

## Public Sphere Creates Independence for Coastal Women in Encouraging the Household Economy of Small-Scale Fishermen in Karangsong Village, Indramayu Regency

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### ABSTRACT :

Marine climate change has resulted in a decline in the economic level of fishermen, especially small-scale fishermen who depend on marine resources to meet their daily needs. In addition, the poverty experienced by fishermen reflects economic vulnerability due to low and unstable incomes, which are caused by fluctuating market prices, a lack of alternative livelihoods, insufficient cooperation and support networks, and the prevalence of illegal fishing practices. By carrying out dialogue in the public sphere effectively, a supportive environment can be created for small-scale fishermen to optimize the potential of the public sphere in improving the family economy through increasing human resource skills. In this framework, coastal women play a vital role in the economic activities of small-scale fishermen's households through alternative economies. This research aims to investigate the role of dialogue in the public sphere to improve the economy of small-scale fishermen in coastal areas and explore the role of women in efforts to improve the family economy. This research uses a qualitative descriptive method with a case study approach. The research results show that dialogue in the public sphere has been recognized as a means of building better understanding between various parties in society, as well as the importance of involving women in family economic decision-making. This research provides implications from the concept of dialogue theory in the public sphere, reflecting the concept of community participation and creating mutual agreement through open communication and the exchange of ideas in formulating solutions to improve the family economy.

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## INTRODUCTION

Karangsong Village, located in Indramayu District, has an area of 24,340.469 hectares, including public waters of 868.57 hectares. The majority of the village's population is fishermen. In 2023, fisheries production in West Java reached 1,592,694.75 tons, with Indramayu Regency contributing 551,632.81 tons, divided between capture fisheries of 174,131.77 tons and aquaculture of 377,501.04 tons (Yanto, 2024). Despite being rich in marine resources, there are still many fishermen who live below the poverty line, especially those who belong to underprivileged families (Anwar & Wahyuni 2019; Yuliana 2021).

**Table 1. Development of the Percentage of Poor Population in Indramayu Regency 2019-2023.**

No	Year	Percentage
1	2019	11,11
2	2020	12,7
3	2021	13,04
4	2022	12,77
5	2023	12,13

Source : (Databoks, 2024)

The percentage of poor people in Indramayu Regency, data as of November 30, 2023, was recorded at 12.13 percent. This number decreased by 0.64 percent compared to the previous year which was reported at 12.77 percent. The development of the percentage of poor people over the past 5 years in Indramayu Regency has been on an up-and-down trend, moving from poverty of 11.11 percent to 13.04 percent in 2019 and towards 12.13 percent in 2023. In general, fishermen are also referred to as coastal communities who professionally or routinely carry out fishing or other marine products as their livelihoods. The coast is an area rich in marine resources and is home to fishing communities who depend on marine catches for their survival.

However, the economic conditions of small-scale fishermen's households are often vulnerable and unstable due to climate change factors. Climate change has a major impact on the function of marine ecosystems, changing the distribution of fish stocks and their food (Nagelkerken et al., 2023). Likewise, the biomass that can be caught in the ocean could drop by up to 40% in some tropical areas (Cinner et al., 2022). Climate change and loss of social capital are seen as major threats to small-scale fisheries, as is the decline of coastal infrastructure, loss and degradation of near-shore habitats, and privatization of access rights (Stoll et al. 2023).

Climate change results not only in a decrease in the number of fish but also in a shift in the population of fish species, changes in fish migration patterns, and the creation of social and economic risks (Raubenheimer & Phiri 2023). The phenomenon of climate change has also resulted in a decline in the economic level of fishermen due to the absence of fishing activities, and has impacted the income for fishermen's households due to weather disruptions (Lukum

et al. 2023; Purba 2022). Coastal communities, especially small-scale fishermen, are very dependent on marine resources to meet their living needs. However, climate change makes it difficult for fishermen to determine when fish will arrive, resulting in a decrease in economic income (Wahyudi et al., 2023). In addition, other social issues related to the poverty of fishermen include economic vulnerability due to low and unstable incomes caused by fluctuating market prices, lack of alternative livelihoods, insufficient cooperation and support networks, the prevalence of illegal fishing practices, and so on (Fernando et al., 2024; Macusi & Sabino, 2023; Putri, 2024).

By conducting dialogue in the public sphere effectively, a supportive environment can be created for small-scale fishermen to optimize the potential of the public sphere to exchange ideas and concepts in improving the family economy. The public sphere is one of Habermas' concepts introduced in his habilitation thesis in 1962 entitled "The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society". The public sphere is not owned by the state, the economy, or the family; rather, it is a place where individuals gather to communicate about issues that are relevant to society in general. This is the arena where public thought is carried out and public opinion is formed (Finlayson, 2023).

The role of dialogue in this public sphere is crucial because it facilitates the exchange of ideas, experiences, and concepts between fishermen. Through dialogue, two-way communication can be achieved to build meaning and create understanding (Sidharta et al 2024). They can identify problems, formulate solutions, and create joint agreements for further action. The economic conditions of fishermen during the lean season require fishermen to seek ideas by creating alternative economies. From this dialogue, awareness emerged about the importance of seeking joint solutions, and the initiative to involve coastal women in efforts to improve the family economy.

In this framework, the role of women in the coastal economy is very important. Although often not recorded in official statistics, coastal women play a vital role in the economic activities of small-scale fishermen's households, from trading to family financial management (Gaffar & Latang 2021). In addition to influencing changes in household economic income, the role of women in improving the economy of fishing households can be further enhanced through skills in processing fish caught from the sea and providing market intelligence for the sustainability of their businesses (Rahim et al. 2021; Liliyana et al. 2023).

In terms of sustainable development, using natural and human resources in a comprehensive development system to build a healthy ecosystem. Improved access to education, training, and business capital, as well as policies that support women's management of marine resources, can create new opportunities for environmental sustainability and economic growth in coastal areas. By providing equal opportunities to women, sustainable development can be achieved to ensure that the interests of women and men are taken into account in the allocation of resources (Warth & Koparanova 2012).

Previous studies have been extensively conducted to examine how women navigate public sphere. Various studies show the important role of women in the public sphere, especially in the use of social media like Twitter and their involvement in communities. Women

use Twitter to discuss important issues regarding women's rights and to gain support (Shockley et al., 2020; Thorsen & Sreedharan, 2019). Empowering women through involvement in collective decision-making and religious traditions can also strengthen women's roles in the public sphere (Cheek & Corbett, 2024; Pakuna et al., 2024). Another study illustrates that the increase in education and career participation has strengthened the role of women in the economy and society, although social control still limits their role in public sphere, especially for female coffee farmers (Ramli et al., 2023; Vargas et al., 2023). Almansour & Kempner (2016); Langhi (2014) emphasize the importance of women's involvement in public sphere, both academic and political, despite facing obstacles such as family obligations, cultural challenges, and exclusion from public sphere. Overall, these studies show how women in various contexts strive to expand their roles in the public sphere despite facing challenges. This research positions itself by exploring the role of coastal women in improving the household economy of small-scale fishermen through dialogue in the public sphere. The novelty of this study lies in demonstrating how this dialogue not only facilitates the exchange of ideas but also actively promotes the involvement of coastal women in creating sustainable alternative economies in response to the challenges posed by climate change on fishermen's household incomes.

Based on the description, this research will fill the gap in previous studies by exploring the role of women in the context of coastal communities. How can dialogue in public sphere be used to enhance the economic well-being of fishing families through women's involvement in alternative economies, while also addressing the economic challenges exacerbated by climate change.

This study aims to investigate the role of dialogue in public sphere in improving the economy of small-scale fishermen in coastal areas and the extent to which dialogue in public sphere can be an effective instrument in facilitating the exchange of information, ideas, and solutions between small-scale fishermen to overcome the economic challenges they face, exploring the role of women in efforts to improve the family economy.

## RESEARCH METHOD

This research is a qualitative type because this research was made with the intention of discuss more on the issue of authoritarian parenting that occurs in society through the meaning of the authoritarian parenting scene in the Korean drama "SKY Castle" by parents who apply authoritarian parenting. The nature of this research is descriptive because this study uses a qualitative descriptive method with a case study approach. Yin argues that the use of case studies aims to understand and explain complex phenomena or situations in depth (Yin, 2018). By using qualitative descriptive methods and case study approaches, this study provides a deep understanding of the role and contribution of coastal women in improving the economy of small-scale fishermen's households, as well as provide a basis for developing more effective empowerment programs. Qualitative methods, according to Creswell, are holistic and in-depth approaches to understanding human phenomena, with a focus on descriptive data collection, contextual analysis, and a deep understanding of the meaning of the subjects studied (Creswell & Creswell, 2018).

Karangsong Village in Indramayu Regency was chosen as the research location because it has characteristics of a coastal village whose majority population is small-scale fishermen. Karangsong Village is a coastal village in Indramayu Regency whose majority population is small-scale fishermen who depend on marine resources as their main source of livelihood. Therefore, economic fluctuations due to the disruption of fishermen's fixed income have a significant impact on their daily lives.

**Table 2 List of informants**

No	Informant (Initials)	Roles
1	Bambang (BM)	Head of the Praja Gumiwang Community
2	Kusnanto (KS)	Member of the Praja Gumiwang Community
3	Santi (ST)	Housewife

Source : (Researcher, 2023)

Data collection was conducted through participant observation, in-depth interviews with coastal women and local community leaders. The sources interviewed in this research include Bambang (BM) and Kusnanto (KS). Bambang is the head of the Praja Gumiwang community, Kusnanto (KS) is also a member of the Praja Gumiwang community, and Santi (ST) is a housewife, as shown in Table 2. Documentation such as records of household economic activities and empowerment activities were also analyzed. The data analysis in this study follows a four-stage coding process based on Miles et al., (2014), which includes condensation, coding, categorization, and theming. These four stages are used to conduct the data coding process in order to derive themes from the interviews. Data analysis was conducted qualitatively to identify the roles, contributions, and challenges faced by coastal women in efforts to improve the household economy of small-scale fishermen. The results of the analysis were used to interpret the roles and contributions of coastal women in improving the household economy of small-scale fishermen.

## RESULTS AND DISCUSSION

The sea is where fishermen carry out their activities, but fishing cannot always be done continuously because it is influenced by seasonal factors such as wind, waves, and ocean currents. These factors are related to the tropical climate which has a dry season pattern (June - September) and rainy season (December - March), as well as a transition season, namely April - May and October - November. Starting from a chat conducted by small-scale fishermen in a public sphere, to respond to the situation of no income for fishermen when the seasons change. The chat among fishermen began with a discussion about unstable sea conditions due to climate change. They shared their experiences about the decline in the number of fish catches and the impact on their family's economic income.

The public sphere according to Habermas is a space that plays a role in the democratic process. The public sphere is a democratic space or a platform for public discourse, where citizens are free to express their opinions, needs, and interests discursively. The public sphere

is independent, a place where people engage in rational and critical discussions with one another about power, having free access from domination (Habermas, 1989). The use of public sphere by small fishing communities for dialogue is an important step in promoting the independence of coastal women to enhance household economies.

They felt concerned because this condition threatened their survival and the welfare of their families. In the chat, an open dialogue was created, fishermen shared their feelings with other fishermen about the lean season conditions they were facing, fishermen began to seek joint solutions to overcome the economic challenges faced by climate change. One idea that emerged was to empower coastal women in improving the family economy. According to informant Arif, the dialogue between fishermen was carried out in fishermen's houses in turns and the issues discussed in the dialogue were related to the decreasing sea catch, one of which was the poor sea conditions which resulted in fishermen losing their fishing gear.

*"The place for dialogue is still in the village and the location is in the fishermen's houses themselves, if there are those who are willing to gather, they can do it at my house, maybe Mr. Bambang wants to know what my house is like, and usually the problems discussed are about bad sea weather conditions and if they force themselves to go to sea, the fishing nets can be lost."* (BM, February 17, 2023)

In the dialogue activity, an initiative was created from the fishermen to involve coastal women, in this case the wives of the fishermen, in an effort to improve the family economy. They realized that women have the potential and an important role in processing fish catches, trading, and family financial management. After the dialogue among fishermen, an agreement was reached on an action plan to improve the family economy, namely by borrowing capital from the fishermen's cooperative for business capital in fish management. Public dialogue provides an opportunity for individuals and groups to communicate their personal experiences and share their opinions and perspectives, facilitating protest actions, including digital dialogue through virtual public sphere (Benecke & Verwey, 2020).

Thus, the dialogue is not only a forum for sharing experiences and ideas, but also an initial step towards real change in improving the welfare of small fishing communities in facing complex economic and environmental challenges. They realize that conditions such as this lean season threaten their survival and the welfare of their families. Empowerment strategies, such as involving women in cooperative management and diversifying fishery products, have been suggested as potential solutions to reduce poverty and enhance the economic resilience of fishing communities (Kahar & Broto, 2023). Through dialogues held in fishermen's homes in turns, they share experiences and ideas to find solutions that can improve the family economy.

The dialogue process requires awareness, awareness here is not in the form of technical or knowledge transfer but is a dialogical process where individuals together seek solutions and resolutions to problems. In the context of small-scale fishermen, public sphere like Galampa in Holimombo Jaya Village serve as community meeting places where social,

economic, and cultural activities are discussed, reflecting Habermas's idea of the public sphere as a forum for dialogue and problem-solving (Ahmadin & Amiruddin, 2020). Small-scale fishermen in Karangsong village through the social capital they have, namely trust, norms, and togetherness, form awareness to carry out dialectical communication in the form of discussions to overcome the economic problems of fishermen in a dialogical form to find solutions to the problems faced. According to informant Kus, the small-scale fishermen community in Karangsong village has a joint business cooperative (KUB) Minah Subur whose purpose is to help the economy of its members.

*"The small fishing community in Karangsong village has a KUB, the KUB was previously the result of a dialogue conducted by fishermen and it was agreed to form a KUB whose purpose was to help the members' economy. In the past, the mothers' understanding of why the fathers held meetings kept getting no results, and we explained to the mothers that the meetings were held to discuss improving the family economy and the result was the creation of a KUB, and KUB members could borrow capital for business."* (KS, Desember 21, 2023)

With the existence of KUB, fishermen began to plan programs and activities that could be carried out together with coastal women through the establishment of small businesses managing marine products. They work together to increase production, increase the added value of fish catches, as a plan to produce an alternative economy for fishermen during the lean season. KUB is a forum for fishermen to establish small businesses managing marine products. By combining the resources and knowledge they have, coastal women can optimize the processing of catches through the process of managing fish catches into products with economic value. For example, fresh fish can be processed into processed products such as salted fish, dried fish, or other seafood products.

The establishment of these small businesses also helps to diversify the income sources of fishermen's families. By having additional businesses in the marine product management sector, fishermen and coastal women can have alternative income during the lean season or in situations where fish catches decrease. In addition to improving their own economic welfare, sustainable management of marine products can also contribute to the preservation of marine resources and the coastal environment. In an interview, Santi elaborated on the role of women in improving economic welfare:

*"It is important for us to find ways for wives to contribute to the family's economy." "This can be done with small efforts or other jobs that can support the husband's income. 'I think we should think together about what kind of business is most suitable and feasible for us to run, so that it can truly help the economy of the fishing family.'"* (ST, 17 Februari 2023)

Thus, this approach is not only beneficial for fishermen and coastal women economically, but also for the sustainability of the environment and natural resources that are the basis of

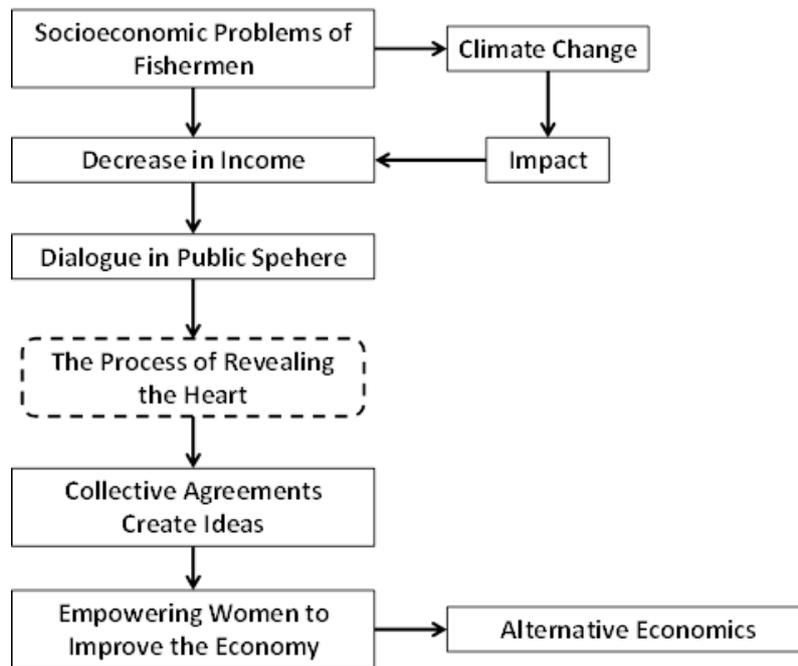
their lives. According to informant Arif, the formation of KUB resulting from the dialogue agreement has a strong goal in creating an alternative economy for fishermen, through women's independence.

*"If we want to improve the welfare of fishermen's economy, the container is a cooperative, then from this cooperative we will outline what the planning will be for the women's business, finally from this planning, what is expected to happen in the future, is that their business will run and that can help produce an alternative economy other than going to sea."* (BM, February 12, 2024)

Thus, through dialogue and collaboration in KUB, small-scale fishers and coastal women can face economic and environmental challenges more effectively and develop strategies for economic sustainability. By leveraging their shared knowledge and resources, they can create joint ventures that benefit the fishing community and the surrounding environment. This also reflects a spirit of collaboration and empowerment that can serve as an example for other communities in facing climate change and economic challenges.

The role of dialogue in improving the family economy is very important because it facilitates open communication, exchange of ideas, and collaboration among fishermen. Through dialogue, fishermen can share experiences and understanding of the economic challenges they face. After the dialogue process, the fishermen have reached an agreement to involve coastal women through the creation of an alternative economy with fish management efforts. For this reason, in the context of overcoming the problem of declining economic income of fishermen due to the phenomenon of changing seasons, the author creates a framework for the dialogue process in the public sphere to create an alternative economy for fishermen through the involvement of coastal women. (see picture 1).

Figure 1. The creation of an alternative economy through dialogue in public sphere begins with the socio-economic problems faced by fishermen due to climate change which has an impact on their declining income. The fishermen, feeling compelled to find solutions to the problems they face, started a dialogue in their own public sphere. In this dialogue process, they expressed the problems they faced to each other, in the dialogue process an initiation and joint agreement was created to improve the family economy by involving coastal women in alternative family economic efforts through fish management efforts. In this dialogue process in public sphere, the role of dialogue is very crucial. Dialogue facilitates the exchange of ideas and concepts between fishermen, allowing them to share experiences, knowledge, and innovative ideas to overcome the economic challenges they face. In addition, dialogue also allows for the formation of a joint agreement that encourages the active participation of all parties in creating effective and sustainable solutions.



Picture 1. Creating an Alternative Economy Through Dialogue in Public sphere

Public dialogue refers to the way communication and interaction occur between individuals, groups, or entities in the context of an open public sphere, illustrating the process of exchanging ideas, perspectives, and information among the parties involved in the communication. This means that communication is not a one-way street; rather, it involves various parties actively participating, and the communication process is no longer focused solely on sending messages to others, but on the process of conveying messages together with others. This indicates that communication aims for balanced and collaborative interaction in creating the meaning of reality (Lubis, 2018).

Thus, the process of creating an alternative economy through dialogue in the public sphere is relevant to previous research. Dialogue in the public sphere has been identified as a means to build better understanding between various parties in society, resolve conflicts, and achieve inclusive and sustainable solutions. The concept of dialogue in the public sphere describes the process of exchanging ideas, views, and information between parties who actively participate in communication, which is in accordance with the description of the dialogue that emerged in the context of fishermen's economic problems.

In addition, previous studies have emphasized that the public sphere is not only a place to interact and share knowledge but also a place where women can access new economic opportunities and take part in decision-making related to their household economy. This is in line with efforts to involve coastal women in efforts to create an alternative economy. Previous studies also show that women play an important role in fishing communities, especially in increasing family economic income. Women play a crucial role in small-scale fishing communities through their involvement in the fish value chain activities, contributing to food security and the enhancement of household income (Manyungwa et al., 2019).

Several previous studies have also revealed the role of coastal women in helping to increase family economic income. Utami (2018) revealed that involvement in improving family economics is one of the pillars of strengthening the regional economy. In addition, women play a crucial role in the sustainability of family-managed small-scale fisheries and often serve as drivers of innovation and business development (Freeman & Svets, 2022). Empowering women, especially in rural areas, will greatly assist in improving the economic well-being of individuals, families, and rural communities (Fabiya & Akande, 2015). Therefore, empowering women in rural areas is key to improving the welfare of individuals, families, and society as a whole in efforts to create an alternative economy for fishing communities.

Thus, it can be said that dialogue in the public sphere plays a crucial role in strengthening the economic well-being of small-scale fishing families by involving women in alternative economies. Through effective dialogue, fishermen can share experiences, identify problems, and seek solutions together to face the economic challenges posed by climate change. Furthermore, this research emphasizes that the active involvement of women in the public sphere and family economic decision-making can significantly contribute to the improvement of the welfare of fishing families, thereby expanding our understanding of the role of women in the context of coastal economies. This research provides new insights that are relevant in efforts to empower women in coastal communities and enhance their economic resilience against dynamic environmental changes.

## CONCLUSION

Through open and supportive dialogue, fishermen expressed their concerns and ideas to overcome their economic challenges. Through dialogue, awareness was raised to create an alternative economy. The solution that emerged was to involve coastal women in improving the family economy to mitigate the impact of the lean season they faced. The process of creating an alternative economy through dialogue in the public sphere is in accordance with previous research findings. Dialogue in the public sphere has been recognized as a means to build a better understanding between various parties in society, as well as emphasizing the importance of involving women in family economic decision-making.

### Theoretical Implications

The implications of the dialogue theory highlight the importance of open communication, exchange of ideas, and collaboration among fishermen and other community members in formulating solutions to improve the family economy. Dialogues conducted in the public sphere facilitate the critical and constructive exchange of ideas, which in turn allows for the formation of mutual agreements. The dialogue process involving fishermen reflects the concept of community participation. In addition, this study highlights the importance of recognizing the role played by women in natural resource management and family financial management. This not only provides opportunities for women to contribute economically but also promotes gender equality in decision-making.

### Policy Implications

The policy implications of the results of the dialogue and initiatives carried out by small-scale fishermen in Karangsong village have great potential to form a policy basis that supports alternative economic development for fishermen and coastal women. The government can develop policies that specifically support the empowerment of coastal women in the fisheries sector and natural resource management. These policies can include women's access to training, education, business capital, and technical support to increase their role and contribution to the family economy. Policies that support the formation and strengthening of cooperatives could provide support in terms of capital, management, marketing, and market access.

### Research Limitations

Although this study provides valuable insights into efforts to create an alternative economy through dialogue and participation of coastal women in natural resource management in Karangsong Village, Indramayu Regency, there are several limitations that need to be considered. The main limitation of qualitative research is the difficulty in generalizing the results of the study because it focuses on a particular case study. This study was only conducted in one village, so the findings and recommendations generated may not be directly applicable to different contexts. This study may be limited in the number of respondents or informants involved. This may limit the representation of diverse views and experiences of fishermen and coastal women in Karangsong Village. Although the study was conducted at the village level, it is possible that some local aspects or relevant social and economic dynamics may not be fully explored.

### REFERENCES

- Ahmadin, M., & Amiruddin, M. (2020). Galampa as Public Space on Fishermen Societies in Holimombo Jaya Village on Eastern Coast of Buton Island. *226(Icss)*, 1055–1058. <https://doi.org/10.2991/icss-18.2018.221>
- Almansour, S., & Kempner, K. (2016). The role of Arab women faculty in the public sphere. *Studies in Higher Education*, *41*(5), 874–886. <https://doi.org/10.1080/03075079.2016.1147723>
- Anwar, Z., & Wahyuni, W. S. (2019). Miskin Di Laut Yang Kaya: Nelayan Indonesia Dan Kemiskinan. <https://doi.org/10.24252/SOSIORELIGIUS.V4I1.10622>
- Benecke, D. R., & Verwey, S. (2020). Post digital dialogue and activism in the public sphere. In *Social Media and Elections in Africa, Volume 2: Challenges and Opportunities* (Vol. 2, pp. 135–151). Palgrave Macmillan, Cham. [https://doi.org/10.1007/978-3-030-32682-1\\_8](https://doi.org/10.1007/978-3-030-32682-1_8)
- Cheek, J. Z., & Corbett, P. E. (2024). Public decision making by women's self-help groups and its contributions to women's empowerment: Evidence from West Bengal, India. *World Development Perspectives*, *33*, 100549. <https://doi.org/10.1016/j.wdp.2023.100549>
- Cinner, J. E., Caldwell, I. R., Thiault, L., Ben, J., Blanchard, J. L., Coll, M., Diedrich, A., Eddy, T. D., Everett, J. D., Folberth, C., Gascuel, D., Guiet, J., Gurney, G. G., Heneghan, R. F., Jägermeyr,

- J., Jiddawi, N., Lahari, R., Kuange, J., Liu, W., ... Pollnac, R. (2022). Potential impacts of climate change on agriculture and fisheries production in 72 tropical coastal communities. *Nature Communications*, 13(1), 1–11. <https://doi.org/10.1038/s41467-022-30991-4>
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Research Design Fifth Edition.
- Fabiyi, E. F., & Akande, K. E. (2015). Economic Empowerment for Rural Women in Nigeria: Poverty Alleviation through Agriculture. *Journal of Agricultural Science*, 7(9). <https://doi.org/10.5539/jas.v7n9p236>
- Fernando, R., Bellanthudawa B.K.A., & Halwatura D. (2024). Analysis of Climate Variable and Fisherman Perception on Climate Change Divers in Negombo Lagoon Area. *Proceedings of International Forestry and Environment Symposium*, 27. <https://doi.org/10.31357/fesympo.v27.7104>
- Finlayson, J. G. and D. H. R. (2023). "Jürgen Habermas." In *The Stanford Encyclopedia of Philosophy* (Edward N.). Metaphysics Research Lab, Stanford University.
- Freeman, R., & Svets, K. (2022). Women's empowerment in small-scale fisheries: The impact of Fisheries Local Action Groups. *Marine Policy*. <https://doi.org/doi:10.1016/j.marpol.2021.104907>
- Gaffar, S. B., & Latang. (2021). Pemberdayaan Perempuan Pesisir Melalui Pengolahan Ikan Laut di Dusun Ulo-Ulo Desa Belopa Kecamatan Belopa Kabupaten Luwu. *Seminar Nasional Hasil Penelitian*, 39–47.
- Habermas, J. (1989). *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society* (Translatio). Thomas Burger, Cambridge Massachusetts: The MIT Press.
- Kahar, M. R., & Broto, M. F. (2023). Management for Alleviating Poverty Among Fishermen Through Empowering Female Fishermen in North Kalimantan. *KnE Social Sciences*, 2023, 200–216. <https://doi.org/10.18502/kss.v8i5.12999>
- Langhi, Z. (2014). Gender and state-building in Libya: towards a politics of inclusion. *The Journal of North African Studies*, 19(2). <https://doi.org/https://doi.org/10.1080/13629387.2014.881736>
- Liliyana, L., Sidharta, V., Arlena, W. M., Lancia, F., & ... (2023). Productive Role Of Coastal Women In Development Communication (Case Study of Empowerment of Fisher Housewives in Building the Family Economy in Pabeanudik Village, Indramayu District). *Jurnal ...*, 12(03), 2770–2775.
- Lubis, S. (2018). Komunikasi Dialogis Landasan Masyarakat. *CommuniquE*, 1(1), 1–6.
- Lukum, R., Hafid, R., & Mahmud, M. (2023). Pengaruh Perubahan Musim Terhadap Pendapatan Nelayan. *Journal of Economic and Business Education*, 1(1), 115–123. <https://doi.org/10.37479/jebe.v1i1.18687>
- Macusi, E. D., & Sabino, L. L. (2023). Impacts of extreme climate change event on small-scale fishers and their community and their adaptation in Baganga, Davao Oriental. *Biology and Life Sciences*. <https://doi.org/https://doi.org/10.20944/preprints202312.1558.v1>

- Manyungwa, C. L., Hara, M. M., & Chimatiro, S. K. (2019). Women's engagement in and outcomes from small-scale fisheries value chains in Malawi: effects of social relations. *Maritime Studies*, 18(3), 275–285. <https://doi.org/10.1007/s40152-019-00156-z>
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative Data Analysis: A Methods Sourcebook*. Sage Publications, Inc.
- Nagelkerken, I., Allan, B. J. M., Booth, D. J., Donelson, J. M., Edgar, G. J., Ravasi, T., Rummer, J. L., Vergés, A., & Mellin, C. (2023). The effects of climate change on the ecology of fishes. *PLOS Climate*, 2(8), e0000258. <https://doi.org/10.1371/journal.pclm.0000258>
- Pakuna, H. B., Hunowu, M. A., Datumula, S., Sunarsi, D., Wahyuni, Tamu, Y., & Daulay, P. (2024). Patterns of women empowerment in rural Indonesia: the role of quran completion tradition. *Cogent Social Sciences*, 10(1). <https://doi.org/10.1080/23311886.2024.2356915>
- Purba, L. D. (2022). Dampak Risiko Terkait Iklim Terhadap Perekonomian. *Pertamina Energy Institute (PEI)*, 8(3).
- Putri, R. S. W. (2024). Adaptation patterns of fishermen in ujungalang village, kampung laut district, cilacap to maintain the economy families in facing climate change. *Jurnal Cahaya Mandalika* ISSN 2721-4796 (Online), 5(1), 403–409. <https://doi.org/10.36312/jcm.v5i1.2269>
- Rahim, A., Rossali, W., Laapo, A., Sabar, W., Syam, U., & Rijal, S. (2021). Factors affecting household income in the post-empowerment of small-scale fishermen wives. *IOP Conference Series: Earth and Environmental Science*, 828(1). <https://doi.org/10.1088/1755-1315/828/1/012049>
- Ramli, M. A., Rosele, M. I., Achmad, A. D., & Qotadah, H. A. (2023). Women's Right of Inheritance in Islam: Between the Sharia Provision and Demand of Socio-cultural Changes. *Khazanah Hukum*, 5(2). <https://doi.org/10.15575/kh.v5i2.29181>
- Raubenheimer, C., & Phiri, A. (2023). The impact of climate change and economic development on fisheries in South Africa: a wavelet-based spectral analysis. *Humanities and Social Sciences Communications*, 10(1), 1–11. <https://doi.org/10.1057/s41599-023-02408-0>
- Shockley, B., Lari, N. A., El-Maghraby, E. A. A., & Al-Ansar, M. H. (2020). Social media usage and support for women in community leadership: Evidence from Qatar. *Women's Studies International Forum*, 81. <https://doi.org/10.1016/j.wsif.2020.102374>
- Stoll, J.S., Risley, S.C., & Henriques, P. R. (2023). A review of small-scale marine fisheries in the United States: Definitions, scale, drivers of change, and policy gaps. *Marine Policy*. <https://doi.org/10.1016/j.marpol.2022.105409>
- Thorsen, E., & Sreedharan, C. (2019). #EndMaleGuardianship: Women's rights, social media and the Arab public sphere. *New Media & Society*, 21(5), 1121–1140. <https://doi.org/10.1177/1461444818821376>
- Utami, D. C. (2018). Pemberdayaan Perempuan Pesisir Melalui Pengembangan dan Penguatan Perekonomian Berbasis Komoditas Lokal. *Jurnal Penelitian & Pengabdian Kepada Masyarakat*, 1(1), 11–22.

- Vargas, A. M. Y., Finke, J., Morales, M. I. V., Cruz, L. E. G., Castellanos, A. A., Florez, G. A. G., & Posada, L. M. (2023). Factors influencing the empowerment of women coffee growers in Southern Colombia. *Cogent Social Sciences*, 9. <https://doi.org/https://doi.org/10.1080/23311886.2023.2204633>Page 2 of 22
- Wahyudi, W., Muslihin, M., Wayudi, M., Rahman, A. A., Rizal, M., & Rahmi, R. (2023). Respon Nelayan Terhadap Fenomena Iklim (Perspektif Sosial Ekonomi). *Journal on Education*, 5(4), 16748–16758. <https://doi.org/10.31004/joe.v5i4.2864>
- Warth, L., & Koparanova, M. (2012). Empowering Women for Sustainable Development United Nations. *United Nations Economic Commision For Europe*, 1, 1–26.
- Yanto, B. S. (2024). Indramayu dengan Produksi Perikanan Terbesar Se-Jawa Barat Kontribusi 34,63 %.
- Yin, R. K. (2018). *Case Study Research and Applications Design and Methods Sixth Edition*.
- Yuliana. (2021). Dinamika kehidupan sosial budaya masyarakat pesisir. The dynamics of the socio-cultural life of coastal communities. *Journal of Aquaculture Science*, 6, 28–36. <https://doi.org/https://doi.org/10.31093/joas.v5i1S.xx>