisheries, small enterprises, or conservation—are generally directed toward established male groups. Women and youth are rarely included in beneficiary lists, and their informal roles mean they are often deemed 'ineligible' for support. This asymmetry in access deepens the precarity they already navigate and narrows their ability to adapt to ecological and economic change.[39]

Taken together, these gaps in representation, knowledge, and access for women and young people show that exclusion is not accidental but structural.[40] The system's governance structure determines whose labour is recognised, whose knowledge counts as legitimate, and who is seen as a stakeholder in the first place. These structural gaps shape the very conditions under which quiet resilience emerges, reinforcing inequalities even as women and youth continue to sustain their communities in the margins. Their quiet resilience unfolds within structures that do not give them space—and precisely because of that, must be understood as part of the politics of adaptation.[41]

Quiet resilience: Agency from the margins

From the two previous sections, it is already clear that both women and young people do have limited agency—the capacity to make decisions, act, and navigate circumstances, even within the constraints imposed by structural inequalities.[42] We found that precarity shapes how women sustain both domestic and economic functions of their households, while their contributions remain undervalued and largely unrecognised. Decision-making around coastal resources is similarly shaped by exclusion, with governance spaces often dominated by adult men, limiting the meaningful participation of women and young people. With formal spaces

[38] FAO, *Illuminating Hidden Harvests: The Contributions of Small-Scale Fisheries to Sustainable Development*, (Duke University and WorldFish, 2023),139, https://doi.org/10.4060/cc4576en.

[39] Sarah Harper et al., 'Women and Fisheries: Contribution to Food Security and Local Economies,' *Marine Policy* 39 (May 2013), https://doi.org/10.1016/j.marpol.2012.10.018.

[40] Bina Agarwal, 'Bargaining and Gender Relations: Within and Beyond the Household,' *Feminist Economics* 3, no. 1 (1997), 14, https://doi.org/10.1080/135457097338799; Jesse Ribot and Nancy Peluso, 'A Theory of Access,' *Rural Sociology* 68, no. 2 (2003), https://doi.org/10.1111/j.1549-0831.2003.tb00133.x.

[41] Sultana, 'Climate Change, COVID-19,' 448; Rao, 'Gender, Climate Change,' 4; Andrea Nightingale, 'Bounding Difference: Intersectionality and the Material Production of Gender, Caste, Class,' *Geoforum* 42, no. 2 (2011), 154, https://doi.org/10.1016/j.geoforum.2010.03.004.

[42] Nightingale, 'Bounding Difference,' 154.

constrained, alternative forms of agency emerge—yet these remain marginal within broader systems of power.

Because of gendered precarity and exclusion from decision-making processes and governance, women and young people's forms of agency become improvisational, small-scale, and embedded in everyday life. They are still transformative, but only within very limited spheres—primarily at the household or micro-community level.[43] For instance, women actively shape household economies by deciding what products to process and sell based on market value (*nilai jual*), managing daily finances, and diversifying income sources in response to fluctuating catches and environmental change. Similarly, young people initiate small-scale activities such as eco-tourism or informal enterprises, creating new, albeit fragile, livelihood pathways.

These practices can improve household stability and create pockets of economic opportunity. However, their transformative potential remains constrained, as these contributions rarely translate into influence over formal decision-making spaces, access to resources, or broader governance processes. This disconnect becomes even more pronounced under conditions of climate uncertainty. As climate variability, declining fish catches, and shifting coastal conditions intensify, the forms of labour that sustain village life are rendered invisible. Women expand their roles across household management, income generation, care work, and community life, while young people migrate for work, take on irregular employment, or send remittances home to support their families. Although many of these practices are not new, they have become increasingly central as climate-related pressures and economic instability narrow livelihood options.

It is also important to note that these improvisational forms of adaptation emerge not from freedom or choice, but from necessity and the pressures of survival.[44] The ability to adapt or 'be resilient' arises because women and youth are pushed into it by the structural conditions surrounding them, not because they are supported or enabled by the system. This is why we refer to this form of agency as quiet resilience. And this is precisely why quiet resilience must be understood as survival and not empowerment.

One of the clearest expressions of quiet resilience can be seen in several everyday practices of women. Women are constantly adjusting household strategies: reworking how they process fish depending on weather conditions; switching between different types of work; stretching limited income; and buffering shocks when earnings decline. Alongside this, care work and domestic responsibilities do not diminish. The stereotypical roles assigned to women remain firmly in place—they are still expected to maintain the household, manage family finances, sustain social networks, and hold together the social and emotional infrastructure of everyday life. All these activities are forms of labour, even though the system does not recognise them as such.

Despite these constraints, women consistently demonstrate leadership and extensive knowledge in what they do—knowledge that rarely receives recognition.[45] They act as knowledge keepers, social organisers, and, in many ways, crisis managers when households

[43] Rao, 'Gender, Climate Change,' 5.

[44] Sultana, 'Climate Change, COVID-19,' 456; Petra Tschakert, 'From Impacts to Embodied Experiences: Tracing Political Ecology in Climate Change Research,' *Geografiska Annaler* 94, no. 2 (2012): 149, https://doi.org/10.1080/00167223.2012.741889.

[45] Weeratunge, 'Gleaner, Fisher,' 4; FAO, *Illuminating Hidden Harvests,* 209.

face disruptions brought by climate pressures.[46] Their micro-enterprises—whether processing fish, producing fish crackers *(kerupuk)*, weaving, or undertaking seasonal agricultural labour—reflect a form of improvisational economic agency. These micro-enterprises are not framed as 'entrepreneurship' in the development sense, but as survival work: patchwork income strategies that keep households afloat in the absence of structural support. Again, these examples show that women do have agency, but not the kind that grants them power to shape formal structures. It is agency from the margins. They survive because they are forced to survive. Their acts of resilience are a lifeline, not a choice.

A similar pattern appears in the agency of young people. The creativity and initiative they possess are not accompanied by the power to alter decisions or influence the formal development agenda. As discussed earlier, young people are highly creative and agile: they initiate eco-tourism activities; run small digital-marketing efforts; informally monitor coastlines; take on short-term and irregular jobs; and contribute in various ways to support their households. This agility and adaptability are forms of youth agency—attempts to make a living in a challenging and changing environment and fill the governance gaps that shape their everyday lives. Yet, once again, their agency is not formally acknowledged.[47] Their involvement is treated as supplementary not strategic; they are often positioned as executors rather than decision-makers.

The exclusions become even more layered for young women. They experience tighter social restrictions, fewer livelihood opportunities, and narrower mobility pathways compared to young men, illustrating how generational precarity is compounded by gendered norms that further restricts their choices. Migration, in many cases, becomes a survival decision rather than an aspiration. Youth agency exists, but it is systematically disempowered.[48]

When we look across the findings from the field, it becomes clear that dominant narratives of 'resilience' often celebrate the fact that women and young people manage to cope, without asking why they must cope in the first place. We therefore refer to these practices as 'quiet resilience': a form of everyday, small-scale adaptation, sustained through care, solidarity, and improvised livelihood strategies, that enables households and communities to endure, despite persistent exclusion from formal systems.

What is often framed as resilience in policy and development discourse is better understood as endurance shaped by conditions of precarity and limited structural support. Rather than an uplifting story of strength, resilience in our study consists of quiet, everyday practices that keep households and community life intact, often at considerable personal cost. It emerges through exclusion, lack of recognition, uneven burdens, and the structural constraints that narrow people's choices. And while their actions are not overtly confrontational, they are also far from passive. There is a quiet refusal embedded in their endurance—a refusal to collapse, a refusal to disappear, a refusal to stop moving even when formal systems give them no space. Their everyday resilience pushes back against the conditions that seek to limit them, even if it does not transform those structures outright. This is why quiet resilience must be understood as part of the politics of adaptation: a form

[46] Margaret Alston, 'Gender Mainstreaming and Climate Change,' *Women's Studies International Forum* 47 (Part A) (2014), https://doi.org/10.1016/j.wsif.2013.01.016; Sarah Bradshaw, *Gender, Development and Disasters* (Edward Elgar Publishing, 2013).

[47] White, 'Agriculture and the Generation Problem,' 9–10, 15–16; Cornwall, 'Unpacking "Participation",' 281; Lawless et al., 'Gender Norms and Relations,' 353.

[48] White, 'Agriculture and the Generation Problem,' 10.

of survival that unfolds within inequality, shaped by constraint but also by the determination to keep life going on their own terms.

Conclusion

The stories from NTB and Riau show that coastal women and young people are already adapting, already moving and holding the everyday life of their communities—even when formal systems continue to exclude them. Their resilience is quiet, shaped not by choice or empowerment, but by the structural pressures that narrow their options and force them to endure. Yet within these constrained spaces, they continue to think, adjust, care, redistribute labour, and keep small economies alive. These acts are not celebrated in policy documents, nor do they translate into formal power, but they are the backbone of coastal survival.

Quiet resilience is not a romantic story of strength; it is a political reminder of the inequalities that shape who gets to thrive and who must constantly adapt. To understand climate adaptation and mitigation, we must also understand what compels people to adapt, and whose labour makes adaptation possible. These everyday strategies—imperfect, improvised, and often invisible—are where the real politics of coastal change unfold.

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