

Empowerment of Gender-Based Small-Scale Fishers to Strengthen the Coastal Economy: Case Study Batang Regency

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ARTICLE INFO

Article history:

Received September 11, 2023

Revised December 20, 2023

Accepted December 24, 2023

Available online December 31, 2023

Keywords:

Fishers; Gender; Empowerment; Batang Regency



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ABSTRACT

This study aims to analyze gender roles in fishing households and formulate gender-based fishers empowerment strategies. This research focuses on the Coastal Area of Batang Regency, Central Java Province, Indonesia. The approach used in this study is a mixed method using two approaches: qualitative and quantitative. The approach used in this study is a mixed method with a quantitative approach using descriptive statistics and a qualitative approach using Atlas Ti. Using snowballing sampling, data were obtained through in-depth interviews and questionnaires with selected fishing communities. The results showed that the distribution of gender roles in fishing households is still unbalanced, where women as wives have roles that focus more on reproductive aspects such as taking care of the household and children. While many aspects of production are dominated by men, in addition to aspects of society, both women and men have a balanced role. To encourage gender-based fishers' empowerment, it is necessary to increase the role of women in the

production aspect, where the provision of entrepreneurship-related training is essential. In addition, the women's side should encourage the establishment of small and medium enterprises to promote the economic well-being of the family. The findings show that gender-based empowerment in coastal areas is needed to strengthen the economy of small-scale fishermen. Moreover, women have an essential role in maintaining the stability of their families.

1. INTRODUCTION

In the current global era, climate change is a world problem (Rafly et al., 2023) Various kinds of increasingly dense human activities have a major influence on changes in components of the environment, especially the greenhouse effect which is the main contributor to global warming which makes climate change occur (Prakash, 2021) Climate change that occurs has a major impact on Indonesia as a maritime country, one of the consequences of climate change that occurs today according to BMG is rising sea levels that are getting higher, changes in rainfall, extreme weather, floods, and landslides. In addition, extreme climate change has a major influence on people's livelihoods as a series of social problems occur due to climate change (Ariadi, 2023)

Coastal areas are directly affected by climate change that occurs today (Short & Neckles, 1999) Sea level increase due to global warming causes changes in the system of coastal areas that occur due to extreme weather, tidal flooding, and land erosion (Sudha Rani et al., 2015). Water level rise due to climate change that is currently occurring makes coastal areas become flood zones which makes people in coastal areas more vulnerable (Susilowati et al., 2018). Coastal communities as communities that inhabit the area will experience changes in many things due to climate change.

Climate change has a broad impact on coastal communities, the majority of which make a living as fishers, so many fishers are trapped in poverty (Mulyono & Susilowati, 2012). Vulnerable fishing ecosystems provide a small change that has a big impact on them. In addition, their ships also face the problem of uncertain weather conditions, so climate change disrupts the livelihoods of fishers (Purwanti, 2013). Climate change that occurs makes it difficult for fishers to determine fishing seasons due to weather changes, this can have an impact on ecosystem instability both socially and economically (Barange et al., 2018).

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Fishers are economically and socially very vulnerable, with uncertain natural conditions causing a decrease in the catch obtained, making them financially vulnerable (Islam et al., 2020). So that climate change has indirectly made fishers experience difficulties in material aspects (natural, financial, and physical capital) and social (Nayak & Berkes, 2019). Vulnerability itself is a concept where they cannot cope with the dangers caused by climate change. Fishers are faced with a disturbance that has the potential to experience damage, so dealing with the disturbance requires adaptive ability in fishers to overcome the problem. (Freduah et al., 2019).

In facing these problems, gender-based empowerment is very important to do. Empowerment is seen as an important thing in facing climate change, because empowerment can increase the capacity and capability of coastal communities, especially fishers, to adapt to existing changes (Cinner et al., 2018). Gender-based empowerment provides equal opportunities between women and men, where women also feel a great impact due to climate change (Akinsemolu & Olukoya, 2020).

Women tend to be more vulnerable when compared to men, where women still have an economic level, education is still low when compared to men, and the division of social roles in society still prevents women from being able to adapt well. So men's positions are better to adapt because of the ease of mobility for them (Akinsemolu & Olukoya, 2020). Therefore, it is important to understand and address the gender norms and relationships that shape the lives of coastal communities, and to ensure that men and women have equal opportunities and benefits from livelihood programs (Stacey et al., 2019). Thus, gender-based empowerment in coastal areas can not only improve the quality of life of individuals and families, but also improve social cohesion, resilience, and sustainability of coastal communities. It can also promote more inclusive and equitable development that respects the rights and dignity of all people (Stacey et al., 2019).

Batang as one of the cities located on the North Coast of Java, has a fairly high fishery potential. However, climate change that occurs makes fishers in Batang experience a considerable impact, making them still one of the vulnerable communities. This is also supported by most Fishers in Batang who are still traditional fishers who use simple equipment and depend on existing weather conditions, so their income is uncertain. To overcome this, gender-based empowerment is important to stabilize the fishers economy, because women and men have equal power in strengthening the coastal economy. Based on the description above, this study aims to analyze gender roles in fishers households and formulate gender-based fishers empowerment strategies.

2. METHOD

The research was conducted in the Coastal Area of Batang Regency, Central Java Province, Indonesia. The study was conducted for approximately two months, from January to February 2023. The coastal area of Batang Regency was chosen as the research location because it is one of the areas in Central Java that has a fairly large fishing village. Primary data and secondary data were used in this study, where primary data were obtained through interviews, and secondary data were obtained through government agencies and other sources such as journals, books, and news. In this study, there were 40 respondents. Respondents were selected using snowballing sampling, which is a fishing household living in the coastal area of Batang Regency.

The data obtained were then analyzed by a mix method, using descriptive statistics to determine gender roles in fishing households, where gender roles are based on multiple roles consisting of reproduction (related to domestic activities such as taking care of children, cooking, cleaning the house et al.), production (related to women's contribution in the family economy), and *managing community* (how women manage or play a role in their communities) proposed by Moser (2014). Triangulation is then used to reinforce descriptive statistical results through transcription of interviews conducted with respondents. In the formulation of gender-based fishermen empowerment strategies, quantitative descriptive analysis was used to answer these objectives, the results of transcending obtained through interviews were then processed with Atlas Ti, to find out the best gender-based empowerment strategies that can be applied to the coast of Batang Regency.

3. RESULT AND DISCUSSION

Gender Roles in Fishers's Households

Gender roles refer to a set of behaviors, attitudes, and expectations that individuals consider appropriate or desirable based on their gender (Tong, 2012). In this study, gender roles were used to analyze the division of duties in fishing households. Gender role analysis is based on Moser (2014) which classifies gender roles into three, namely reproductive roles, productive roles, and managing communities. Based on the results of the study, gender roles in fishing households in coastal Batang Regency are as follows.

Reproductive Role

Reproductive roles refer to the division of roles related to household activities, such as parenting, besides that according to Moser (2014) reproductive roles are also closely related to domestic tasks such as cooking, cleaning, and many more. Table 1 shows the division of reproductive roles of coastal fishing households in Batang Regency. It can be seen that women are more dominant in reproductive roles when compared to men. Although men's involvement already exists in domestic activities, most domestic activities are still carried out by women such as caring for and teaching children (80%), cooking (88%), preparing food and cleaning the house (93%), and shopping (95%)

Table 1. Division of Reproductive Roles (n=40)

Reproductive Role	Husband	%	Wife	%
Parenting	8	20%	32	80%
Teaching Children	8	20%	32	80%
Cook	5	13%	35	88%
Preparing Food	3	8%	37	93%
Cleaning the house	3	8%	37	93%
Shop	2	5%	38	95%
Maintaining Family Health	10	25%	30	75%

Source: Primary Data, 2023

Women have a very dominant role in the reproductive sector in fishing households when compared to men. Women have a very dominant role, almost all domestic activities such as taking care of children and taking care of the household such as cooking, shopping for household needs, and maintaining family health are carried out by women. According to Putri & Lestari (2015) and Trivianti et al. (2022), the large gap between women and men still occurs due to several factors where patriarchal cultural factors still dominate in fishing households which make women more in the domestic sector while men are more in the public sector. In addition, more men's activities in the sea, making their role in taking care of the household not dominant, where when they return from sea activities, most of them will make preparations for sea the next day. This was conveyed by Mrs. Minah's as one of the informants.

"...if it's a household matter, such as cleaning the house, taking care of the children, cooking yes we as wives do, because the husband has a lot of activities in the sea, go home also later immediately check the net is broken, continue to take care of preparations to go to sea again tomorrow..."

The division of roles in reproductive roles can be balanced between women and men regardless of the patriarchal culture that is still inherent in society. Men can be involved in the domestic sector if there is spaciousness, besides that men's involvement provides opportunities for women to be able to actively participate in other activities outside their domestic activities (Trivianti et al., 2022). Although the role of women is still more dominant, men also have a fairly good share and awareness, if household activities are also part of their responsibilities as husbands. When they have free time, husbands will help their wives in taking care of the family. This was conveyed by Mr. Tarjo.

"..... If I'm not at sea, and there are no damaged nets for me to repair, sometimes I help my wife shop for necessities such as vegetables at the market...."

Productive Role

Productive role according to are activities related to earning a living for the household. The productive role has an important role in the household, especially in improving the economic welfare of their household. Based on Table 2, it can be seen that the role of men is more dominant when compared to the role of women in productive roles. Men dominate in the productive sector, especially in fishing activities that are 100% carried out by men. In fish processing activities, the role of men dominates as much as 65%, while women who take part in the fish processing sector are only around 35%. However, in trade activities, the role of women dominates by 55% when compared to men by 45%. Although women have been involved in trading activities, most productive activities are still controlled by men.

Table 2. Division of Productive Roles (n=40)

Productive Role	Husband	%	Wife	%
Catching fish	40	100%	-	-
Fish Processing	26	65%	14	35%
Trade	18	45%	22	55%

Source: Primary Data, 2023

In productive activities, men and women should have equal opportunities, but often women are only involved in household work or petty trade (Moser, 2014) Meanwhile, men are more likely to work in the productive sector, in this case, fishing and processing the catch. RThe low involvement of women in the productive sector occurs due to several factors, one of which is environmental factors which still assume that earning a living is the husband's responsibility so that women only focus on the household (Trivianti et al., 2022)Even though women do not yet dominate the role of production, the participation of women in the production sector provides great benefits for maintaining the economic stability of their families. Where uncertain climatic conditions result in fewer fish catches, resulting in reduced family income. With women's participation in earning a living, this shortfall can be covered from their income. This was conveyed by Mrs. Mariyati.

"...now the fish catch is uncertain, sis, sometimes there are results, sometimes not, the family income has decreased, even though the needs are increasing... Yes, we as wives end up helping our husbands, sis, selling small amounts of ice, and selling fish at TPI when my husband comes home from fishing... thank God, sis, little by little we can cover the shortfall..."

Managing Community Role

The role of managing community is the activities of household members in their community in the form of social, religious, cultural and political activities. Moser (2014) explains that managing community activities has an important role in supporting the welfare of both men and women.Based on Table 3, it can be seen that the role of community management in fishing households has the same tendency, for both women and men. Where every member of the household participates in community activities. Like a girl who are 100% involved in family empowerment and welfare (PKK) activities and Fishers Group Meeting activities which are attended by 100% men. For religious activities, both men and women participate in religious activities in their area. The religious activity most frequently participated in by the community is recitation of the Koran. Fishers Group Meeting activities are mostly attended by men because the majority of almost all Fishers who go to sea are men. Apart from that, family empowerment and welfare activities (PKK) are special activities for women so that all members involved in PKK are women.

Table 3. Managing Community Role Division (n=40)

Managing Community Role	Husband	%	Wife	%
Family Empowerment and Welfare (PKK)	-	-	40	100%
Religious Activities	24	60%	26	65%
Fishers Group Meeting	40	100%	-	-

Source: Primary Data, 2023

The role of managing the community is very necessary, especially to develop the knowledge and experience of fishermen. In addition, community activities also contribute to the implementation of fishing community empowerment programs. Many empowerment activities channeled by both the government and NGOs are carried out through communities in Fishers Village (Suwarno et al., 2019). Managing a community provides many benefits for women, the social interaction carried out by women provides many benefits, where women can exchange important information, especially related to fish commodity prices, social assistance, training, and information related to savings and loans. This was conveyed by Mrs. Inggit.

"During recitation or PKK activities, we often chat and then there will be information, for example, if there is any assistance or outreach activities, then for example, what is the current price of fish at the Fish Auction Place (TPI) and sometimes there will be information if you want. just borrow money from this cooperative, there's a lot of information, sis, when we get together, especially when we recite the Koran with the PKK"

Gender Division of Fishers Households

The division of gender roles between men and women after being discussed above can be seen if in some role divisions, there is still inequality between genders. In Table 4 it can be seen that there is still a gender gap, where the role of women dominates more in domestic activities (reproductive roles), with a value of 78%. While productive activities are dominated by men, which is 56%, although women have also participated in productive activities, which is as much as 44%, the scope of activities still revolves around small trading activities such as opening stalls at home, where according to them opening stalls at home, women can still take care of household affairs while generating additional income. For the role of managing the community, both men and women already have the same involvement.

Table 4. Gender Role Division in Fishers Households Based on Reproductive, Productive, and Managing Community (%) (n=40)

Gender	Peran	Persentase
Male	Reproductive	14%
	Productive	56%
	Managing Community	53%
Female	Reproductive	78%
	Productive	44%
	Managing Community	55%

Source: Primary Data, 2023

Women do not only have a role in parenting or reproduction, they have a dual role that combines reproductive, productive and community roles. This role is intersectional, where on the one hand women can be an economic force and workforce, on the other hand women have the role of giving birth, caring for children, family and household. And women have a role in society (Maviza & Thebe, 2023; Moser, 2014). According to Moser (2014), women and men should have equal opportunities in taking roles in the household. Men's participation in household activities can provide opportunities for women to enter productive activities. Environmental changes due to climate change in Batang Regency make fishermen's income unpredictable, where fishermen tend to experience a decrease in fishing yields, so family income decreases. Women's participation in economic activities has a positive effect on the family economy because of the additional income obtained (Kusumawardhani & Susilowati, 2021). In addition, the balance between men and women participating in community activities provides great opportunities for the implementation of fishing community empowerment programs (Trivianti et al., 2022).

Gender-Based Fishers Empowerment Strategy

To overcome climate problems in Batang Regency Coastal City, gender-based empowerment can be one of the keys for fishing communities to adapt to environmental changes. According to Tivianti et al (2022), gender-based empowerment patterns will maximize the role of household members, especially in elevating women's roles in productive activities. An overview of gender-based empowerment strategies can be seen in Figure 1.

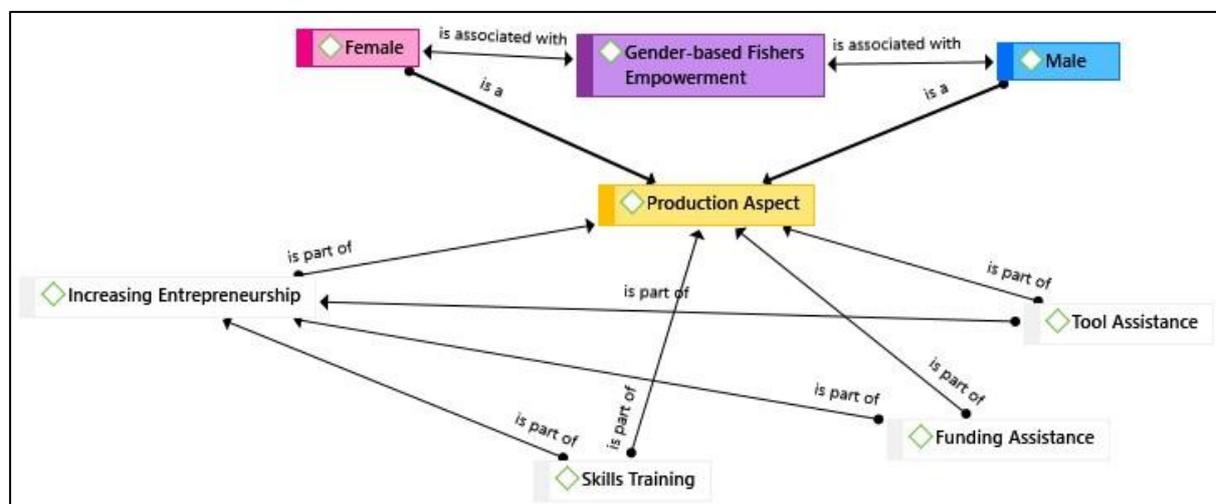


Figure 1. Gender-Based Fishers Empowerment Strategy
Source: Primary Data, processed by Atlas Ti 2023

Table 5. Gender-Based Fishers Empowerment Strategy Code

No	Kriteria Kode	Nilai
A.	Production Aspect	31
1	Skill Training	4
2	Increasing Entrepreneurship	13
3	Funding Assistance	6
4	Tool Assistance	8

Source: Primary Data, 2023

Figure 1 shows that to increase the role of fishing communities, especially women, they focus on the production aspect. Where in the aspect of production the formation of small and medium enterprises should be encouraged as part of women's efforts to improve the economic welfare of the family, the importance of the formation of small enterprises was suppressed thirteen times by respondents (Table 5). To encourage the establishment of small business units run by women, it is necessary to have skills improvement training aimed at improving women's ability to both make handicrafts and process fishery products into dishes or snacks that have high selling value. In addition, the provision of guaranteed capital assistance in the form of capital and important tools in encouraging the growth of women's interest in developing small businesses.

According to Tivianti et al (2022), encouraging the emergence of small business units is important, especially for coastal women. In addition, empowerment activities designed must also look at the three roles of women, where the three roles must be balanced with each other (May et al., 2004; Pereznieta & Taylor, 2014). Small businesses carried out by women do not interfere with the three roles of women because business activities can also be done in leisure time and can also be done at home so that they can still carry out their household activities.

4. CONCLUSIONS AND RECOMMENDATIONS

The division of gender roles in fishing households in Batang Regency Coast still has gender inequality, where as many as 78% of women play more roles in reproductive roles or domestic activities such as childcare, cooking, shopping when compared to men whose role in reproductive activities is 14%. In the role of productivity, the division of household roles is still dominated by men, which is 56%, where the most productive activities carried out are collecting fish and obtaining fishery products. Although the role of men dominates in activities when compared to women in trafficking activities, women have contributed by opening small stalls in their homes. The role of managing communities both women and men has been relatively balanced, where each of them already has activities that are followed, where women participate in PKK activities and men in the Fishers Group Meeting group. For religious activities, women and men have both participated in it, especially in recitation activities. Gender-based empowerment strategies, especially for women, focus on production aspects where increasing the formation of small businesses formed by women is one of the strategies that can improve the economy of coastal communities. In addition, to strengthen women's motivation in forming small businesses, the provision of skills training and assistance with cash capital and important tools is carried out. This research still has limitations in that strategy formulation is still based on the results of interviews with fishing communities. To develop strategies that are more applicable in future research, further research needs to be carried out regarding gender-based empowerment strategies with relevant stakeholders.

5. ACKNOWLEDGEMENT

This research is part of the research that passed the Master Thesis Research Grant scheme with Number: 345-54/UN7.6.1/PP/2022. Therefore, the authors would like to thank the Ministry of Education, Culture, Research, and Technology for the financial support in making this research. The author also thanks all parties who have helped in the process of making this research.

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