

# Gender, Adaptation Strategies, and Livelihood Resilience: A Case Study from Floating Market of Banjarmasin, South Kalimantan, Indonesia

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**Abstract.** The purpose of this study is to analyse livelihood adaptation mechanisms and the factors that influence the livelihood resilience of male and female floating market trader households in *Kuin Alalak*. The research used quantitative approach using questionnaire and was supported by qualitative approach employing in-depth interviews. The results of the study showed that female-traders of floating markets performed more diverse adaptation strategies as they were regarded as main breadwinners in most of trading households. Female floating market traders have their own way to overcome vulnerability. They tried to maintain independent actions so as not to depend on others. Making good use of all the resources they had from their own resources is the key for female floating market trading households to better adapt to various economic challenges and threats. With all their physical limitations and resources, they were able to prove that they were strong enough to become the main breadwinners for their families. Male-traders who usually have much bigger scale of economy and control more resources, were not adapting very easily to the incoming crisis.

**Keywords:** female-traders, floating market, gender, livelihood, resilience.

## 1 Introduction

In developing countries, contribution of women in supporting household economic resilience is seen as very significant. This is in line with Rijkers and Costa., (2012) who pointed out that working in rural non-farm economy appears to be very important for women who participate in income earning activities for the family and especially so for those who are the heads of their households. In Indonesia, the role of women in supporting household livelihoods is quite substantial. There is a tendency that the role of women in the economy continues to intensify, especially in the urban economy. Cameron et al., (2019) stated that there is a strong sign that the underlying propensity for women to participate in the labor force has been increasing, particularly in urban areas where the opportunity is much larger as compared to rural areas. The involvement of women in the non-domestic work has been taking place for a long time in

Banjarmasin of South Kalimantan Province. The work participation rate continues to increase year by year. Based on the data of the Central Bureau of Statistics of Banjarmasin City., (2019), the labour force participation rate for the male population in 2019 was 78.62 percent, while for the female population was 53.80 percent in the same year. Women's labour force participation rate increased as compared to the previous year, possibly due to the economic needs in the household to help the family to earn more income. This situation is also reflected by the lives of traders of *Kuin Alalak* Floating Market in Banjarmasin. The involvement of women in the public sector also shows that women's desire to have equal rights between women and men is getting higher. In addition, women have more opportunity to demonstrate more roles and occupations in various aspects of the economy.

During the economic crisis, the role of women in supporting household economic resilience is very important, especially in the informal trade sector. Even though the results of previous studies shows that women are most vulnerable to being hit by a crisis. Horn., (2010) stated that women constitute the majority of the informal workforce in most developing countries and predominate its poorest and most vulnerable ranks. The more or less similar situation took place in the informal trade sector of *Kuin Alalak* who bear multiple roles in the economy. This is in line with Gustavsson., (2020) who pointed out that the involvement of women in the world of economic business cannot be separated from their relation to the life of the family. Women participate in economic activities as do men. Women's participation in the economy was motivated by the desire to secure the future of their families. Anggadwita et al., (2017) stated that women entrepreneurs play a role in improving the family economy which is supported by their education and experience. In addition to their liability for family, husband, and children, women have been acting as an alternative engine of economic growth because they may create businesses and employment opportunities. Even though women are usually hit by hardest impact of crises and appear vulnerable, but women's participation in the economy determines economic resilience so that the resilience of household livelihoods can be maintained. Kiewisch., (2015) stated that women's empowerment within the household is essential to improving intra-household resource allocation for resilience. Njogu et al., (2017) also stated that the involvement of women in sustainable rural livelihoods cannot be underestimated, they have an important role in making livelihood decisions for the rural household economy. Empowering women can promote and sustain sustainable livelihoods.

Based on the results of field research, the *Kuin Alalak* floating market, which was formerly known as the *Muara Kuin* floating market, is located at the estuary of the Barito River. This floating market has emerged naturally since the 14th century, before the Banjar Kingdom was founded in 1595. This floating market is part of the *Bandarmasih* River Port which covers the flow of the *Barito* River, from the *Kuin* River to the *Kelayan* River Estuary. Its geographic position at the confluence of several tributaries makes it a strategic place for trading activities (Wijaya and Kwanda., 2019). Hendraswati., (2016) pointed out that this floating market evolved because it is located in quite strategic water areas, in which many rivers in Banjarmasin and the historical range that considers rivers to be cultural basis of Banjarese are situated. The river is used by local people for main route of transportation and a market-place for trading or transaction activities. Buying and selling activities are carried out on the river by boat, so the market is called a floating market. Economic activity on the river is one of the important activities for the economy of the Banjarese community. They earn a livelihoods to meet the needs of household life by depending on boats. Trading activities is a work done by

*Banjarese* people since hundreds of years ago which has become a traditional activity and the result of the influence of Muslim traders who come to the area.



**Fig. 1.** *Kuin Alalak* Floating Market Banjarmasin City, 2020

Since 2020, this floating market has been considered as safer place from the threat of big waves due to rushes or cargo ships going back and forth. *Kuin Alalak* floating market is located on South *Alalak* Street, South *Alalak* Village, directly adjacent to North *Kuin* Village and North Banjarmasin District. The name of the market was taken from three locations, which were later merged into one, namely the South *Alalak*, Central *Alalak*, and North *Kuin* Floating Market. In this location, the floating market traders work to earn income and depend their life on boats from dawn, around 02.00 a.m. until the morning sun begins around 08.00 a.m. Based on the results of this study, the number of traders in the *Kuin Alalak* Floating Market ranges from 150 to 200 traders. There are several names for floating market traders, namely *dukuh* and *panyambangan*. *Dukuh* is the firsthand trader who sells agricultural products, while the *panyambangan* is the second hand who buys merchandise from the *dukuh*. Based on the information obtained in the field, *dukuh* often comes from areas that are quite far away from the location of the *Kuin Alalak* Floating Market, including the districts of *Hulu Sungai Selatan*, *Hulu Sungai Tengah*, and *Hulu Sungai Utara*. These *dukuh* usually use boats with larger loads to carry agricultural products in the form of vegetables and fruits. Sometimes, they have to survive several days at the floating market location until the merchandise is sold out. After then they return to their area and collect merchandise to be brought and resold at the *Kuin Alalak* Floating Market location.

Based on field observations, the traders who sell in this floating market are dominated by female traders, and most of them are more than 40 years old. However, when viewed from the size of the boat, there are significant differences between male and female traders. Male traders usually use larger boats equipped with engines or in *Banjarese* it is called as *kelotok*.

They are wholesalers who sell merchandise in quite larger quantities, while female traders in floating markets using small, non-engine boats or in *Banjarese* it is called as *jukung*.



**Fig. 2.** Trading activity in floating market

Female floating market traders are retail traders who sell merchandise in small quantities. After their trading activities at the location of *Kuin Alalak* Floating Market, female traders of the floating market often sell their merchandise to traditional land-living markets or going around to small rivers approaching people's houses along the river. Female floating market traders who use *jukung* often join *kelotok* belonging to male traders by using hand to get to their destination faster, without too much effort of rowing and feel safer from big waves.

## **2 Problems Statement**

Floating market trader households are household that have relatively of low economic status and facing uncertainty of incomes. The daily income of floating market traders ranges from IDR 30,000 to 100,000 depending on the amount of product brought, the season, and the weather conditions. The economic crisis which is often in the form of a sudden shock experienced by floating market trader household is originating from uncertain income due to seasonality and unsold perishable and not durable traded goods that leads to a larger economic loss. They do not have sufficient equipment such as refrigerators, to keep the products remain fresh. In addition, the COVID-19 pandemic causes another serious pressure (stress) for the household economy of floating market traders due to a decrease in the capacity of people's purchasing power due to restriction policies from the government. Restriction policy to contain the spread of corona virus transmission has also caused a significant decrease of community activities. The decreased of income was also felt by all other household members

who have precarious jobs, such as construction workers, small-food traders, and other informal jobs in the regions.

The adaptation strategy to overcoming economic crisis carried out by each household is different according to the ability and scale of ownership of resources. Berman et al., (2012) pointed out that adaptation strategy is reflected by the number and quality of rural communities to deal with the adverse effects of climate change or ecological changes by increasing their adaptability in order to live sustainably. In this regard, adaptive capacity is the ability to prepare themselves to adapt to climate change in the future. In the case of floating market traders in *Kuin Alalak* floating market, there are differences in the size of boats for male and female traders, which can indicate differences in the scale of socio-economic status. The size of boat may also affect to the income they get every day. Therefore, it is interesting to see a comparison of how male and female traders in the *Kuin Alalak* floating market undertake livelihood adaptation strategies and observe the factors that support the achievement of household livelihood resilience in responding economic shock or crisis.

### **3 Research Method**

The data and information used in this article is drawn from a study that was carried out in *Kuin Alalak* floating market, Banjarmasin City, South Kalimantan Province. A series of field research activities were conducted for six months, ranging from August 2020 to January 2021. The field research was a study with a quantitative approach and was supported by qualitative approach. Quantitative research was conducted using a survey method using questionnaire as a data collection tools. Qualitative research was conducted to obtain descriptive data with field observations and in-depth interviews. Narratives from the resource persons taken up via in-depth interview enriches the entire explanation of the study.

The number of respondents drawn for this study amounted to 40 respondents consisting of 20 male and 20 female floating market traders. The determination of respondents is done purposively because the number of traders in the *Kuin Alalak* floating market is not known precisely. The respondents in this study are male and female floating market traders, whose other household members work and earn income from non-floating market sector. The way of respondent selection aims at seeing the contribution of household members in each household of male or female floating market traders to maintain household livelihood, both in trading or non-trading sectors effectively. Qualitative data collection was carried out using in-depth interviews to informants. Informants were selected using the snowball method. In addition, another method used is through field observations at the research site to see the actual phenomena that occur. Both types of data are used complementarily in this article.

### **4 Result and Discussion**

#### **4.1 Characteristic of Trader According to Gender Specific**

The characteristics of respondents in this study were identified in terms of age, number of dependents, education level, and size of the boat owned by male or female floating market

traders. In the following section, a more detailed explanation regarding the characteristics of respondents would be elaborated more comprehensively.

**Age.** Based on data of this study, the age of respondents ranged from 34 years to 70 years. The age of male traders ranged from 43 years to 70 years, while the age of female traders ranged from 34 years to 69 years. The following is a breakdown of the respondent ages who are male and female floating market traders (Table 1). In general, most of the traders either male or female might be classified as mature and productive age.

**Table 1.** Number and percentage of respondents by age and gender in the analysis, 2020

Respondents age (years)	Male		Female	
	n	%	n	%
30 - 40	0	0,0	5	25,0
41 - 50	4	20,0	8	40,0
> 50	16	80,0	7	35,0
Total	20	100,0	20	100,0

Sources: Analysis from primary data, 2020

Based on the data from Table 1, it shows that the dominant age of male respondents is more than 50 years, which is 80 percent. There is a fact that here will be less and a smaller number of male floating market traders in the future. There is a fact that working as male trader in the floating market has been less attractive for the younger generation. There is even smaller number of next generations of male to work as floating market traders. Their sons choose to work in other sectors because they want to earn more income quickly in an easier way. Meanwhile, the dominant age of female respondents was in the range of 41-50 years, which is 40 percent. Those female traders aged 30-40 usually have children who were old enough to be left at home more independently.

Meanwhile, female traders who were more than 50 years old, had their children who were already married and lived independently. The female traders now lived with their husbands only so they could feel free to trade in floating market to increase their income for their daily needs. This condition shows how *Kuin Alalak* opened more opportunities for women to participate in the trading economy.

**Number of Dependents.** The number of dependents is the total number of individuals whose life is borne by the income earned from each livelihood activity carried out by the respondent. The following is a more detailed explanation of the number of dependents of male and female respondents who are floating market traders (Table 2).

**Table 2.** Number and percentage of respondents based on number of dependents, by gender, 2020

Number of dependents	Male		Female		Total	
	n	%	n	%	n	%
2 – 3 dependents	3	15,0	6	30,0	9	22,5
4 – 5 dependents	10	50,0	11	55,0	21	52,5
> 5 dependents	7	35,0	3	15,0	10	25,0
Total	20	100,0	20	100,0	40	100,0

Sources: Analysis from primary data, 2020

Table 2 shows that in male and female households, most of floating market traders have four to five dependents in one household. Respondents who have the greatest number of dependents of two to three people are female respondents whose children have already get married and they no longer live in one household anymore. They are not included in the calculation of household dependents. Meanwhile, respondents who have more than five dependents, mostly male floating market traders who have many children that are still living with them. The children are on the school age pursuing formal or non-formal education. It is very often to find, cases where the married son or daughter still live in the same household together with their new family in the parents' houses. Male and female floating market traders are the main breadwinners in their household. Thus, the more the number of dependents, the more necessities of life that must be met. The number of dependents brings a consequence of risk or vulnerability to the household economy. This is especially the case for the dependents that are not yet productive. This is in line with Njuguna and Ngige., (2020) who pointed out that the number of dependents influenced livelihood outcomes negatively. More small family size, fewer dependents, higher levels of paternal education, parental support, increased aggregate family income, and increased value of family assets will support their livelihood strategies to attained higher levels.

**Level of Education.** The education level is measured by the level of formal education achieved by respondents. The level of education in this study is divided into several categories, namely (1) not completed from elementary school, (2) elementary school, (3) junior high school, (4) senior high school, (5) graduated from college. The education level of male and female respondents who were mostly found in this study was that they did not complete from elementary school/equivalent. The following is detailed explanation of the education levels of male and female floating market traders (Table 3).

**Table 3.** Number and percentage of respondents based on education level, 2020

Respondent's education level	Male		Female		Total	
	n	%	n	%	n	%
Not completed from elementary school	16	80,0	1	60,0	2	70,0
Elementary school	1	5,0	5	25,0	6	15,0
Junior high school	1	5,0	1	5,0	2	5,0
Senior high school	2	10,0	2	10,0	4	10,0
Graduated from college	0	0,0	0	0,0	0	0,0
Total	20	100,	2	100,0	4	100,0
		0	0		0	

Sources: Analysis from primary data, 2020

Based on data from Table 3, it shows that the majority of male and female floating market traders was of low level of education. They did not finish elementary school or equivalent. They did not complete formal education due to the family's economic limitations which forced them to work instead of continuing their education. Earning income for a better livelihood is the only reason to explain why most of the respondents left the school earlier for a job.

**Boat Size.** The types of boats used by floating market traders are motorized boats or in *Banjarese* language called *kelotok* and non-motorized boats in *Banjarese* language called *jukung*. *Kelotok* is larger than *jukung*, with the size about 6.8 meters to 10.2 meters long. While *jukung* only uses paddles to move, with the size of four meters to five meters long. Based on the results of this study, the details of the boat sizes of male and female respondents floating market traders are as follows (Table 4).

**Table 4.** Number and percentage of respondents based on boat size, *Kuin Alalak*, 2020

Boat Size (meters)	Male		Female		Total	
	n	%	n	%	n	%
4	0	0,0	12	60,0	12	30,0
4,5	0	0,0	3	15,0	3	7,5
5	0	0,0	2	10,0	2	5,0
6,8	6	30,0	2	10,0	8	20,0
8,5	10	50,0	1	5,0	11	27,5
10,2	4	20,0	0	0,0	4	10,0
Total	20	100,0	20	100,0	40	100,0

Sources: Analysis from primary data, 2020

Based on data from Table 4, it shows that *kelotok* is dominantly used by male floating market traders, while *jukung* is predominantly used by female floating market traders. The majority of traders who use large, motorized boats (*kelotok*) were male traders who became wholesalers with large quantities of merchandise. In addition, male floating market traders can also trade fairly large items such as watermelons, coconut, fresh fish in large quantities, vegetables in large quantities, and fuel (diesel). While women, usually played a role as retail traders, who carry merchandise in small quantities. They sold agricultural products in the form of fresh vegetables and fruits, such as cabbage, eggplant, pumpkin, orange, lime, banana, rambutan, guava, and many more. The size of the *kelotok* which was quite large and needed to be equipped with engine has made female floating market traders tended to avoid of using *kelotok*.

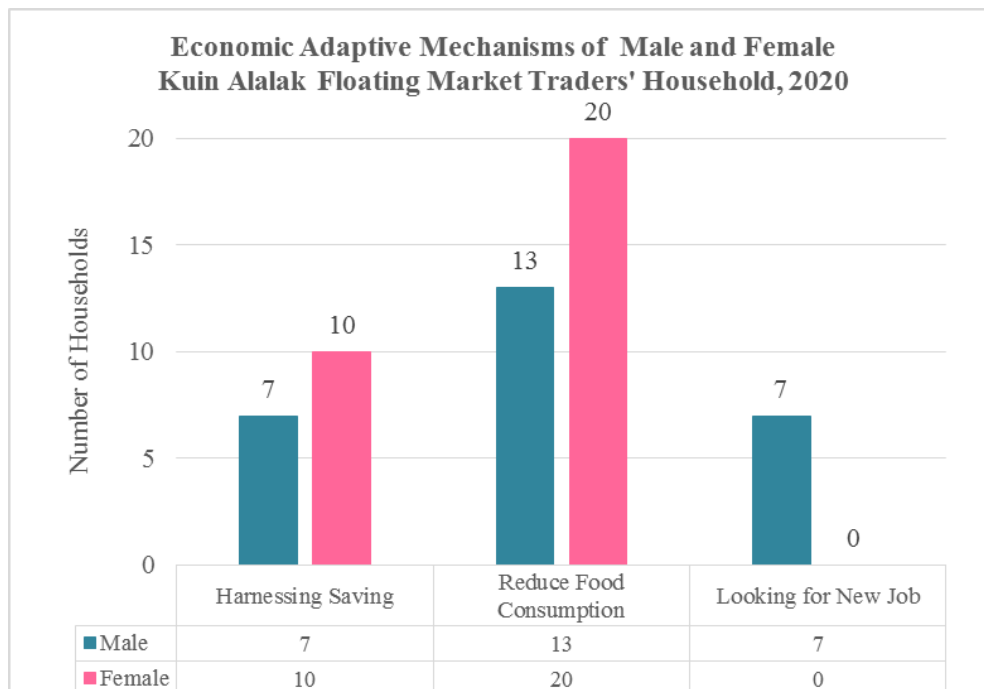
#### 4.2 Adaptation Strategies Among Traders According to Gender Specific

Based on study from Dharmawan et al., (2016), three adaptation mechanisms that can increase livelihood resilience may be classified into economic adaptation mechanisms (such as diversification of livelihood sources and the use of household savings), ecological adaptation (such as utilizing natural resources), and social adaptation (such as asking for help from close



relatives and money lending institutions). Each household develops various adaptation mechanisms to minimize risk and maintains household livelihood security. Sohail., (2014) stated that both men and women should work together in the society to bring household prosperity. Women must raise their voice for their rights and they should be self-confident. Empowering women is essential for the development of the economy and household livelihood. The following is a further explanation of economic, ecological, and social adaptive mechanisms undertaken by male and female floating market traders.

**Economic Adaptation Mechanisms.** The mechanism of economic adaptation is a strategy carried out by floating market trader's household to maintain or increase livelihood status. This strategy could be done by utilizing various capitals owned as well as getting additional sources of income. The following Figure shows how economic adaptation mechanisms were carried out by male and female floating market traders' households (Figure 3).



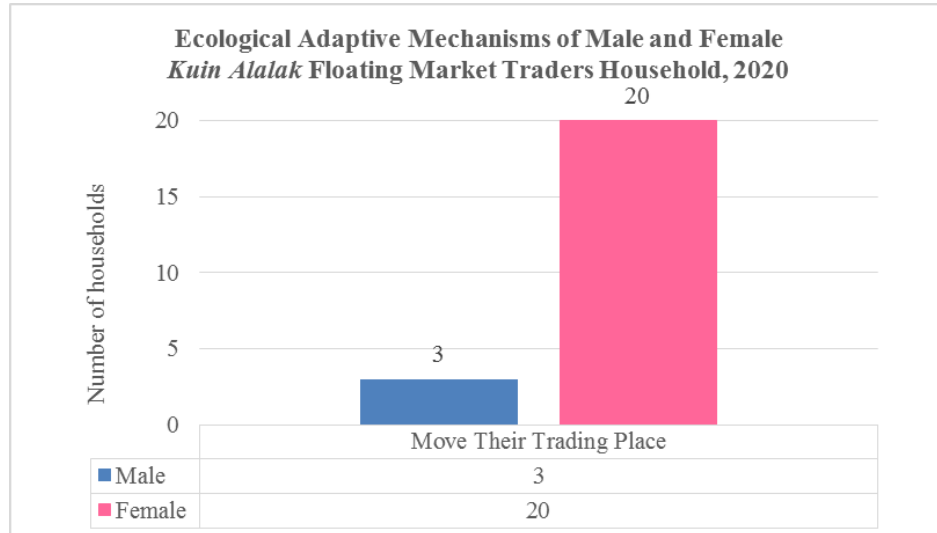
**Fig. 3.** Economic Adaptive Mechanisms of Male and Female Kuin Alalak Floating Market Traders Household, 2020

Based on the data in the Figure 3, it showed that the economic adaptive mechanisms undertaken by floating market traders' household occurred in the forms of utilizing savings, reducing food consumption, and looking for new jobs. Both male and female traders usually used reduction of food consumption as major adaptive mechanism. With this mechanism they spent less money when facing an economic crisis so as not to depend on other people's help. There was an ethics of shame for being indebted or asking for help from others in time of economic crisis. What is important to mention is that a quite substantial number of female

traders to use saving to survive. This economic adaptive mechanism was predominantly shown by female traders as compared to male traders. It shows that female floating market traders prefer to use their own resources, rather than external resources because it will cause financial dependence. Female floating market traders did not want to take bigger risks. They thought that asking for help from others could increase the economic burden because they should pay back in the future. This is in line with the finding of Alberts et al., (2016) who pointed out that women have different ways of rebuilding livelihood strategies, they use agency to balance household needs, opportunities, constraints and mobility faced by their households. This could also be the reason why female floating market traders preferred to use savings than male traders. Even though the amount of money saved was not much and was only kept at home. This is in line with the finding of de Groot et al., (2017) who pointed out that male and female have a very important role in achieving the goals of family livelihood welfare, but female have proven to be more resilient than male because female consider risks more in business. Female traders were a better money saver as compared to male traders in the households.

In adaptive mechanism type of looking for a new job, only male floating market traders' households performed this mechanism. When experiencing an economic crisis, they chose to look for new jobs, such as being construction workers, selling mineral water, or asking job as farm laborers to earn additional income. This work was carried out by male household members only when there was a real crisis after other mechanisms were unable to cover the economic crisis. Meanwhile, the female traders of floating market did not carry out this mechanism. This is because they had already another side jobs of meeting the customers located out of the river.

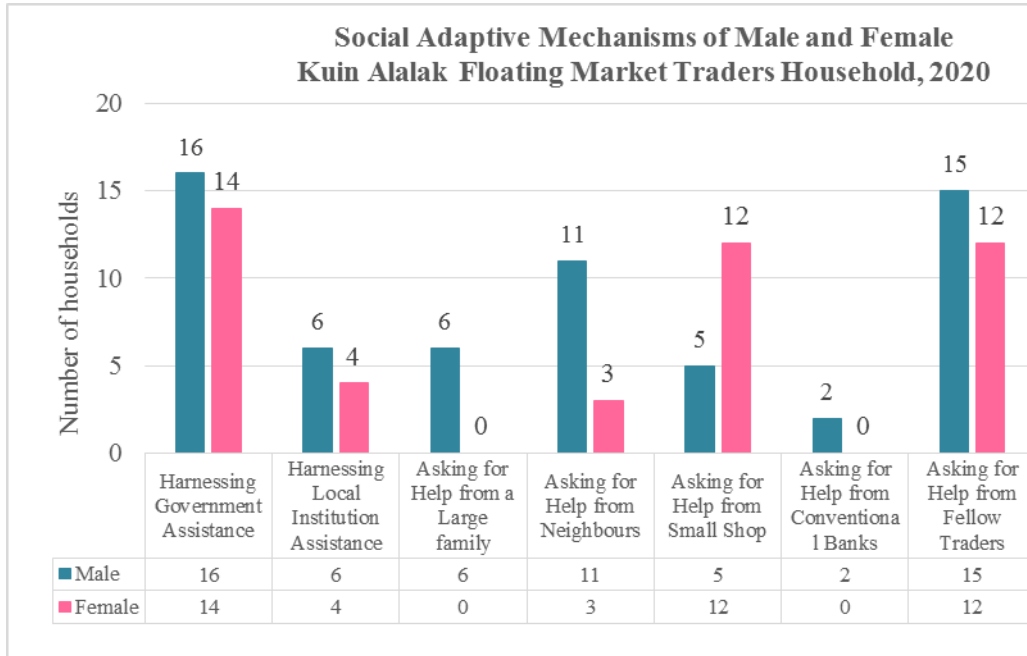
**Ecological Adaptation Mechanisms.** Ecological adaptive mechanisms were chosen as an adaptation strategy carried out by floating market traders' households by utilizing nearby natural resources that could be easily accessed by all households' members. For example, looking for another sub-river to trade. The following figure explains an ecological adaptation mechanism carried out by floating market traders in a bit detail (Figure 4).



**Fig. 4.** Ecological Adaptive Mechanisms of Male and Female Kuin Alalak Floating Market Traders, 2020

Based on the data of Figure 4, it shows that female traders were more moveable as compared to that of male traders. The ecological adaptation mechanisms carried out by female floating market traders is by increasing mobility to find out more trading places. All female floating market traders do the mechanism to change their location of trading place. After buying and selling activities at the *Kuin Alalak* floating market from early in the morning around 03.00 until 06.00 in the morning, they continued to sell their merchandise in the traditional out of the river markets by travelling to small rivers. With this strategy they could find more customers in selling merchandise. Female floating market traders could more easily get around small rivers because the boats they used were small and only require oars to move. This means that female floating market traders could reach more consumers directly to their homes to sell their wares. This strategy was very seldom implemented by male traders. The male floating market traders chose to move to another bigger places to trade at the *Lok Baintan* Floating Market which was located a bit far away in Banjar Regency because they had a feeling that the market opportunity was challenging and was greater. It is worth to note that due to a small size of the boat, female traders had limited maneuvers spatially.

**Social Adaptation Mechanisms.** Social adaptative mechanism was usually a strategy carried out by either male or female floating market trader households by utilizing their social relations. The following figure shows how a social adaptation mechanism was carried out by floating market traders' households (Figure 5).



**Fig. 5.** Social Adaptive Mechanisms of Male and Female Kuin Alalak Floating Market Traders' Household, 2020

Based on the data in Figure 5, it shows that social adaptive mechanisms carried out by floating market trader households was various. It may occur in the form of harnessing government assistance, harnessing on local institution assistance, asking for help from extended families, asking for help from neighbors, asking for help from local stalls, asking for help from conventional banks, and asking for help from fellow traders. The majority of social adaptive mechanisms were mostly carried out by male floating market trader households. Based on the results of this study, male floating market traders chose to use social adaptive mechanisms because economic assistance would be easier and faster to obtain. In contrast to male, female floating market traders really avoid asking for help from people outside family because they did not want to be dependent on their own families. Female floating market traders avoid borrowing money from conventional banks for fear of not being able to repay. In addition, the loan interest imposed by conventional banks could cause a burden and difficulties in the future. In some cases, the existence of bank interest was also regarded not in accordance with the religious principles. This was the way female traders maintain their livelihood resilience in facing shock and difficulties.

Folke (2006) pointed out that resilience is not only about being persistent or resilient to disruption, but also about opening opportunities in terms of recombination of structures and processes, system renewal and the emergence of new alternatives. Based on this study, it shows that male floating market traders were more dependent on assistance from others to face crisis as compared to the female one. Male floating market traders were more dependent on social assistance originating from the government. They also relied on social capital in the

form of informal relationships with neighbors and colleagues. In contrast, the female floating market traders, tended to rely on transforming own resources transforming their own resources to build resilience.

### 4.3 Livelihood Resilience

Speranza et al., (2014) pointed out that livelihood resilience is the ability of household to cope with stresses or shocks and maintain or enhance resources that have important functions. Livelihood resilience is characterized by actors' assets and strategies to maintain and enhance the function of assets, to self-regulate and learn from these stresses. Therefore, a living becomes resilient if actors or households can maintain its main function (food, income, insurance, poverty reduction, etc.). Based on the results of the study, there were several things used by household as a source of vulnerability, including (1) crisis emanating form Covid-19 pandemic crisis which causes a decrease in the scale of trading activities; (2) macroeconomic crisis from the impact of social restrictions to contain Covid-19 pandemic (3) decreased household income at risk of poverty. This situation has usually caused severe stress and shock for floating market traders' households livelihood recently.

Speranza et al., (2014) provided an analytical framework to understand the existence of indicators of resilience, namely an analysis of buffer capacity, consisting of assets owned by the household; and analysis of self-organization, in the forms of institutions, cooperation and networks, supportive social structures, and trust between actors who work together. In addition, an analysis of capacity for learning, i.e., the ability to carry out continuous learning about threats and transfer knowledge to other actors. The level of resilience might be seen from the time used by the households to recover from shock or crisis (Saraswati and Dharmawan., 2015).

Based on the results of this study, the length of time needed by floating market trader households to recover from the crisis is divided into two categories, namely: less than four days and exactly or more than four days. The length of time to recover from the economic crisis was influenced by how the household managed its resources to contain various causes of economic crisis. The sooner to recover from a crisis, the better the resilience capacity of livelihoods will be. The following is a detailed explanation of the length of time used by the male and female floating market trader households to recover from the crisis (Table 5).

**Table 5.** Number and percentage of male and female floating market trader households based on time to recover from the crisis, 2020

Households	< 4 days		≥ 4 days		Total	
	n	%	n	%	n	%
Male floating market traders	12	60,0	8	40,0	20	100,0
Female floating market traders	14	70,0	6	30,0	20	100,0

Source: Analysis from primary data, 2020

Based on the data in Table 5, it shows that female floating market traders households' resilience much better than that of male floating market traders' households. It needs less than four days for female traders of floating market to recover from the crisis. This situation was basically influenced by the strategy of each individual household to regulate economic conditions to achieve livelihood resilience. Based on information from the field, the cause (stressor) of the crisis that they often experience was the amount of daily income that declined due to uncertain weather conditions such as rain as well as uncertain fluctuation of merchandise supply to trade. Currently, daily income had also sharply declined due to government policies to reduce the risk of Covid-19 transmission by imposing social restrictions and limitation of business as well as community activities which caused people's purchasing power to decline. They tried to overcome the crisis conditions with various mechanisms of livelihood adaptation, such as asking for help from neighbors, harnessing assistance from fellow traders, asking for help from stalls, reducing food consumption, utilizing savings, and so on.

For many male floating market trader households chose to take advantage of social relations by harnessing their social network to get a certain amount of money via asking help from others. It was usual that asking for economic assistance when experiencing an economic crisis because, might become a way out since they feel easier and faster to obtain. However, it needed more time to repay the loan as there was even interest on the loan which could actually make the repayment even more difficult for male floating market traders to fulfil. In contrast to this phenomenon, female floating market traders chose to use savings or reduce household expenses by reducing food consumption because they feel personally ashamed to ask for loan. They did not dare to borrow some money from other people or conventional banks, due to the risk in the future. This is in line with the finding of Loh and Dahesihsari., (2013) who pointed out that many female entrepreneurs in Indonesia were able to overcome many of the social, cultural, and political restrictions placed upon them. Women proved that local women's capacity had grown beyond to the decision-making process, contributing to the advancement of resiliency at the individual, family, and community levels. Women skills at rebuilding resilience by synthesizing social, economic, and environmental aspects to achieve long-term sustainable development goals were especially outstanding (Hou and Wu., 2020). In fact, optimizing one's own resources might be better to achieve livelihood resilience than expecting help from others. By doing so, female floating market traders had a faster time to recover from the crisis. Their simple lifestyle helped much for being able to manage and control livelihood very well. Female floating market traders can better adapt when facing crisis situations in the form of shocks and stresses that threaten their household economy.

## **5 Conclusion**

Based on the analysis in this study, it can be concluded that female floating market trader's household have their own way to surviving. Female floating market traders was able to utilize their own resources optimally so as not to depend on the help from others. With all their physical limitations and resources, they were able to prove that they were strong enough to

become the main breadwinners for their families. Their choice to live simply, had caused better livelihood through avoiding being dependent from other's people help.

The female traders had also unique ways to survive by using social, economic, and ecological adaptation mechanisms that differ from male floating market traders. Their variety of adaptation could facilitate their flexible trading activities and highly mobility to reach more customers as well as minimizing physical risks from the Barito River. Based on the results of this study, it proves that female floating market trader who are considered physically weak and have limited resource ownership, were actually able to maintain a better life than that of male floating market traders. Hard work and optimal use of their own resources were able to make the household livelihoods of female floating market traders able to maintain and achieve better household livelihood resilience.

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