Jurnal Maneksi (Management Ekonomi Dan Akuntansi)
e-ISSN: 2597-4599
Volume 15 No.04, Desember 2026
Journal Home Page: https://ejournal-polnam.ac.id/index.php/JurnalManeksi
DOI: https://doi.org/10.31959/jm.v15i4.4114
Page: 2252-2266

ECONOMIC EMPOWERMENT OF COASTAL WOMEN THROUGH FISHERY-BASED MSMEs: A THEMATIC ANALYSIS IN DEMAK REGENCY

Regas Panji Pratomo [1)], Fahmy Akbar Idries [2)], Novi Diah Wulandari [3)], Lilis Kurniasari [4)], Wina Mutiara [5)], Arjuna Gabriel Muktaf [6)]

[1,2,3,5,6)] Department Manajement, Economic Faculty, Universitas Nahdlatul Ulama Yogyakarta, Indonesia
[4)] Department Electrical Engineering, Faculty of Information Technology, Universitas Nahdlatul Ulama Yogyakarta, Indonesia
[1)] regas.panji@unu-jogja.ac.id (*), [2)]fahmy@unu-jogja.ac.id, [3)] d.wulandari@unu-jogja.ac.id, [4)]lilis@unu-jogja.ac.id, [5)]234441021@student.unu-jogja.ac.id, [6)]234441066@student.unu-jogja.ac.id

ARTICLE HISTORY
Received:
Oktober 02, 2026
Revised
November 02, 2026
Accepted:
November 02, 2026
Online available:
December 01, 2026

Keywords:
women empowerment, fishery-based MSME, coastal women, agency, resources, achievements

*Correspondence:
Name: Regas Panji Pratomo
E-mail: regas.panji@unu-jogja.ac.id

Editorial Office
Ambon State Polytechnic
Center for Research and Community Service
Ir. M. Putuhena Street, Wailela-Rumahtiga, Ambon
Maluku, Indonesia
Postal Code: 97234

ABSTRACT

Introduction: *Coastal women contribute substantially to household economies through fishery-based micro, small, and medium enterprises (MSMEs), yet their economic participation does not automatically translate into empowerment. This study aims to analyse the process of economic empowerment of coastal women through fishery-based MSMEs in Demak Regency using the resources, agency, and achievements framework.*

Methods: *The study used an exploratory qualitative approach with 23 purposively selected women engaged in fishery-based MSMEs. Data were collected through in-depth interviews and analysed using NVivo-assisted thematic analysis, guided by four analytical propositions derived from Kabeer's resources, agency, and achievements framework.*

Results: *The results show that economic empowerment occurs through the utilisation of resources, including capital, raw materials, equipment, family networks, customers, market access, and institutional support. These resources are converted into agency through women's capacity to manage capital, determine product quality, choose marketing strategies, and adapt their businesses to various constraints. This agency produces achievements such as additional household income, business continuity, loyal customers, and growing aspirations to expand production capacity and market reach. However, limited capital and technology, fluctuating raw material prices, uneven institutional access, and coastal environmental vulnerability still constrain the process. These findings suggest that empowerment depends not on economic participation alone, but on women's ability to turn available resources into meaningful economic decisions and achievements. To strengthen the sustainability of coastal women's MSMEs, they need better access to technology, markets, business assistance, and institutional support.*

This is an open-access article under the CC BY license (https://creativecommons.org/licenses/by/4.0/)

INTRODUCTION

Coastal areas play a significant role in economic development through production, processing, trade, and distribution of fishery products. In the context of the blue economy, the sustainability of the fisheries sector is not only related to the utilization of marine resources, but also to the capacity of coastal communities to benefit economically in an inclusive manner. Women are among the key actors in this sector, as they are involved in production, post-harvest processing, trade, and marketing of fishery products. Women make up an estimated 39.6% of workers along the small-scale fisheries value chain worldwide (FAO, 2023) , and (Harper, Adshade, Lam, Pauly, & Sumaila, 2020) estimate that women land catches valued at approximately USD 5.6 billion per year in small-scale marine capture fisheries, yet their contributions remain systematically undervalued and largely missing from the official national fisheries statistics compiled by governments. Despite their considerable contributions, the economic benefits women receive are not always commensurate with their level of involvement in the value chain (Kleiber, Harris, & Vincent, 2014) (Kleiber et al., 2015; Pedroza-Gutiérrez & Hapke, 2022). This situation underscores the importance of positioning women not merely as household economic supporters, but as economic actors contributing to the sustainability of the coastal economy.

Women's involvement in economic activities is an important part of empowerment, but involvement alone is not sufficient to show that women are empowered. Involvement becomes empowering when it is accompanied by access to and control over resources, the ability to make choices and decisions, and outcomes that women themselves value (Kabeer, 1999a). (Labayo, 2024) found that limited access to and control over productive resources, as well as low levels of participation in decision-making, are significant factors constraining the empowerment of women in fishing communities. (Dasig, 2020) shows that women leaders in fishing communities can develop voice, confidence, and the capacity to act, even though such agency remains influenced by family responsibilities and gender roles. In the Indonesian context, (Susilowati & Mafruhah, 2023) found that women's empowerment in coastal fisheries communities is shaped by three interconnected factors: internal, external, and institutional. These findings indicate that empowerment analysis needs to move beyond income measures and consider the process by which women acquire resources, exercise agency, and achieve economic goals they regard as meaningful.

This perspective aligns with (Kabeer, 1999a) empowerment framework, which conceptualizes empowerment through the interrelationship among resources, agency, and achievements. Resources encompass economic, social, knowledge, technological, network, and institutional support that enable women to make choices. Agency refers to women's capacity to define goals and make decisions, while achievements reflect the outcomes obtained through the utilization of resources and the exercise of agency (Kabeer, 1999a). This framework is relevant to women operating fishery-based MSMEs because business activities unfold under conditions of frequently constrained resources. (Mahmud, Khan, & Ahmad, 2025) show that patriarchal norms, limited institutional support, access to finance, and weak control over productive resources remain primary barriers to the development of women's agency in the fisheries value chain. At the same time, strengthening social capital, adaptive capacity, and stakeholder support is essential for the sustainability of women's entrepreneurship in the fisheries sector (Sugiyanto, Hartono, & Pramudya, 2025) .

Although previous studies have addressed women's participation, limited resource access, value chain inequalities, and various barriers to empowerment, there remains scope for understanding how economic empowerment unfolds as a process in the daily lives of women operating micro-scale fishery-based enterprises. Prior research tends to describe women's roles, contributions, and empowerment programs, or to examine barriers and business development strategies in isolation (Azkia, Rizqiyan, & Alfian, 2025; Sugiyanto et al., 2025; Wardhani et al., 2025) . Studies comprehensively explaining how coastal women mobilize available resources, exercise agency in business decision-making, and transform these into economic achievements under conditions shaped by capital limitations, technology constraints, market access, productive resources, and coastal environmental vulnerability remain limited. This gap is particularly relevant in the context of Demak Regency, where trading and processing activities in the fisheries sector constitute an important component of coastal community livelihoods.

Based on these gaps, this study aims to analyse the process of economic empowerment of coastal women through fishery-based MSMEs in Demak Regency by exploring access to resources, forms of agency in business

management, economic achievements generated, and the conditions that support and constrain the empowerment process. The study employed an exploratory qualitative approach, positioning the experiences of women MSME operators as the primary data source. In-depth interviews were analysed through NVivo-assisted thematic analysis (Braun & Clarke, 2022) using the resources, agency, and achievements framework as the basis for interpretation.

LITERATURE REVIEW

The Kabeer's empowerment framework

This review focuses on the economic empowerment of women in coastal fishery communities; it examines women as economic actors in fish processing and trade rather than the coastal economy. Women's empowerment in this study is grounded in Kabeer's empowerment framework, which views empowerment as a process of increasing an individual's capacity to make strategic life choices. (Kabeer, 1999a) explains this process through three interrelated dimensions: resources, agency, and achievements. Resources encompass material, human, and social assets that enable women to exercise choice. Agency describes women's capacity to define goals, make decisions, negotiate, and act in accordance with their own interests. Achievements reflect the outcomes obtained through the utilization of resources and the exercise of agency. These three dimensions are inseparable because the possession of resources does not, by itself, produce empowerment if women lack the capacity to determine how those resources are used (Kabeer, 1999b, 2018) . Similarly, economic achievements become more meaningful when they result from women's own choices and decisions.

This framework is relevant for understanding the empowerment of women operating fishery-based MSMEs. In the context of this study, resources may include business capital, raw materials, production equipment, knowledge, technology, family networks, customers, market access, and government support. Agency is reflected through women's capacity to initiate and sustain enterprises, manage capital, determine products, maintain quality, choose marketing channels, and make decisions when confronted with changing business conditions. Achievements may take the form of supplementary income, business sustainability, increased economic independence, market expansion, improved production capacity, and greater contributions to household welfare. Related empowerment frameworks have also been used to assess gender inequality in aquaculture (Sarkodie, Adams, Owusu, Leirvik, & Ozturk, 2023) , while studies of coastal women entrepreneurs and collective business groups in Indonesia highlight the roles of gender awareness, access to technology, and stakeholder support (Fitranisa et al., 2026; Wardhani et al., 2025) , confirming the relevance of an empowerment lens across the fisheries and coastal development spectrum.

Previous Study

Research on women in the fisheries sector consistently indicates that women's economic participation does not always produce equivalent levels of empowerment. (Harper et al., 2020) estimate that women account for roughly 11% of participants in small-scale fishing activities worldwide, contributing an estimated USD 14.8 billion per year in economic impact when secondary activities are included. Nevertheless, women's contributions continue to be systematically undervalued. (Kleiber et al., 2014) , in a landmark review, argue for the importance of "counting women and beyond", moving past head counts to recognizing the quality and value of women's work across the fish value chain. Similarly, (Pedroza-Gutiérrez & Hapke, 2022)) propose a framework for accounting the value of women's work in small-scale fisheries and show that the value created through women's processing and trading activities is usually overlooked.

(Labayo, 2024) provides more specific evidence on the relationship between resources and women's empowerment in fishing communities in rural Bicol, the Philippines. This study demonstrates that limited access to and control over productive assets, such as boats and fishing gear, and limited participation in decisions over these assets are the main drivers of women's disempowerment. (Susilowati & Mafruhah, 2023) studying fisherwomen in Pacitan, East Java, found that the community empowerment process is influenced by internal, external, and institutional factors, and proposed an integrated fisheries system model involving all stakeholders. These findings support Kabeer's perspective that resources constitute a necessary condition for the development of women's agency.

Agency does not operate independently of its surrounding social conditions. (Dasig, 2020) found that women who served as leaders in fisherfolk organizations in Bolinao, the Philippines, were able to develop voice, confidence, solidarity, and achievement. However, such capacity remains constrained by family responsibilities and gender role

constructions. (Wardhani et al., 2025) , studying the Juwana coastal community in Central Java, similarly found that women actively participate in fish processing, trade, and the management of business groups and cooperatives, although their success depends on support from husbands, government, and other stakeholders.

More recent studies demonstrate that barriers to women's empowerment in the fisheries sector are multidimensional. In a review of global perspectives, (Mahmud et al., 2025) found that patriarchal norms, insufficient institutional support, financial limitations, and women's low control over productive resources can reduce decision-making autonomy and impede the development of agency in the fisheries value chain. A synthesis of 75 case studies by (Chambon et al., 2023) confirms that, while women's roles in fisheries are diverse and essential, more than 80% of the cases showed no or only limited participation of women in small-scale fisheries management. (FAO, 2023) further identifies significant organizational capacity gaps among women's small-scale fisheries organizations in Indonesia, underscoring the need for targeted institutional support. (Sugiyanto et al., 2025) emphasize that the sustainability of women's enterprises in the fisheries sector requires vulnerability management capacity, strengthened social capital, collective action, and multi-stakeholder collaboration.

Because this study is exploratory and qualitative, it does not test hypotheses. Instead, the conceptual relationships derived from theory and prior research are formulated as analytical propositions that guide, but do not restrict, the analysis. The conceptual relationships of this study begin with the resources accessible to or possessed by women. (Kabeer, 1999) positions resources as the conditions that enable individuals to exercise choice, while (Labayo, 2024) demonstrates that access to and control over productive resources is closely associated with levels of women's empowerment in fishing communities. Accordingly, the better women's access to capital, raw materials, technology, knowledge, networks, and markets, the greater their capacity to make decisions in business management. Based on this reasoning, the first analytical proposition is formulated as follows: **Proposition 1 (P1)** Access to resources enables women's agency in managing fishery-based MSMEs. Agency subsequently becomes the mechanism through which women transform resources into meaningful economic outcomes. (Dasig, 2020; Slahanti, Noegroho, Souisa, & Soegihartono, 2026) demonstrates that women in fishing communities can develop the capacity to act, voice, and achievement when they have the space to make decisions. Within Kabeer's framework, agency constitutes the link between resources and achievements. The second analytical is **Proposition 2 (P2)** Women's agency in everyday business decisions shapes the economic achievements of their enterprises. This empowerment process does not occur in a context free from environmental influences. (Mahmud et al., 2025) demonstrate that social, financial, and institutional barriers can reduce women's control over resources while limiting decision-making capacity. Conversely, (Sugiyanto et al., 2025) emphasize that social capital, collective action, adaptive capacity, and stakeholder support can strengthen the sustainability of women's enterprises in the fisheries sector. Because supporting and constraining conditions may operate through different mechanisms, they are formulated as two separate propositions, **Proposition 3 (P3)** Family, social, and institutional support strengthens the conversion of resources into agency and achievements. **Proposition 4 (P4)** Limitations in capital and technology, raw material scarcity, uneven institutional access, and coastal environmental vulnerability constrain this conversion.

RESEARCH METHODS

This study employed an exploratory qualitative design (Creswell & Creswell, 2018; Creswell & Poth, 2018) to understand the process of economic empowerment of women operating fishery-based MSMEs in the coastal communities of Demak Regency, Central Java. A qualitative approach was selected because the study focuses on the experiences, economic choices, decision-making processes, resource access, and achievements as understood by women in the context of running their businesses. The analytical process was directed toward three conceptual domains derived from (Kabeer, 1999) empowerment framework: resources, agency, and achievements. Resources encompass capital, raw materials, technology, equipment, knowledge, social networks, market access, and institutional support. Agency encompasses the capacity to make decisions, manage capital, determine production and marketing strategies, and respond to business constraints. Achievements encompass economic and social benefits including contributions to household income, business sustainability, economic independence, business development, and market expansion. The four analytical propositions formulated above served as sensitizing guides for the analysis rather than as hypotheses to be statistically tested.

The study was conducted in coastal communities in Wedung Subdistrict, Demak Regency, Central Java. Interview data were collected between June 7 and 16, 2026, across several coastal villages including Weding, Ketapang, Wedung, Buko, Ngawen, Bungo, Kedung Mutih, Ruwit, Menco, Berahan Kulon, Tedunan, and other villages in the area. Informants were selected using purposive sampling based on three inclusion criteria: (1) women who actively operated a fishery-based enterprise, either processing or trading fish, shrimp, shellfish, or other marine products; (2) direct involvement in production, processing, trade, marketing, or business decision-making; and (3) relevant experience in running the enterprise. Interviews were conducted with 27 women. Four transcripts were excluded because the informants' enterprises were not fishery-based (two sold iced drinks and two grew and sold water spinach and shallots), leaving 23 informants for analysis. The number of informants was determined by the availability of eligible women in the selected villages during the fieldwork period rather than by a formal assessment of data saturation. For publication purposes, informants' identities were replaced by codes P01 through P23 to protect participant confidentiality.

Primary data were collected through face-to-face in-depth interviews conducted by the research team, assisted by students who had been briefed on the interview guide. The interviews took place in the informants' villages. All interviews followed the same semi-structured guide of 12 main questions, covering the informant's business goals, future plans, promotion and marketing, business constraints, ways of coping with limited capital, access to raw materials and equipment, views on competition, supporting factors, product differentiation, government support and training, emerging market trends, and anticipated obstacles. The semi-structured format allowed informants to describe their experiences in their own language and perspective (Creswell & Creswell, 2018) . The interviews were not audio-recorded; instead, the interviewers wrote down each informant's answers directly during the interview, keeping as closely as possible to the informant's own words. These notes were then compiled into a standardized transcript for each informant, recording the informant's name, the interview date, the village, and the answers to all 12 questions, which resulted in 27 transcripts. The interviews were conducted in everyday Indonesian, and informants frequently used Javanese and other local terms. These terms were retained in the transcripts and, where necessary, clarified with an Indonesian gloss in brackets, for example mlempem (no longer crisp) and ngadat (broken down). Quotations presented in this article were translated into English by the authors, with local terms kept in italics where no direct English equivalent exists.

Data were analyzed using thematic analysis with the assistance of NVivo, following the six-phase process outlined by (Braun & Clarke, 2019, 2022) : (1) familiarization with data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) writing the report. The analysis combined deductive and inductive approaches, with Kabeer's three concepts as initial analytical categories and additional codes developed from emerging patterns. The quality of the research was addressed through the four trustworthiness criteria for qualitative inquiry (Nowell, Norris, White, & Moules, 2017) , each linked to a specific procedure. Credibility was pursued by comparing accounts across the 23 informants and by presenting verbatim interview quotations, identified by informant codes, as evidence for each theme. Dependability was supported by documenting codes, category revisions, and theme formation in NVivo so that the analytical path can be traced, and by coding discussions among the researchers in which codes, categories, and emerging themes were compared to check the consistency of interpretation. Confirmability was pursued by grounding each interpretation in the transcripts and linking it to informant codes rather than to the researchers' assumptions. Transferability was supported by describing the informants and their context: the 23 women operated salted fish (4), smoked fish (4), and shrimp cracker (3) enterprises, traded fresh fish and other marine products (4), processed or sold petis (2), sold shellfish as mobile vendors (2), and ran fish cracker, shrimp paste (terasi), shrimp trading, and grilled fish enterprises (one each) in villages across Wedung Subdistrict. Because the study is qualitative, no statistical tests were used; interpretive rigour was assessed through consistency in coding, coherence between data and themes, and traceability of empirical evidence.

RESULT AND ANALYSIS

Thematic analysis of in-depth interviews with women operating fishery-based MSMEs in Wedung Subdistrict, Demak Regency, reveals that economic empowerment unfolds as a sequential process linking access to

resources, the exercise of decision-making capacity, and the attainment of economic outcomes. Simultaneously, this process is shaped by coastal environmental vulnerability, technological limitations, access to capital, social networks, and institutional support, conditions that can either facilitate or constrain each stage of the empowerment process. The identified pattern aligns with (Kabeer, 1999) framework, which conceptualizes empowerment through three interrelated dimensions: resources, agency, and achievements. Based on the systematic grouping of interview data within NVivo, four main themes emerged: (1) resources as the foundation of economic empowerment, (2) agency in everyday business management, (3) economic achievements and expanding entrepreneurial aspirations, and (4) coastal vulnerability as a limit on the empowerment process. These patterns are observable across a variety of enterprises, including shrimp cracker production, salted fish, smoked fish, fish paste (petis), shrimp paste (terasi), fish trading, shellfish, shrimp, and other marine products. Table 1 presents the coding worksheet, which lists the categories identified under each theme and the informants whose transcripts contained them.

Table 1
Consumption on Ramadhan

Theme	Category	Supporting informants
Resources	Household money or set-aside earnings used as starting or additional capital	P01, P04, P12, P13, P14, P23 (n = 6)
	Rotation of daily sales proceeds as working capital	P01, P02, P03, P05, P06, P08, P09, P10, P11, P12, P15, P16, P17, P18, P19, P20, P21, P23 (n = 18)
	Cooperative loans	P04, P05, P07, P09, P16, P17, P18 (n = 7)
	Loans or credit from relatives, neighbors, or suppliers	P06, P12, P14, P18, P23 (n = 5)
	Family help with production, packing, or marketing	P01, P02, P03, P04, P07, P14, P15, P16, P22 (n = 9)
	Customer and community networks (neighbors, regular customers, events)	P01, P02, P03, P05, P10, P12, P13, P14, P15, P17, P22, P23 (n = 12)
	Strategic business location	P04, P06, P08, P09, P10, P11, P17, P19 (n = 8)
	Village or government support (training, equipment, aid)	P04, P05, P06, P07, P08, P10, P11, P15, P16, P17, P21, P22 (n = 12)
	Skills from prior work or family tradition	P13, P14, P22 (n = 3)
	Collaboration among fellow producers	P21, P22, P23 (n = 3)
Agency	Quality and freshness standards (real ingredients, no preservatives or formalin)	P01, P02, P04, P05, P07, P08, P09, P10, P12, P13, P16, P18, P19 (n = 13)
	Packaging, service, and visibility (neat packaging, cleaning fish, delivery, banners)	P03, P04, P05, P06, P17 (n = 5)
	Conventional marketing (markets, consignment, neighbors, word of mouth, mobile vending)	P02, P03, P06, P08, P09, P10, P11, P12, P13, P17, P18, P19, P20 (n = 13)
	Digital marketing via WhatsApp, social media, or mobile phone, often assisted by children	P01, P04, P05, P07, P14, P15, P16, P21, P22, P23 (n = 10)
	Product diversification or new product ideas	P01, P03, P06, P17, P20 (n = 5)
Achievements	Contribution to household income	P01, P02, P03, P04, P05, P06, P07, P08, P09, P10, P11, P12, P13, P14, P15, P16, P17, P18, P19, P20, P21, P22, P23 (n = 23)
	Own, independent income	P12, P13 (n = 2)

Theme	Category	Supporting informants
	Loyal customers and orders from the community	P01, P02, P03, P05, P10, P12, P14, P17 (n = 8)
	Sales beyond the village or district	P07, P16 (n = 2)
	Aspirations to expand (equipment, storage, vehicles, brand, markets)	P01, P02, P03, P04, P05, P06, P07, P08, P09, P10, P13, P14, P15, P16, P17, P20, P21, P22 (n = 18)
Constraints	Weather, rain, and high waves affecting drying, catch, and sales	P01, P03, P04, P05, P06, P07, P08, P09, P11, P12, P16, P17, P18, P19, P20, P21, P22, P23 (n = 18)
	Raw material scarcity and price fluctuations	P01, P02, P03, P04, P05, P06, P07, P08, P09, P10, P11, P12, P13, P14, P15, P17, P18, P19, P20, P21, P22, P23 (n = 22)
	Manual or unreliable equipment and limited storage	P01, P02, P05, P06, P07, P09, P11, P13, P14, P15, P23 (n = 11)
	Lack of, or no access to, institutional support	P01, P02, P03, P09, P12, P13, P14, P18, P19, P20, P23 (n = 11)

Source: Primary Data from In-Depth Interviews (June 2026)

Resources as the Foundation of Economic Empowerment

The economic resources that women utilize in operating their enterprises are generally sourced from the household scale and their closest social networks. Initial and working capital are more commonly obtained from household budget savings, reinvested sales proceeds, cooperative loans, family members, or neighbors. One informant who produces shrimp crackers explained that her initial capital came from a portion of the household food budget that was subsequently reinvested after each sale. Similar patterns were found among processors of salted fish, shrimp paste, smoked fish, shellfish traders, and fish traders. Accordingly, women's business capital does not primarily derive from formal financing systems but rather grows through micro-financing mechanisms rooted in the household and self-generated business proceeds. These patterns are illustrated in the following accounts:

P01, shrimp cracker producer, Weding

Bahasa: "Modal pertama ibu itu dari sisipan uang belanja sedikit, lalu ibu buat kerupuk dan ibu jual ke tetangga. Lama-lama makin banyak yang suka jadi ibu putar terus hasilnya buat beli bahan lagi."

English: "My first capital came from setting aside a little of the household shopping money. Then I made crackers and sold them to the neighbours. Over time more and more people liked them, so I kept turning over the proceeds to buy ingredients again."

P04, seafood trader, Buko

Bahasa: "awalnya ibu pinjam koperasi, tapi sekarang ibu mulai sisipkan keuntungan untuk tambahan modal".

English: "At first I borrowed from the cooperative, but now I have started setting aside some of the profit as additional capital."

Both accounts show that initial capital is generated within the household or obtained through a small cooperative loan and is then sustained through the rotation of sales proceeds. In terms of Kabeer's framework, women's financial resources are small but largely under their own control, which gives them room to decide how these resources are used.

Resources in this study also extend beyond the financial dimension. Family members, regular customers, neighbours, business location, and market networks constitute important social resources. Several informants noted that their children assist with marketing through mobile phones or social media, family members help with production and packaging, and neighbours serve simultaneously as customers and informal channels for product promotion. In some cases, government support is present in the form of training, weighing scales, buckets, or business assistance; however, this experience is not uniformly distributed. Some women are aware of government programs, some have participated in them, while others have never received assistance or could not attend training sessions due to family obligations.

P03, fish cracker seller, Wedung
bahasa: “keluarga dukung sekali, anak saya juga bantu-bantu kemas, dan tetangga banyak yang sering pesan buat acara.”
English: "My family is very supportive, my child helps with the packing, and many neighbours often orderfor their events".
P05, marine fish trader, Ngawen
Bahasa: “ada mbak, ibu pernah dapat bantuan ember sama alat timbangan dari kelurahan itu lumayan ngebantu.”
English: " Yes, I once received buckets and a weighing scale from the village office; that helped quite a lot"
P01, shrimp cracker producer, Weding
Bahasa: “Pernah ada pelatihan di desa, tetapi ibuk tidak pernah ikut karena ibu punya anak kecil dulu yang idak bisa di tinggal.”
English: " There was once a training in the village, but I never attended because I had a small child at the time who could not be left alone "

These statements show that family members and neighbours function simultaneously as labour, customers, and channels of information, whereas institutional support reaches only some women. P01's account also shows that a care responsibility determined whether a public resource, in this case training, could actually be used, illustrating that women's access to resources is shaped by gendered household roles.

P14, shrimp paste producer, Wedung
Bahasa: “Ibu kan dulu pernah ikut juragan terasi jadi ya ibu coba aja buka di rumah, lumayan penghasilannya bisa buat tambah-tambah belanja.”
English: " I used to work for a terasi entrepreneur, so I just tried opening my own business at home; the income is quite enough to add to the household budget "

Resources also include skills acquired outside the household enterprise. P14 had worked for a local terasi entrepreneur, and P13 for a smoked-fish entrepreneur, before starting their own businesses, while P22 continued a salted-fish business passed down from her parents. Prior work experience and family tradition therefore function as human capital that lowers the threshold for starting an enterprise.

These findings indicate that women's resources are diverse but fragile. Women possess economic, social, and locational capital that enables their enterprises to function, yet the scale and degree of control over these resources remain limited. This is consistent with (Labayo, 2024) , who found that access to and control over productive resources is a key factor in women's empowerment within fishing communities. (Mahmud et al., 2025) further demonstrate that limitations in productive resources and institutional support can reduce women's economic autonomy within fisheries value chains. (FAO, 2023) similarly identifies significant gaps in women's access to organizational resources and institutional support in Indonesian small-scale fisheries. The findings are therefore consistent with Proposition 1: access to resources is a necessary enabling condition for the development of women's agency, but resource availability alone does not guarantee the realization of empowerment.

Agency through Everyday Business Decisions

The second theme demonstrates that women do not passively receive or use resources. They actively make decisions to sustain their enterprises. Agency is most clearly visible in how women manage capital constraints. When capital is limited, the majority of informants choose to reinvest their profits as subsequent working capital. When this is insufficient, several women turn to cooperatives or family networks as alternatives. This demonstrates that capital limitations do not necessarily halt economic activity but instead motivate women to develop simple financial strategies that maintain the continuity of their business cycles. This account reflects a sequential financial decision: women first rely on their own turnover and turn to external credit only when it is insufficient, keeping debt under their own control.

P05, marine fish trader, Ngawen
Bahasa: “Ya muter dari hasil jualan mbak, tapi kadang kalau kurang ya ibu pinjam koperasi.”
English: “I just turn over the money from my sales, but sometimes, when it is not enough, I borrow from the cooperative.”

Agency also manifests through decisions concerning product quality and value addition. Shrimp cracker producers maintain the use of real shrimp and avoid artificial coloring and preservatives. Fish traders maintain product freshness and offer fish-cleaning services as supplementary value. Salted fish processors select quality raw materials and avoid formalin. Petis (fish paste) producers maintain the use of fresh fish, while other women work to improve packaging, create product labels, offer delivery services, or consider diversifying toward ready-to-cook products. These strategies indicate that women are not merely conducting production activities but are also engaging in market evaluation and making choices related to quality, service, differentiation, and product positioning. These decisions about raw materials and production methods are choices that the women make themselves and that define the value of their products. They show that agency is exercised through self-imposed quality standards rather than through formal business planning.

P07, salted fish processor, Kedung Mutih
Bahasa: "ibu memilih ikan yang bagus tanpa menggunakan formalin dan di keringkan sampai betul-betul kering agar awet dan tidak bau tengik".
English: "I choose good fish without using formalin, and I dry them until they are really dry so that they keep well and do not smell rancid."
P09, petis processor, Wedung
Bahasa: "Petis buatan ibu dari ikan asli tidak dicampur tepung. Warnanya pekat dan rasanya gurih".
English: "The petis I make is from real fish, not mixed with flour. Its colour is deep and it tastes savoury." ()

Additional forms of agency are evident in marketing adaptation. Some enterprises continue to rely on traditional markets, neighbourhood stalls, regular customers, community bazaars, arisan (rotating savings) gatherings, and word-of-mouth communication. However, several informants have begun to utilize WhatsApp and social media, and some have received orders from outside their home district through the assistance of family members. In contrast, there are also women who aspire to sell online but currently lack the necessary digital skills or devices. This pattern demonstrates that digital agency is beginning to emerge, albeit unevenly, which resonates with , who highlight the importance of access to digital technology for coastal women entrepreneurs. The contrast between these accounts shows that digital marketing depends on whether women can draw on the skills of other household members. When a child is able to help, the market extends beyond the village; when no such help or skill is available, the intention to sell online cannot be realized, so digital agency remains uneven.

P07, salted fish processor, Kedung Mutih
Bahasa: "awalnya ibu cuma jualkan ke pasar tapi sekarang di bantu anak ibu di jualkan di hp jadi banyak pesanan dari luar kota."
English: "At first I only sold at the market, but now my child helps me sell through the phone, so there are many orders from out of town."
P09, petis processor, Wedung
Bahasa: "Sekarang banyak orang cari petis buat sambal jadi ibu pengen jualan online tapi ibu tidak bisa".
English: "Nowadays many people look for petis to make sambal, so I want to sell online, but I am not able to."

The contrast between these accounts shows that digital marketing depends on whether women can draw on the skills of other household members. When a child is able to help, the market extends beyond the village; when no such help or skill is available, the intention to sell online cannot be realized, so digital agency remains uneven. These findings reinforce the argument of (Mahmud et al., 2025) that women in fishing communities are not passive actors but are capable of exercising agency in navigating their economic and social circumstances. However, the agency observed in this study manifests primarily as everyday economic agency, a series of small but continuous decisions concerning capital, products, customers, quality, marketing, and risk management rather than as a singular moment of transformative choice. In (Kabeer, 1999a) terms, many of these are second-order choices rather than strategic life choices; nevertheless, their accumulation sustains the enterprise and gradually widens women's room for manoeuvre. These findings are therefore consistent with Proposition 1: resources provide the space for action, but it is women themselves who convert those resources into business strategies through agency.

Achievements beyond Additional Household Income

The most visible achievement is the contribution of the enterprise to household economic welfare. Almost all narratives regarding the rationale for operating a business converge on the need to generate supplementary income, assist the husband, meet household needs, or possess independent earnings. However, the findings demonstrate that achievements extend beyond additional income. Several women already have established loyal customers, receive orders for community events, have expanded sales to villages outside their own, use social media to attract customers from other cities, or have begun planning for increased production capacity. The first two statements show that the most immediate achievement is income that supports household needs, but P12's emphasis on having her own income also points to greater economic independence. P01's account shows another type of achievement: recognition in the local community that translates into a steady flow of orders.

P17, mobile vendor of shelled shellfish, Ketapang
Bahasa: "Biar dapat nambah ekonomi, soalnya buat nyukupi kebutuhan rumah tangga, anak-anak juga masih sekolah. Jualan ini alhamdulliah bantu keuangan keluarga."
English: "To add to our income, because it is to meet household needs, and the children are still in school. Thank God, this business helps the family's finances."
P12, smoked fish producer, Ruwit
Bahasa: "Ya supaya bisa bantu ekonomi di rumah, biar ada penghasilan sendiri, tidak Cuma nunggu dari suami."
English: "So that I can help the household economy and have my own income, not just wait for what my husband brings."
P01, shrimp cracker producer, Weding
Bahasa: "Orang kampung sini pada suka kerupuk buatan ibu, jadi setiap ada acara pasti ibu dapat pesanan."
English: "People in this village like my crackers, so whenever there is an event, I always get orders."

Entrepreneurial development aspirations represent another important form of achievement. Informants expressed desires to possess better production equipment, refrigerators or storage facilities, distribution vehicles, their own brands and labels, a larger commercial space, larger production volumes, and markets extending to other cities. These aspirations reflect a shift in orientation from merely sustaining daily income toward a desire to build business sustainability and growth. In other words, economic activities not only provide income contributions but also create the capacity for women to envision a broader range of economic choices in the future. These aspirations, namely better storage, a larger stall, a brand, and wider markets, show that women's horizon of economic choices has begun to extend beyond daily survival, which in Kabeer's framework indicates an expanding capacity to envision alternatives.

P05, marine fish trader, Ngawen
Bahasa: "pengennya sih bisa buka lapak lebih besar, terus bisa jual lebih banyak jenis ikan, dan bisa punya kulkas ikan sendiri biar ikan tidak cepat rusak."
English: "I would like to open a bigger stall, sell more kinds of fish, and have my own fish refrigerator so the fish do not spoil quickly."
P09, petis processor, Wedung
Bahasa: "Ibu pengen usaha petih ini bisa jalan terus, ibu juga ingin petisnya ada merknya, dan pengen bisa kirim ke luar kota."
English: "I want this petis business to keep going; I also want my petis to have a brand, and I want to be able to send it out of town."

This finding is significant because empowerment should not be measured solely by the magnitude of income. Within (Kabeer, 1999) perspective, achievements acquire empowerment significance when they result from an expansion of the individual's capacity to make choices. The data demonstrate that agency in capital management, product quality, marketing, and customer relationships enables women to sustain their enterprises while simultaneously building broader economic aspirations. These findings are consistent with Proposition 2, that agency shapes economic achievement. However, the achievements observed are more strongly evident at the level of household economic security and enterprise continuity than at the level of large-scale economic transformation, a

pattern consistent with (Stacey et al., 2019), whose evaluation of gender and livelihood initiatives in Indonesian small-scale fisheries found that many initiatives reached women but only a small share were gender transformative.

Coastal Vulnerability and the Limits of Empowerment

Although women demonstrate the capacity to manage their enterprises, this empowerment process unfolds within a highly vulnerable coastal context. Weather emerges as a recurring constraint across multiple interviews. Rain impedes the drying process for shrimp crackers and salted fish, increases the risk of product spoilage, reduces the number of buyers at markets, and limits the mobility of itinerant traders. High waves and poor sea conditions reduce fish catches, making raw materials scarce or more expensive. Several traders are compelled to source from alternative suppliers at higher prices or to reduce production volumes when supplies of fish, shrimp, or shellfish decline. These accounts illustrate how a single environmental factor travels through the enterprise: bad weather disrupts drying and reduces the catch, and substituting raw materials from ponds raises costs and lowers quality

P08, salted fish processor, Kedung Mutih

Bahasa: "Kendalanya di musim hujan jadi susah ngejemurnya dan kalau ombak besar itu jadi hasil tangkapannya sedikit."

English: "The problem is in the rainy season, when drying becomes difficult, and when the waves are high, the catch is small."

P04, seafood trader, Buko

Bahasa: "cuaca jelek jadi nelayan susah dapat tangkapan. Jadi kalau tidak ada nelayan ya ibu beli dari tambak itu pun harganya lebih mahal dan kualitanya pu berbeda".

English: "When the weather is bad, fishers struggle to get a catch. So, if there are no fishers, I buy from the ponds, but the price is higher and the quality is different."

Technological limitations amplify these effects. Several informants continue to rely on manual equipment for grinding, cutting, cooking, drying, and storing fishery products. Needs for improved machinery, drying tools, refrigerators, storage space, and distribution vehicles recurred across interviews. Under these conditions, weather is not merely an environmental concern but becomes an economic constraint, as it affects production continuity, product quality, raw material prices, and income. This interconnection is consistent with the multidimensional social, legal, and financial barriers identified by (Mahmud et al., 2025) . Reliance on manual tools or on a single, unreliable machine means that production capacity is most limited precisely when demand rises, so technological limitations directly restrict the achievements that women can realize.

P01, shrimp cracker producer, Wedung

Bahasa: " Alat juga ibu pakai seadanya masih manual semua. Dari ngegiling, motong, ngejemur ya pakai alat seadanya"."

English: "My tools are just whatever I have; everything is still manual. From grinding and cutting to drying, I use whatever tools are available."

P13, smoked fish producer, Menco

Bahasa: "mesin suka tiba-tiba ngadat (rusak) dan kalau lagi banyak pesanan saya kewalahan karena bikin sendiri".

English: "The machine often suddenly breaks down (ngadat), and when there are many orders, I am overwhelmed because I make everything myself."

Social support serves as an important mechanism for reducing this vulnerability. Children assist with marketing, family members contribute to production, neighbours provide loans or serve as customers, and in some communities, there are practices of mutual assistance among enterprise operators. These findings align with (Sugiyanto et al., 2025) , who emphasize the importance of resilience, social capital, and collective action in strengthening the sustainability of women's enterprises in the fisheries sector. However, institutional support in the study data is not consistently observable. Some women have received training or assistance, while others are unaware of available programs, have not received support, or cannot participate due to family circumstances. This pattern reveals that formal support has not yet become a resource accessible to all women in these communities, mirroring the organizational capacity gaps identified by (FAO, 2023) in Indonesian small-scale fisheries. Viewing fellow processors as partners rather than

competitors shows how collective relations within the village can cushion individual vulnerability and serve as a source of shared knowledge.

P22, salted fish processor, Tedunan
Bahasa: “Di Tedunan sini memang banyak yang mengolah ikan, tapi ibu anggap itu bukan saingan. Malah seneng, jadi bisa saling tukar ilmu.”
English: "Here in Tedunan many people process fish, but I don't see them as competitors. In fact, I'm glad, because we can exchange knowledge.”

The findings are therefore consistent with Propositions 3 and 4. Family support, social networks, customer relationships, and institutional assistance can strengthen the empowerment process (P3), while coastal vulnerability, capital limitations, equipment constraints, raw material scarcity, and uneven institutional access restrict it (P4). Moreover, the study extends existing understanding by demonstrating that in micro-scale fishery enterprises, environmental and structural factors do not operate in isolation. Weather can reduce raw material availability, raw material scarcity increases prices, higher prices increase capital requirements, and technological limitations diminish women's capacity to respond to this cascade of risks, a dynamic not yet fully elaborated in prior studies (Mahmud et al., 2025; Susilowati & Mafruhah, 2023) .

Synthesis of the Empowerment Process

Taken together, the findings demonstrate that economic empowerment among coastal women is a conversion process rather than simply the ownership of a business or the attainment of income. Resources provide the initial opportunity, agency determines how those opportunities are utilized, and achievements reflect the outcomes that can be realized. This relationship, however, is not linear: it unfolds within social and environmental contexts that can strengthen or weaken each stage. The empirical framework derived from the research findings can be summarized as follows:

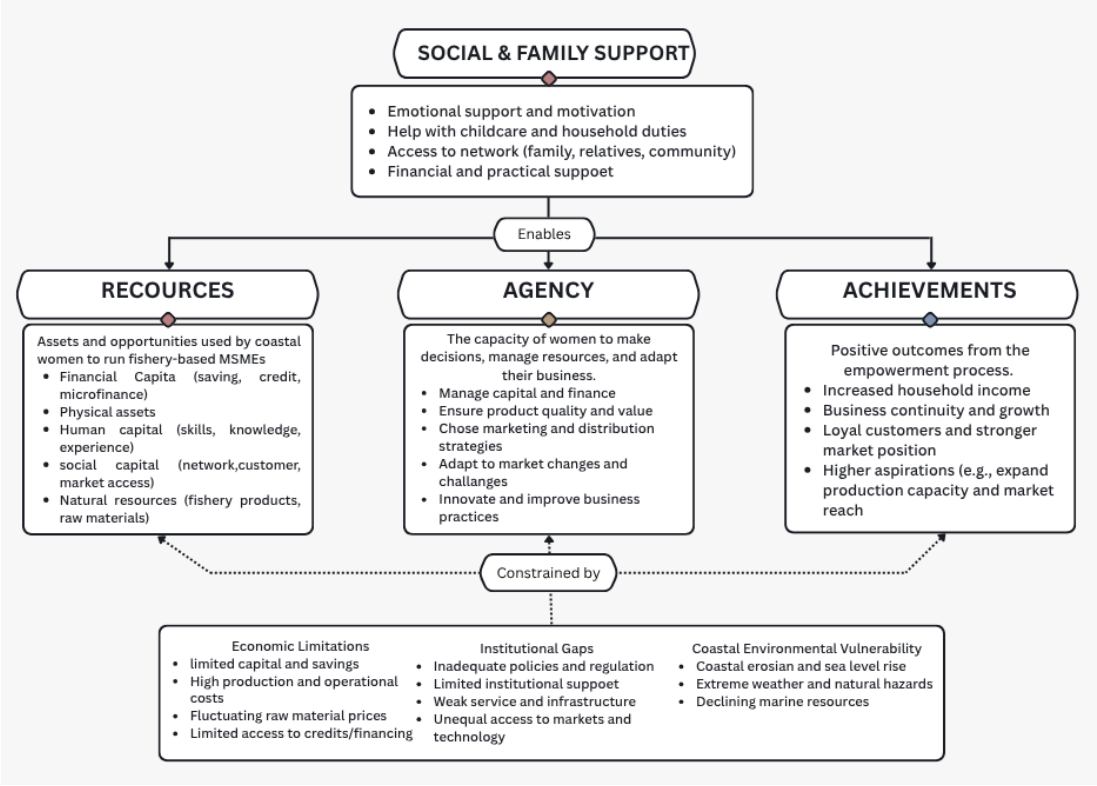


Figure 1. The Empirical Framework

The primary finding of this research is therefore not merely that coastal women contribute to household income. The more significant finding is that women actively convert limited resources into economic agency through capital management, product quality decisions, network cultivation, and market strategies and subsequently transform that agency into business continuity, economic contributions, and entrepreneurial aspirations for the future. Nevertheless, this process has not yet fully produced transformational empowerment, as most enterprises remain dependent on micro-capital, informal networks, simple technology, and coastal environmental conditions that are difficult to control. Table 2 summarizes the empirical interpretation of the four analytical propositions.

Table 2. Empirical Interpretation of Analytical Propositions

Proposition	Empirical Interpretation
P1: Resources enable women's agency	Consistent with the data. Capital, family networks, customers, raw materials, and market access provide the space for women to make business decisions.
P2: Agency shapes economic achievements	Consistent with the data. Decisions regarding capital, quality, marketing, and adaptation contribute to income generation, business continuity, loyal customers, and expansion aspirations.
P3: Family, social, and institutional support strengthens the empowerment process	Consistent with the data. Family and social networks reinforce business operations, while institutional assistance is present but unevenly distributed.
P4: Structural and coastal constraints limit the empowerment process	Consistent with the data. Weather, price volatility, technology gaps, raw material scarcity, and uneven institutional access limit business development.

CONCLUSION

This study demonstrates that the economic empowerment of coastal women through fishery-based MSMEs occurs through the interrelationship among resources, agency, and achievements. Women utilize limited capital, raw materials, family networks, customers, and market access as resources to operate their enterprises. These resources are subsequently converted into agency through decisions regarding capital management, product quality, production, marketing, and strategies for addressing business constraints. Such agency generates achievements in the form of supplementary family income, business continuity, loyal customers, and aspirations to enhance production capacity and expand market reach. The qualitative evidence is consistent with the four analytical propositions: resources enable women's agency (P1); agency shapes achievements (P2); family, social, and institutional support reinforces the empowerment process (P3); and limitations in capital, technology, raw materials, institutional access, and coastal weather vulnerability constrain it (P4).

A key contribution of this study is the affirmation that the empowerment of coastal women cannot be adequately understood merely as increased income or participation in economic activities. Empowerment is a process through which women transform relatively limited resources into decision-making capacity and, subsequently, into meaningful economic achievements, consistent with (Kabeer, 1999) framework and corroborated by recent empirical studies in Indonesian coastal communities (Sugiyanto et al., 2025; Susilowati & Mafruhah, 2023; Wardhani et al., 2025) . Accordingly, coastal women's empowerment programs are recommended to move beyond capital assistance and also improve access to production and storage technology, marketing skills, product development, and market access. Local governments and relevant stakeholders are further encouraged to design outreach programs that are more accessible to women and sensitive to the characteristics of micro-enterprises and coastal environmental vulnerability.

This study has several limitations. First, the informants were drawn from coastal communities in a single subdistrict, Wedung, in Demak Regency, so the findings reflect local conditions of enterprise, markets, and coastal vulnerability. Second, the informants were selected purposively, and the 23 women analyzed do not represent all women operating fishery-based MSMEs; the findings are therefore analytical rather than statistically generalizable. Third, the data consist of interview accounts that were recorded in writing and interpreted by the researchers, so they reflect informants' own perspectives rather than independently verified business records. Fourth, the number of informants was determined by the availability of eligible women in the selected villages during the fieldwork period

rather than by a formal assessment of data saturation. Future research could compare coastal areas with different levels of environmental vulnerability, follow women's enterprises over time to observe how agency and achievements change, and combine interviews with household or enterprise level data to examine whether everyday economic agency extends to strategic life choices.

Author Contributions:

Conceptualization, Regas Panji Pratomo and Fahmy Akbar Idries; methodology, Regas Panji Pratomo; investigation (data collection), Lilis Kurniasari and mhs; data curation, Novi Diah Wulandari, Wina Mutiara and Arjuna Garbriel Muktaf; formal analysis (NVivo coding), Novi Diah Wulandari and Fahmy Akbar Idries; writing original draft preparation, Regas Panji Pratomo; writing review and editing, Lilis Kurniasari and Novi Diah Wulandari; supervision and project administration, Regas Panji Pratomo; funding acquisition, Regas Panji Pratomo. All authors have read and agreed to the published version of the manuscript.

Declaration of the Use of Artificial Intelligence (AI)

During the preparation and revision of this manuscript, the authors used Claude (Anthropic) to assist with English language editing, translation of interview quotations from Indonesian into English, verification of bibliographic details, drafting revisions in response to reviewer comments. All AI-assisted output was reviewed, checked against the original interview transcripts and the NVivo coding, and revised by the authors. The authors take full responsibility for the accuracy, originality, and integrity of the manuscript. AI tools were not credited as authors

Acknowledgments:

This research was funded by the Directorate of Research and Community Service (DPPM), Ministry of Higher Education, Science, and Technology of the Republic of Indonesia, through the Beginner Lecturer Research Grant (Penelitian Dosen Pemula, PDP) for fiscal year 2026. The authors thank the Institute for Research and Community Service (LPPM) of Universitas Nahdlatul Ulama Yogyakarta for administrative support throughout the project. The authors are also grateful to the 23 women fishery entrepreneurs in Wedung Subdistrict, Demak Regency, who generously shared their time and experiences, to the village governments in Wedung Subdistrict for facilitating the fieldwork, and to the students of Universitas Nahdlatul Ulama Yogyakarta who assisted with the interviews.

Conflicts of Interest:

The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

REFERENCES-Heading 1 (Times New Roman 10, Bold, Align Left, UPERCASE)

Azkia, M., Rizqiyan, R. N., & Alfian, M. R. (2025). Literature review: The role and contribution of women fishermen in fishing households and the empowerment program. *Jurnal Perikanan Terpadu*, *5*(1), 1–15. https://doi.org/10.35308/jpt.v5i1.13116

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, *11*(4), 589–597. https://doi.org/10.1080/2159676X.2019.1628806

Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. SAGE Publications.

Chambon, M., Miñarro, S., Santiago, ·, Fernandez, A., Porcher, V., Reyes-Garcia, V., … Ziveri, P. (2023). A synthesis of women's participation in small-scale fisheries management: why women's voices matter. *Reviews in Fish Biology and Fisheries 2023 34:1*, *34*(1), 43–63. https://doi.org/10.1007/S11160-023-09806-2

Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (5 ed.). SAGE Publications.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.

Dasig, M. (2020). Women's agency and leadership in fishing communities: Voice, solidarity, and achievement. *Asian Fisheries Science*, *33*(2), 112–124.

FAO. (2023). *Mapping women's small-scale fisheries organizations in Indonesia: Results from assessing current capacities, gaps and opportunities to strengthen women's organizations in the sector*. Rome. https://doi.org/10.4060/cc8089en

Fitranisa, I., Putri, E. A., Raihan, F., Octavian, Z. N., Amaliya, H., & Rahmadini, N. L. (2026). Gender awareness factor in coastal women entrepreneur's efforts to support family economic resilience. *Ganaya: Jurnal Ilmu Sosial Dan Humaniora*, *9*(2), 213–222. https://doi.org/10.37329/ganaya.v9i2.5412

Harper, S., Adshade, M., Lam, V. W. Y., Pauly, D., & Sumaila, U. R. (2020). Valuing invisible catches: Estimating the global contribution by women to small-scale marine capture fisheries production. *PLOS ONE*, *15*(3), e0228912. https://doi.org/10.1371/journal.pone.0228912

Kabeer, N. (1999a). Resources, Agency, Achievements: Reflections on the Measurement of Women's Empowerment. *Development and Change*, *30*(3), 435–464. https://doi.org/10.1111/1467-7660.00125

Kabeer, N. (1999b). Resources, agency, achievements: Reflections on the measurement of women's empowerment. *Development and Change*, *30*(3), 435–464. https://doi.org/10.1111/1467-7660.00125

Kabeer, N. (2018). *Gender, livelihood capabilities and women's economic empowerment: Reviewing evidence over the life course*.

Kleiber, D., Harris, L. M., & Vincent, A. C. J. (2014). Gender and small-scale fisheries: A case for counting women and beyond. *Fish and Fisheries*, *16*(4), 547–562. https://doi.org/10.1111/faf.12075

Labayo, C. C. (2024). Access, control, and women's empowerment in Philippine fishing communities. *Journal of Rural Studies*, *105*, 103156.

Mahmud, T., Khan, R., & Ahmad, S. (2025). Gender barriers in fisheries value chains: Institutional, financial, and social constraints on women's agency. *Gender, Place & Culture*, *32*(1), 45–68.

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, *16*(1), 1–13. https://doi.org/10.1177/1609406917733847

Pedroza-Gutiérrez, C., & Hapke, H. M. (2022). Women's work in small-scale fisheries: a framework for accounting its value. *Gender, Place & Culture*, *29*(12), 1733–1750. https://doi.org/10.1080/0966369X.2021.1997936

Sarkodie, S. A., Adams, S., Owusu, P. A., Leirvik, T., & Ozturk, I. (2023). Comprehensive green growth indicators across countries and territories. *Scientific Data*, *10*, 422.

Slahanti, M., Noegroho, N., Souisa, J., & Soegihartono, S. (2026). DINAMIKA KEWIRAUSAHAAN PEREMPUAN MUDA DALAM MENGELOLA BISNIS : STUDI KASUS UMKM DI SEMARANG. *Jurnal Maneksi (Management Ekonomi Dan Akuntansi)*, *15*(2), 1227–1233. https://doi.org/10.31959/JM.V15I2.3840

Stacey, N., Gibson, E., Loneragan, N. R., Warren, C., Wiryawan, B., Adhuri, D., & Fitriana, R. (2019). Enhancing coastal livelihoods in Indonesia: an evaluation of recent initiatives on gender, women and sustainable livelihoods in small-scale fisheries. *Maritime Studies 2019 18:3*, *18*(3), 359–371. https://doi.org/10.1007/S40152-019-00142-5

Sugiyanto, E., Hartono, D., & Pramudya, B. (2025). Social capital, vulnerability management, and the sustainability of women's enterprises in Indonesian coastal fisheries. *Ocean & Coastal Management*, *251*, 107089.

Susilowati, I., & Mafruhah, I. (2023). Women's empowerment to alleviate poverty in coastal zones: A case study of fisherwomen in Pacitan, Indonesia. *International Journal of Ethics and Systems*, *39*(1), 165–179. https://doi.org/10.1108/IJOES-12-2021-0237

Wardhani, A. A., Solechan, A., Arwinda, S., Shibghatalloh, A. H., Syafrudin, H. A., & Musliha, C. (2025). Women as pillars of coastal economic resilience: Role transformation, empowerment, and gender support in the

Juwana coastal community. *Jurnal Ilmu Sosial Dan Humaniora*, *14*(2), 396–406. https://doi.org/10.23887/jish.v14i2.95632