

# The Role of Gender in Milkfish Farming Families in Dealing with the Impact of Tidal Floods (Case Study: Api-Api Village, Wonokerto District, Pekalongan Regency)

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## ABSTRACT

*Milkfish pond farming households in coastal areas face considerable social and economic challenges due to environmental vulnerabilities such as tidal flooding, which threaten the sustainability of aquaculture activities and household livelihoods. These conditions highlight the importance of gender roles in maintaining household resilience and well being. This study aims to examine gender roles within milkfish pond farming households in Api-Api Village by analyzing the roles of wives, and husband in productive, domestic, and social management activities. The study employed a case study method with descriptive statistical analysis. The findings indicate that wives domestic roles are the most dominant, particularly in child rearing, household maintenance, and family financial management. Wives productive roles are generally low to moderate, reflected in limited involvement in income generating activities as an adaptive response to declining household income caused by tidal flooding. Wives participation in social management is also relatively low due to limited engagement in formal organizations. In contrast, husband play a dominant role in productive and social activities, while their involvement in domestic task remains limited. Overall, the division of gender roles is complementary but has not yet achieved gender equity.*

**Keywords:** economic and social resilience, gender roles, milkfish pond farming, tidal flooding

## INTRODUCTION

Tidal flooding is a flood phenomenon that occurs due to rising sea levels. This phenomenon usually occurs in coastal areas that are at low altitudes and is a serious threat to the lives of the surrounding community. According to Hakim et al., (2022) Flooding is caused by two factors, namely natural and anthropogenic factors or human intervention. Natural factors include the topography of the area, soil type, tides, and extreme weather. Meanwhile, anthropogenic includes land subsidence, land-use changes, reduction of mangrove areas, global warming with the effects of sea level rise, and other human activities. High waves due to extreme weather can exacerbate flooding conditions and global warming also contributes through the melting of polar ice and the thermal expansion of seawater which increases the risk of inundation in coastal areas. This condition makes coastal areas increasingly vulnerable to tidal floods that occur repeatedly and have the potential to cause various social, economic, and environmental impacts for the people living around them, especially for community groups that depend on the coastal sector for their livelihood.

One of the areas that experienced a significant impact due to tidal floods was Pekalongan Regency, especially Api-Api Village, Wonokerto District. Based on the 2023 village monograph data, the largest land use in the village is 114,370 ha of pond land, which is the main source of livelihood for the community. In 2017-2020, the area of brackish water fish ponds decreased due to land degradation triggered by tidal floods. Damage to pond embankments causes seawater intrusion into the cultivation area, thereby reducing milkfish productivity and having an impact on reducing farmers' income. In

addition to economic losses, tidal floods also caused damage to infrastructure, disruption of transportation activities, and damage to settlements. Tidal floods occur almost every day at 11.00-17.00 WIB, thus affecting the social and economic activities of the community in a sustainable manner.

Various previous studies have examined the impact of tidal floods on the decline in pond productivity, household economic losses, and adaptation strategies of coastal communities in the face of environmental change. Research Izzah (2022) Identify the impact of flooding and the form of adaptation strategies carried out by coastal communities to maintain the sustainability of livelihoods. Meanwhile, (Karnaen & Amanah, 2013) It shows that the decline in farmers' income due to pond damage encourages women to contribute to meeting the economic needs of their families, even though the division of domestic labor is still dominated by wives. In line with that Septiadi & Wigna (2022) stated that women still have limited involvement in the household decision-making process even though they contribute to the family economy. Research Hartiwi et al., (2025) also states that the division of roles Gender still tends to place women in the domestic sphere, while their involvement in productive activities and decision-making is not fully equal. The findings show that the impact of tidal floods not only affects the economic aspects of farming families, but also has the potential to change the division of productive, domestic, and social roles between husbands and wives in households.

Other studies have examined the impact of tidal floods on economic aspects, but adaptation strategies of coastal communities, and the division of gender roles in households are still discussed separately. Research on gender roles is generally conducted in the context of households or economic activities in general, while studies that specifically analyze how the impact of tidal floods affect the distribution of productive, domestic, and social roles in milkfish farming families are still relatively limited. Changes in environmental conditions and decreased income due to tidal floods have the potential to change the division of responsibilities between husband and wife as an effort to maintain the sustainability of the household economy. Therefore, research on the role of gender in milkfish farming families is important to understand the change in the division of roles in dealing with the impact of tidal floods.

The impact of the tidal flood caused farming families to make various adjustments in meeting household needs. This condition encourages a change in the division of roles between husband and wife, both in productive, domestic, and social activities. These changes show that the sustainability of farmers' households does not only depend on the ability to maintain their cultivation business, but also on the adaptive division of roles between husband and wife in carrying out productive, domestic, and social functions. Based on this description, this study aims to analyze the role of gender in milkfish farming families in dealing with the impact of tidal floods through the identification of the division of productive, domestic, and social roles between husbands and wives.

## **METHODS**

### **Research Approach**

This study uses a descriptive quantitative approach with a case study method. A descriptive quantitative approach is used to describe the level of the role gender in milkfish farming families based on the results of measurements using questionnaires. The case study method was chosen because the research is focused on the phenomenon of tidal floods that occurred in Api-Api Village, allowing an in-depth study of the division of roles gender in the milkfish farmer family. According to Kusumastanto (2016) Case study research methods are methods in research that are specific, focused, intensive and detailed about one phenomenon or certain phenomena whose results cannot be generalized to other problems/areas due to the peculiarities of the research. Case study research aims to uncover the peculiarities or uniqueness of the characteristics contained in the case being studied (Assyakurrohim et al., 2023).

### **Research Location and Time**

The research location is in Api-Api Village, Wonokerto District, Pekalongan Regency. The location determination was used deliberately (purposive) based on the phenomenon of tidal floods that had an impact on the lives of milkfish farmers in Api-Api Village. This research was carried out from February-August 2024.

## Population and Sampling Techniques

The study population consisted of milkfish farmers and farmer wives totaling 87 people each. Sampling using non-probability sampling with purposive sampling, namely the technique of selecting respondents based on certain criteria that are in accordance with the research objectives. According to Maxwell (2012), in Firmansyah & Dede (2022), purposive sampling is a technique of deliberately selecting individuals or events to obtain relevant information that cannot be obtained from other respondents. Based on this technique, the number of respondents sampled was 47 milkfish farmers and 47 milkfish farmers' wives.

## Data Types and Sources

The data used in this study are primary and secondary data. Primary data were obtained from direct observation and interviews using questionnaires to milkfish farming families and key persons. Secondary data is obtained from literature studies obtained from libraries and other places in the form of the results of previous research related to research, articles from the internet.

## Data Analysis

Data analysis was carried out using descriptive statistical analysis. The data obtained from the questionnaire was used to measure the level of the role gender in the family of milkfish farmers who were affected by the flood. The role of wives is analyzed using descriptive statistics on a conventional scale of 1-10 to measure the level of wife's involvement in economic, domestic, and social activities. The formula used is as follows (Sari, 2019).

$$\text{Average Score for Each Statement} = \frac{\text{Total Score}}{\text{Number of Respondents}} \dots\dots\dots (1)$$

$$\text{Average Score for Each Aspect} = \frac{\text{Total Average Score of Each Statement}}{\text{Number of Statements}} \dots\dots\dots (2)$$

The measurement results are presented in the form of average scores and role-level categories. Meanwhile, the role of the husband was analyzed using a frequency table to illustrate the distribution and tendency of the husband's role in productive, domestic, social activities, and decision-making in the milkfish farmer's family. Level gender In the family of farmers, it is analyzed through three categories, namely productive role, domestic role, and social management role (Tranggono et al., 2017).

## RESULTS AND DISCUSSION

### The Role of Gender in Milkfish Farming Families

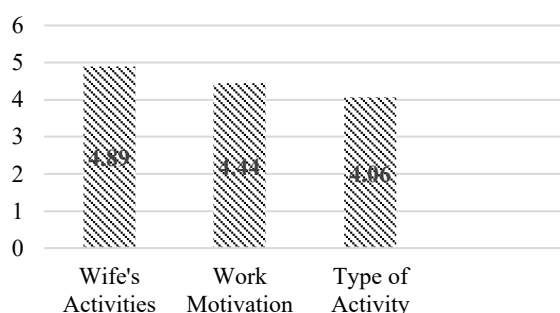
Role division gender in the family it is seen through the difference in the types of work and activities between men and women. Men are generally positioned as those who carry out work outside the home, such as working, entrepreneurship, or farming, which generally demands physical strength. In contrast, women are more directed to domestic tasks that focus on household management, including cleaning the house, washing, and taking care of children (Nurislamia et al., 2020). Role division gender in the milkfish farming family, milkfish are generally complementary. Men are responsible for physical work that requires effort, such as pond preparation, seed sowing and harvesting. Meanwhile, women have an important role in supporting activities such as financial management, product processing, and marketing. The role of milkfish farmers' wives in dealing with the impact of tidal floods is one of the important aspects in supporting family economic sustainability.

This study uses role theory gender from Moser (1993) to see the division of roles between husband and wife in milkfish farming families. According to Moser (1993) there are three roles gender namely productive, reproductive or domestic, as well as community and political management. Productive roles refer to The role of women and men to obtain payment or wages in cash and the like. Work activities can be interpreted in the formal and non-formal sectors. Reproductive roles refer to the role of relationships with childcare responsibilities and domestic tasks related to family survival. The role of

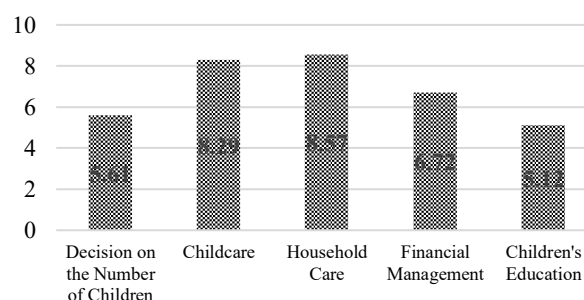
community management is a social activity that supports the survival of the community, such as mutual cooperation, local organizations, and informal social services.

### The Role of Wife in the Family of Milkfish Farmers

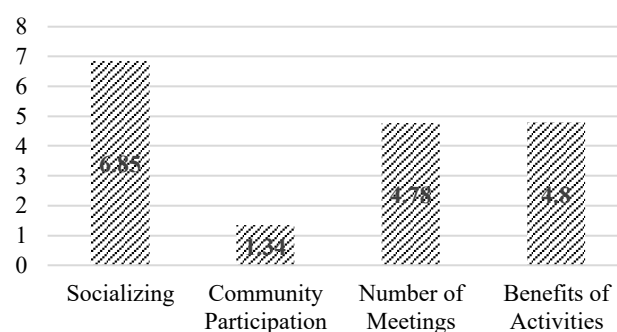
The wife of a milkfish farmer plays a role in household activities and is involved in economic activities such as assisting her husband in managing household finances and pond business, finding additional sources of income or running a small business. The involvement of farmers' wives is a form of family adaptation to economic losses due to the decline in household income due to tidal floods. There are three aspects of roles assessed in this study, namely productive roles, domestic roles, and social roles. The average score assessment category in these three aspects is based on (Wahyuni, 2020). The assessment is divided into five categories, namely Very Low ( $1.00 \leq \text{an average score} \leq 2.80$ ), Low ( $2.81 \leq \text{an average score} \leq 4.60$ ), Medium ( $4.61 \leq \text{an average score} \leq 6.40$ ), High ( $6.41 \leq \text{an average score} \leq 8.20$ ), and Very High ( $8.21 \leq \text{an average score} \leq 10.00$ ). The following is a table of the role of the wife in the role in the milkfish farmer family.



**Figure 1.** The level of productive role of the wife



**Figure 2.** The level of domestic role of the wife



**Figure 3.** The level of social role of women

Based on Figure 1, Figure 2, and Figure 3, the aspect of domestic role has the highest average score of 6.86 in the high category, while productive role and social role obtain an average score of 4.46 and 4.44 in the low category, respectively. In the domestic role, the indicator of home care was the most dominant activity (8.57), while in the productive role, the indicator of activities carried out by the wife had the highest score (4.89). As for social roles, socializing with the surrounding community received the highest score (6.85), while participating in a community or group was the indicator with the lowest score (1.34). These results show that wives still play a greater role in domestic activities than productive or social activities.

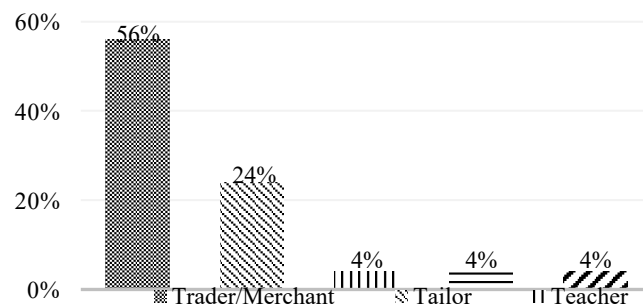
### The Productive Role of Wife in the Family of Milkfish Farmers

The wife of a milkfish farmer not only plays a role in household management, but also contributes to the family's economic activities and social life. The wife's role includes involvement in productive activities that help increase family income. In general, the wives of milkfish farmers work in aquaculture as sellers of milkfish harvests and milkfish processors, but not a few also work outside the aquaculture sector (Maulana & Rahardian, 2015). This condition shows that women in farming families carry out more than one role at the same time.

According to Moser's theory (1993), women have three main roles, namely productive roles, domestic roles, and community management roles. In the context of a milkfish farmer family in Api-Api Village, the three roles appear to be carried out simultaneously by the wife, although the level of involvement in each role is different. Productive roles are roles that are done to obtain pay or wages in cash or the like. In milkfish farmer households, the role of the wife is often the key in ensuring the success and continuity of production. The participation of milkfish farmers' wives can realize the economic independence of coastal families.

The results of the average value of productive roles presented in Figure 1 are 4.46, this value shows that the involvement of wives in economic activities is still relatively low. This finding is in line with the concept of Moser (1993) which states that women have a productive role in the household, but its implementation is influenced by the socio-economic conditions faced by the family. The low score of productive roles indicates that although wives have made efforts to help meet the family's economic needs, their involvement has not been optimal because they still face various limitations in access to capital, technology, and market information. This research is different from Candrakuncaraningsih (2020) which shows that the contribution of fishermen's wives to family income is relatively high, which is more than 20%. The difference is suspected to be caused by differences in the characteristics of the research area, the type of livelihood, and the socio-economic conditions of the respondents, so that the involvement of wives in productive activities in milkfish farming families in Api-Api Village still faces various obstacles due to the impact of the tidal flood.

Based on the interview results, as many as 23 respondents chose to work as milkfish traders, processors of cultivated products, and tailors to help increase household income. The family's needs both economically and socially will also be the responsibility of women with their husbands (Purwanti, 2013 in Utami et al., 2021). When the flood occurred, the husband's production and income decreased, so that the family experienced difficulties in meeting the needs of household life. Farmer's wife tries to increase family income, namely by working. This is in line with Arivia et al., (2019) which explains that the destruction of ecosystems causes women to have to look for alternative sources of livelihood when the family's main livelihood is declining. Women choose to work at home by opening a stall or selling business because in addition to being able to increase their income, they can also do domestic work such as taking care of children (Karnaen & Amanah, 2013). These activities are carried out by farmers' wives individually because according to them the income received is greater than working in groups. The following is the percentage of jobs of milkfish farmers' wives in Api-Api Village.



**Figure 4.** Jobs of milkfish farmers' wives in Api-Api Village in 2024

Based on Figure 4, the majority of the jobs of milkfish farmers' wives are traders with a percentage of 56%. The wife of a milkfish farmer plays a role in the post-production process of pond cultivation by selling milkfish harvested by her husband. The wives of milkfish farmers process milkfish into value-added products, such as presto milkfish, or shredded milkfish and sell them to the market or directly to consumers. This reflects that wives not only carry out domestic roles but also carry out productive roles, i.e. engage in activities that generate economic value and increase family income.

The wife of a milkfish farmer who does not work is around 51% of the total number of all respondents only relying on their husband's income. The low involvement of women in productive activities is influenced not only by individual choices, but also by various structural barriers. Based on the results of the interview, limited business capital causes farmers' wives to have difficulty starting or developing businesses. In addition, access to market information is still low, making product marketing only carried out in the environment around the village so that market reach is limited. Another obstacle is the use of

production technology that is still simple because the farmer's wife's group has not been actively running as a forum for capacity building and distributing equipment assistance. This condition causes women's economic potential to not develop optimally. These findings are in line with Juliana & Koniyo (2019, in Erniati et al., 2021) which states that women fishermen still face various limitations, such as low product quality, limited capital, technology, market information, and limited production capabilities.

The results of this study show that tidal floods not only have an impact on decreasing pond production and family income, but also encourage changes in roles in farmer families. Women began to take a productive role as a strategy to maintain the sustainability of the household economy. However, this involvement is not fully optimal because it still faces various structural obstacles. Therefore, efforts to empower women are needed through increasing access to training, capital, fishery product processing technology, and strengthening farmer wife groups. This step can not only increase women's economic contribution, but also strengthen the resilience of farming families in facing the impact of tidal floods.

**The Domestic Role of Wife in the Milkfish Farmer's Family**

Domestic roles are roles related to the responsibility of caring for children and managing household chores to maintain the sustainability of family life. The division of labor between men and women is still influenced by societal norms, namely all types of domestic or feminine jobs that use traditional technology that do not require strong labor to be done by women. So that men play less role in domestic activities because their husbands' daily lives are spent in the public sector (Mahanani, 2003 in Rochmayanto & Kurniasih, 2013). The domestic activities referred to in this study are all activities carried out in the house such as cooking, washing, and cleaning the house. The domestic role of milkfish farmers' wives not only includes biological domestic aspects, but also includes social, economic, and psychological dimensions.

Based on the results of the analysis in Figure 2, the result of the average value of domestic roles is 6.68 which is included in the high category. These results show that the involvement of wives in domestic activities is still very dominant compared to husbands. These findings are in line with Moser's (1993) theory which states that domestic roles are roles that are still socially placed on women. A high score of domestic roles indicates that although wives contribute to productive activities, the primary responsibility for household management remains with women. Domestic roles are an inherent role for women related to the obligation as housewives who must manage and solve all household affairs (Wulandari et al., 2022). The domestic role of milkfish farmers' wives in Api-Api Village can be seen in Table 1.

**Table 1.** The domestic role of the wife in the milkfish farmer's family

| No | Indicator                                                                                 | Role     | Number of Respondents |                |
|----|-------------------------------------------------------------------------------------------|----------|-----------------------|----------------|
|    |                                                                                           |          | Frequency             | Percentage (%) |
| 1  | Decisions about the number of children to have.                                           | Wife     | 0                     | 0              |
|    |                                                                                           | Together | 47                    | 100            |
| 2  | Carrying out functions in child education                                                 | Wife     | 42                    | 89             |
|    |                                                                                           | Together | 5                     | 11             |
| 3  | Performs functions for home maintenance (sweeping, washing, cooking, cleaning the house). | Wife     | 47                    | 100            |
|    |                                                                                           | Together | 0                     | 0              |
| 4  | Manage family finances.                                                                   | Wife     | 28                    | 60             |
|    |                                                                                           | Together | 4                     | 10             |
| 5  | To make decisions that determine the education and future of the child                    | Children | 15                    | 32             |
|    |                                                                                           | Together | 32                    | 68             |

Source: Data Analysis Results (2024)

Based on Table 1, as many as 47 respondents or all respondents stated that the decision regarding the number of children owned was taken together. The decision on the number of children to have is an agreement that has been determined by the husband and wife. In the childcare indicator, 89% of respondents were left to their wives and 11% were carried out jointly. Husbands give their wives confidence in their child-rearing patterns. This is because the wife and children spend more time at home than husbands, husbands have to work to go to the pond so that they have less time with children. The majority of the wives of milkfish farmers in Api-Api Village work as traders or tailors in their homes, besides they do their jobs they also take care of and take care of their children at home.

The function of household care is one of the indicators in domestic roles related to domestic affairs, such as washing clothes and dishes, cooking and cleaning the house. Based on the answers, all respondents said that to carry out the function of household care is carried out by the wife. The division of roles in the family often occurs by agreement. Usually wives take on domestic roles to support husbands who work outside the home or are involved in the family's main economic activities. A high value scale indicates that the housework is carried out by the farmer's wife with the help of a husband or child.

The next indicator is managing family finances, 60% of respondents said that the one who manages the finances of the milkfish farmer family is the wife. In economic life, women's role is as a financial manager (Indriastuti et al., 2023). The wife helps the husband to record income and expenses from the farm, manages the household and business budget to keep it balanced, and helps the husband make financial decisions, such as when he wants to expand his business or buy new equipment. The husband entrusts the family finances to the wife, because the wife understands better what household needs are needed, such as for shopping for clothes, food and board, for saving, to buy jewelry, household furniture, electronic devices, children's education costs and so on.

The last indicator is determining the education and future of the child. As many as 15 respondents or 32% of all family members chose to leave the decision to the child, while parents only accompanied and gave good advice for the child's education. On the other hand, as many as 32 respondents or 68% of the total number of respondents chose to be together in children's education decisions. Their children who are still in kindergarten, elementary, junior high, and high school usually still need their parents' decision in determining education. For parents, the most important thing is that their children like and are comfortable, so that parents can also follow and support funds or support in other ways. Milkfish farming families want enough education for their children so that they can become better people in the future.

The results of the study show that the impact of the tidal flood has not changed the dominance of women in carrying out domestic roles, even though wives also take a productive role to help meet the economic needs of the family. This is due to the decline in income from the pond business, so that domestic responsibility remains the main burden of women. These findings support the concept of Moser's (1993) theory, which explains that women often play a dual role, namely maintaining domestic responsibilities while participating in productive activities. Thus, the tidal flood does not reduce the domestic burden on women, but instead expands the responsibility of wives in maintaining the sustainability of farmers' households.

### **The Social Role of Wives in the Family of Milkfish Farmers**

Social roles are one of the components in the theory triple role Moser (1993), namely the role of women in various community activities that aim to maintain social relations and support community life. Social role is a role related to society. Social roles include all activities carried out at the community level, voluntary and without wages. This role can be in the form of the participation of coastal women in social community activities, such as cooperatives, recitations, taklim assemblies, religious activities and other socio-cultural activities (Wulandari et al., 2022). The social role of milkfish farmer wives includes a variety of responsibilities related to social interaction, community relations, and the maintenance of harmony in the household environment.

Based on the results of the analysis in Figure 3, the average score of social role is 4.44 which is included in the low category. These results show that the involvement of farmers' wives in community social activities is still limited. The findings indicate that although women have a social role as explained by Moser (1993), their implementation is not optimal because it is still influenced by time constraints, the absence of a group of farmers' wives, and flood conditions that limit community activities. Thus, Moser's triple role theory is relevant in explaining the existence of women's social roles, but the intensity of its implementation is influenced by the social and environmental conditions faced by farming families.

Social activities are activities carried out outside the home to strengthen the bonds of friendship by interacting with each other between communities which is carried out in a useful activity. Social activities carried out by the wife of milkfish farmers in Api-Api Village include Family Welfare Empowerment (PKK) activities, recitation, social gatherings, and posyandu. Social activities can also be carried out through groups or communities such as the milkfish farmer's wife group or the coastal women's group, but in Api-Api Village there is no group that accommodates milkfish farmer's wives to just share information or carry out economic activities. The involvement of farmers' wives in social activities is also a means to increase their capacity and expand social networks. Through participation

in various community activities, farmer wives can gain new knowledge, various experiences, and strengthen fellow community members. This is important in encouraging women's empowerment, especially in the context of coastal life which often faces various economic and social challenges.

All respondents socialized with the surrounding community, the form of socialization carried out was by talking to neighbors who were around. Arisan activities provide benefits for milkfish farmers' wives, they can save regularly and exchange ideas with other farmers' wives who participate in social gatherings. The social gathering activity is carried out once a month. Meanwhile, the benefits obtained from recitation are that they gain religious knowledge, read the Quran, and stay in touch with the community. Not all milkfish farmers' wives participate in PKK activities, usually these PKK activities are attended by those who are active. PKK activities in Api-Api Village are making processed food products, recycled crafts, and socializing clean and healthy living. For the wife of milkfish farmers, the time of gathering is a means of unwinding and socializing with the community. Another reason is that milkfish farmer wives get several benefits such as being able to strengthen friendships, exchange ideas, increase skills, maintain harmony, share opinions, stories, entertainment, information, and so on.

However, women's involvement in social activities has not taken place optimally. Based on the results of the study, all respondents stated that they were not members of the farmer's wife group or women's business group because until the time the research was carried out, there had been no organization that specifically accommodated women farmers in Api-Api Village. This condition causes women to have limited space to obtain training, share experiences, and develop economic activities together. Research (Purwanti, 2013) It shows that the existence of coastal women's groups is able to improve skills while providing additional income for its members. Thus, the lack of a group of farmer wives is one of the factors that causes the low social role of women in Api-Api Village.

The low social role is also influenced by the high domestic burden that is still borne by women. As shown in the previous discussion, the farmer's wife remains the most dominant party in carrying out household chores and childcare. This condition causes women's time allocation to participate in social activities to be more limited than men. These findings are in line with (Rochmayanto & Kurniasih, 2013) which states that the amount of time women spend to meet domestic needs causes opportunities to participate in social activities to be reduced. The condition of the tidal flood also affects the social activities of the community. According to Jumatiningrum & Indrayati (2021), one of the impacts of the flood is the disruption of community social interaction due to limited population mobility. The findings are in accordance with the results of an interview with the Head of Api-Api Village (2024) who said that people tend to reduce gathering activities when tidal floods occur because the residential environment is flooded so that mobility becomes difficult. This condition shows that tidal floods not only have an impact on the economic aspects of farmer families, but also affect social relations and community participation in various social activities.

Overall, the results of the study show that the social role of farmers' wives is still relatively low even though women still try to maintain social relationships through various community activities. Based on Moser's (1993) triple role theory, women not only carry out productive and domestic roles, but also have responsibilities in managing society. However, in milkfish farming families in Api-Api Village, the implementation of this role is not optimal because it is influenced by the high domestic burden, the absence of active women's institutions, and the impact of tidal floods that limit social interaction. Therefore, it is necessary to strengthen women's institutions through the formation of farmer wife's groups that can be a forum for capacity building, information exchange, and economic empowerment so that women's social roles can run more optimally while strengthening the resilience of farming families in facing the impact of tidal floods.

### **The Role of Husbands in the Family of Milkfish Farmers**

Husbands in milkfish farming families generally hold the role of head of the family as well as the main manager of the pond cultivation business. This role includes direct involvement in the cultivation process, from land preparation, maintenance, to harvesting, as well as managing marketing strategies for production to meet the family's economic needs. Husbands also play a role in guiding family members and establishing relationships with the community or outside parties for the sustainability of the pond business and household welfare. The husband has various efforts such as the procurement of aid/material tools, the procurement of seed assistance and training to increase the capacity of farmers. These efforts are made to realize the welfare of his family both inside and outside his household (Ibrahim et al., 2020).



## The Productive Role of Husbands in Milkfish Farming Families

The husband's productive role in the milkfish farming family focuses on activities that directly generate income for the household. The productive role played by the husband as the head of the household is working as a milkfish farmer. The productive role played by the husband as the head of the household is working as a milkfish farmer. The cultivation of milkfish ponds is the main income of farmers in Api-Api Village. Men tend to dominate more in earning a living while women do not do much of their own production/business activities (Karnaen & Amanah, 2013). The productive role played by the husband in the family is to carry out technical management of the pond, such as land cultivation, water filling, sowing seeds, feeding, pest and disease control, and harvesting. Marketing crops by selling milkfish directly to middlemen markets, or cooperatives. The husband also plays a role in making decisions in the pond business, such as choosing the type of seed, planting season, the use of fertilizer or feed, harvesting, and the management of business capital are generally in the hands of the husband, so that the husband's role is the main key in determining the success of the pond business and the stability of family income.

## Husband's Domestic Role in the Milkfish Farmer's Family

Domestic roles are related to the responsibility of taking care of the household and meeting the daily needs of family members, such as cooking, cleaning the house, caring for children, and creating a harmonious family. These activities are still dominated by farmers' wives because they have more time at home. Men play less role in domestic activities because their daily lives are spent in the public sector (Rochmayanto & Kurniasih, 2013). In general, the domestic role in the farming family is more carried out by the wife, but in certain conditions the husband is also involved. The domestic role of the husband in the family is presented in the frequency table in table 2.

**Table 2.** The domestic role of the husband in the milkfish farming family

| No | Indicator                                                              | Role     | Number of Respondents |               |
|----|------------------------------------------------------------------------|----------|-----------------------|---------------|
|    |                                                                        |          | Frequency             | Percentage(%) |
| 1  | Decisions about the number of children to have.                        | Husband  | 0                     | 0             |
|    |                                                                        | Together | 47                    | 100           |
| 2  | Carrying out functions in childcare                                    | Husband  | 0                     | 0             |
|    |                                                                        | Together | 5                     | 11            |
| 4  | Manage family finances.                                                | Husband  | 14                    | 30            |
|    |                                                                        | Together | 4                     | 10            |
| 5  | To make decisions that determine the education and future of the child | Children | 15                    | 32            |
|    |                                                                        | Together | 32                    | 68            |

Source: Data Analysis Results (2024)

Based on Table 2, it shows that men's involvement in domestic activities is still very necessary so that the burden on women does not get heavier, and in order to create better equality in household management in the future (Sabilla et al., 2024). Family characteristics are different and in accordance with the family decisions that have been made, as many as 30% of respondents choose a husband who manages their family finances and 10% of respondents choose to manage family finances together. Some families consider their husbands to be the main breadwinners, so they feel more responsible for managing the income generated. If the wife focuses more on domestic roles and childcare, then the husband may take over the family's financial management. If this domestic role is taken over by men, there is a possibility that family stability will be disturbed. This is due to the long-standing division of roles in society and women are expected to be in control in regulating domestic life (Sabilla et al., 2024). This domestic role has a great influence on the comfort and well-being of the family as a whole.

## The Social Role of Husbands in Milkfish Farming Families

The husband's social role in the milkfish farmer's family includes active involvement in various community activities and social relationships that support the sustainability of the pond business and family life. Community social activities carried out by the husband in Api-Api Village such as mutual cooperation, RT/RW meetings, participating in milkfish farmer groups, village deliberation forums, and routine recitations. These activities are used as a means of communication and socialization for husbands, but not all husbands participate because there are some who do not have free time or work.

Husbands also play a role in building working relationships with collectors, fish traders, feed providers, and related agencies to expand market opportunities and get information about milkfish farming. This social role is important because it relates to access to information, training, assistance, or markets that will strengthen the family's economic position.

The division of gender roles in milkfish farming families is not only influenced by socio-cultural construction, but also by environmental vulnerability conditions due to tidal floods. Changes in household economic conditions encourage the adaptation of roles between husband and wife. This research contributes to the study of gender sociology and the sociology of coastal communities, by showing how the division of gender roles in milkfish farming families is dynamically formed as a form of social and economic adaptation to the impact of tidal floods. The results of this study also strengthen the understanding of the relationship between environmental vulnerability, family resilience, and gender social construction in coastal communities.

## CONCLUSION

This study aims to analyze the role of gender in milkfish farming families in dealing with the impact of tidal floods through the identification of the division of productive, domestic, and social roles between husband and wife. The results of the study show that the division of roles in the farmer's family is still complementary, the farmer's wife plays a dominant role in the domestic sphere, especially in childcare, household management, and family financial management, while the husband still dominates the productive role as the main breadwinner and pond business manager. The impact of the flood encouraged wives to participate in carrying out productive roles as a strategy to maintain family income, but the level of involvement in productive and social roles is still relatively low due to limited access to capital, technology, market information, and the lack of optimal groups of farmers' wives. This study shows that tidal floods not only have an impact on economic aspects, but also affect the dynamics of the division of gender roles in farmer families. The contribution of this research lies in the analysis of the relationship between the impact of tidal flooding and changes in the distribution of productive, domestic, and social roles in milkfish farming families which have been more studied separately. Therefore, the support of the government and stakeholders is needed through strengthening the empowerment of coastal women, increasing access to training, capital, fishery product processing technology, market information, and the formation of farmer wives' groups as a forum for economic and social capacity building to increase the resilience of farming families in facing the impact of tidal floods.

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**Conflict of Interest.** The authors declare no conflict of interest.

**Declaration of Generative AI Use.** During the preparation of this work, the authors used ChatGPT (OpenAI) in order to improve the clarity, grammar, and readability of manuscript. These tools were used solely for language support and did not contribute to the study design, data collection, data analysis, interpretation of results, or the scientific conclusions. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the published article.

**CRedit Contribution.** CM collected, processed, and analysed the data and wrote the original draft; TK and OO designed the study and developed the methodology; CM, OO, and TK reviewed and edited the manuscript. All authors read and approved the final manuscript.

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