

Contribution of Lake Tondano Fish Breeder's Wife to Household Income in Eris Village, Eris Subdistrict, Minahasa Regency

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Abstract—Research on the contribution of women in efforts to support the husband's work generates additional income from the community of caramba fish breeders Nets in Lake Tondano District Eris Minahasa. Data collection is done by observation or direct observation. The population in this study was women as wives of fish farmers, where her husband conducted fish breeding activities with the Karamba Net system. The determination of data retrieval targets is done by interview while using the questioner to fill in the questions made to women like the wife of the cultivator in Eris Village, Eris Subdistrict, Minahasa Regency, questions include Participation / domestic role of women, what kind of work she does, how much time (hours) use in each doing this type of work. Furthermore, the participation / social role of women, often follow the work of devotion in the environment, meetings in the village, counseling activities, follow ppk activities; Participation / productive role in the field of fisheries: the type of work and the allocation of time and how much income per month, the reason the work is done by women and the obstacles faced by the time of doing the work.

The contribution of the income of the cultivated wife is 33.63%, where this contribution has an important role in the survival of the family can be fulfilled and support the needs in the family and community in Eris Village. This result shows that one-third of the family's living cost is the contribution of the wife of the fish breeder, which is why the wife not only serves the family and relies only on income from the husband but this contribution in addition to taking care of the household is also very important in supporting the income and meeting the needs of the family dependents.

Keywords— Contribution, women, Eris Village.

I. INTRODUCTION

The potential of natural resources in the common water area of Lake Tondano contained biological and nonbiological natural resources has good prospects to be developed to support the development of North Sulawesi province. Lake Tondano is a water resource that utilization of various multi-functions, where one of its functions is the business of Aquaculture which is currently still developed with Caramba Fish Cultivation Nets.

The data shows that the Placement of Net Karamba in Lake Tondano according to the Department of Marine

Affairs and Fisheries of Minahasa in 2017, Amounted to 12,178 units.

Pangemanan (2014), stated that the number of Karamba is no longer entirely cultivated fish cultivation is caused, fish farmers who are on average small capital cannot afford anymore, because feed for fish food prices continues to increase. As a result, most farmers are unable to continue their business. The results of the 2018 study showed that 50% of the Net Caramba is no longer empowered.

Women as wives or daughters in family life, feel the change in income in the household has been reduced and

began to be unable to meet the needs of the family as it should be. This encourages women in households to take part in work to supplement their household income.

Women's participation in the world of work, has contributed greatly to the welfare of the family, especially in the economic field. The number of working women continues to increase both in Indonesia and in other countries, due to several factors such as increased learning opportunities, the success of planning programs, many daycare centers, and technological abominations that allow women to stop as well as family problems and work problems, as well as increased work participation. Working women certainly increase household income, which is automatically able to improve the nutrition and health of the whole family. This makes each woman have two roles at once, namely the domestic role that takes care of the household and the public role that is in charge of outside the home or work in meeting the needs of her family life. For lower-class families, the involvement of the whole family is very helpful (Nurulmi, 2017).

Eris village is one of the villages located on the shore of Lake Tondano located in the Eris District of Minahasa Regency. Families in declining conditions indirectly make up the majority of households in the village triggering women's participation as cultivating wives to do work as part of family life. Women's participation contributes greatly to aquaculture businesses, in addition to helping to ease the work of husbands as farmers, also helping to increase household income.

In general, people think that the place of women is at home, women are not breadwinners, because the one who makes a living is a man or his role as a husband. Women work and earn adequate income as wives remain in status to help husbands, and the income they earn is considered complementary. The role of women in supporting the family economy has been going on since the emergence of the family institution itself. The division of duties between members of families, including women to organize home life is an economic activity (Munaroh, 2007).

Family economic limitations are what demands women as wives of fish farmers to work, because women's fish farming activities as wives play a very strategic role, especially in post-harvest and marketing of fishery products. According to Sutadi (2006), stated that the contribution of women as cultivating wives to household income can reach half of the husband's income. The results of widaningroem *et al.*, (1998) study on the south coast of Yogyakarta showed that although reproductive contributions are made by women, it turns out that it reaches 80% of the allocation of time every day when they do productive activities at home, and the contribution is

temporarily abandoned and handed over to their children or mothers/grandmothers.

Various jobs that women can do to be able to make a meaningful contribution in supporting family income, such as selling fish in the market, as retailers, food vendors, food stall traders, even as housekeepers. Activities carried out by women as wives can help the economy of the household of fish breeders themselves.

II. RESEARCH METHODS

This research is descriptive research using the basis of research that is surveyed. A survey is research conducted by collecting data, researching, and interpreting data, in general, is available in the Creswell field, 2009.

Data collection is done by observation or direct observation. The population in this study was women as wives of fish farmers, where her husband conducted fish breeding activities with the Karamba Net system. The determination of data retrieval targets is done by interview while using the questioner to fill in the questions made to women like the wife of the cultivator in Eris Village, Eris Subdistrict, Minahasa Regency, questions include Participation / domestic role of women, what kind of work she does, how much time (hours) use in each doing this type of work. Furthermore, the participation / social role of women, often follow the work of devotion in the environment, meetings in the village, counseling activities, follow ppk activities; Participation / productive role in the field of fisheries: the type of work and the allocation of time and how much income per month, the reason the work is done by women and the obstacles faced by the time of doing the work.

Data analysis of research results is distinguished into two kinds, namely quantitative descriptive analysis and qualitative descriptive analysis. Quantitative descriptive analysis is the processing of data using mathematical calculations, while qualitative descriptive analysis is the processing of data conducted with systematic author languages. The data that has been analyzed is then interpreted as the result of research and discussed or summarized according to field facts, regarding the journals of research results related to this study (Sugiyono, 2010).

To find out the amount of contribution of women as wives of fish breeders to household income can be calculated by the formula (Mantjoro, 1979), namely:

The net income of fish farming families is calculated from the total household income of fish breeders minus the total expenditure of household fish breeders.

III. RESULTS AND DISCUSSIONS

3.1. General Circumstances of Fish Breeder's Wife

Most wives are mothers in a household, where fish breeders are the head of their family. This cultivator's wife works not only to fill her free time, or to develop her career, but to do work to increase income in meeting the needs of her household because the income earned by her husband has not been able to meet the needs of the family or still lack.

The fundamental problem that is always faced by fish farming families is how to meet the increasing needs of life while the income received is still lacking. This situation requires the wife of a fish breeder to participate in helping the family economy. This is the driving factor for the wife of the fish breeder in Eris Village to contribute to increasing the family income. Various forms of livelihoods are done to support their family life.

The livelihoods of the wives of fish farmers in Eris Village consist of various livelihoods, among others as fish sellers in the market, food vendors, stalls, housekeepers, and some who work as civil servants (civil servants). More details can be seen in Table 1:

Table 1. The livelihood of Fish Farming Wife

No.	Livelihood	sum (people)	percentage (%)
1	Fishmongers at the market	3	15
2	Fish gatherers	4	20
3	Food vendors	8	40
4	Merchant/Kiosk	2	10
5	Housekeeper	1	5
6	Civil Servants	2	10
Total		20	100

An adequate level of education is one of the factors also needed in people's lives, where education is one of the indicators used to measure the level of development of a village. People who are members of one village, which has an adequate level of education, describe that the status of education is sufficient or good. Similarly to the wives of fish farmers in Eris Village, their level of education can be seen in table 2.

Table 2. Education level of fish farming wife in Eris Village

No.	Education Level	sum (people)	percentage (%)
1	primary school	2	10
2	Junior High School	5	25
3	High School	9	45
4	academy	2	10
5	bachelor	2	10
Total		20	100

The data showed that 45% of women as wives of fish breeders are good enough because they get an education up to the top secondary school level (SMA), this illustrates those women in Eris Village realize that education is needed even though it does not continue to the next level of college. When they have a family, it is the work that decides to be pursued to help the family income rather than continue their education. This is the basis of women's thinking in Eris Village that continuing their education is not solely their goal in dealing with family life.

One of the factors that are less important in determining how much income contribution of the Wife in doing a job through the types of work done is the age factor, this is very related to one's readiness in determining the productivity of the work. The age of the wife of the fish breeder who performs her activities can be seen in Table 3.

Table 3. Age classification of fish breeder's wife

No.	Age Level (year)	sum (people)	percentage (%)
1	≤30	3	15
2	31 – 40	9	45
3	41 – 50	5	25
4	51 – 60	1	5
5	>60	2	10
Total		20	100

Source: Primary data of research results, 2020

Family dependents are one of the factors that are taken into account in how much the family spends. This can be seen in Table 4.

Table 4. Number of dependents of fish farming families

No.	Family Dependents	sum (people)	percentage (%)
1	1	2	10

2	2	9	45
3	3	5	25
4	4	4	20
Total		20	100

Source: Primary data of research results, 2020

The results showed that 85% of women as wives of fish farmers in Eris Village belong to the productive age group. This means that age determines their work productivity and if finally, the results of this study showed 33.78% of family income is donated by the wife of the breeder because the age that productivity determines a person's performance.

Income is a determinant in living the daily life of the family, which is why it is very helpful for the family to continue their lives. The results of the study on the level of family income more specifically to families in running fish farming businesses can be seen in Tabel5.

Table 5. Income of fish breeders in Eris Village

No.	Revenue month (Rp)	Side Revenue/month (Rp)	sum (Rp)
1	2.200.000	-	2.200.000
2	4.200.000	-	4.200.000
3	4.500.000	-	4.500.000
4	2.000.000	1.000.000	3.000.000
5	2.500.000	1.500.000	4.000.000
6	3.000.000	2.000.000	5.000.000
7	3.000.000	-	3.000.000
8	3.350.000	1.250.000	4.600.000
9	2.250.000	-	2.250.000
10	6.500.000	-	6.500.000
11	2.750.000	500.000	3.250.000
12	3.500.000	750.000	4.250.000
13	2.500.000	500.000	3.000.000
14	4.000.000	-	4.000.000
15	5.000.000	-	5.000.000
16	4.250.000	-	4.250.000
17	3.250.000	1.000.000	4.250.000
18	2.500.000	1.250.000	3.750.000
19	3.150.000	750.000	3.900.000
20	6.000.000	-	6.000.000

Ttl	70.400.000	10.500.000	80.900.000
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Source: Primary data of research results, 2020

The income obtained by fish farmers in Eris Village varies, the lowest income is Rp 2,000,000 and Rp 2,500,000. This is because they are classified as labor only. In Eris Village, each worker is employed per month, they are paid a fee of that amount. In contrast to fish farmers who earn Rp 5,000,000 to Rp 6,500,000, those who earn like this per month because they are fish farmers who own caramba nets. Revenues can change higher because both those who work and the owner of the caramba nets add to each caramba unit. If at any time there is a decrease in income it also depends on the price of fish in the market.

Currently, the people of Eris Village, which has fish farmers, not only them but the whole world are experiencing the Covid-19 outbreak. Fish breeders currently earn by about 20% to 25%, because of the price of fish that applies before Covid-19 Mujair fish per kilo Rp 25,000 - Rp 27,000, but with Covid-19 then the price of fish drops to Rp 20,000 per kilogram even up to Rp 17,000 per kilogram if traders from outside Eris Village come to the fish harvest.

The average income of fish breeders in Eris Village from the results of the study turned out to be only Rp 4,000,000 / month by supporting the family of other needs, so such income is not enough to meet all the needs of the family. This is what encourages the cultivator's wife to work in increasing their family income.

Every fishery activity carried out, the role of family members in this case the wife is needed to support the family's economic life. The husband who serves as the head of the family is very important in living the home life. The wife as the mother of children who need clothing, food, and boards also plays a role in helping the husband in meeting all the needs of his family. The amount of income donated as a contribution to the family's income both in fishery business activities and outside fishery business activities. The income of the wife of the fish breeder can be seen in Table 6.

Table 6. Wife's income of fish breeder in Eris Village

No.	Income Level (Rp)	Fishery Business		Outside Fishery Business	
		sum	%	sum	%
1	1.000.000	-		8	53,44
2	1.500.000	-		5	33,33
3	2.000.000	3	60	-	
4	2.500.000	2	40	-	
5	7.000.000	-		2	13,33

Total	5	100	15	100
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Source: Primary data of research results, 2020

The life that every family life is a life that will continue, and this will not be separated from the needs that must be

used every day. Daily needs such as food, clothing, health, education, electricity, water, and other needs, of course, need to spend money for the results of existing income to meet these needs. Based on the results of the study on the level of family expenditure, can be seen in Table 7.

Table 7. Household expenditure of fish farmers in Eris Village

No.	food	clothes	Farm	education	health	Other	sum
1	1.150.000	150.000	-	200.000	500.000	250.000	2.250.000
2	2.000.000	1.000.000	200.000	750.000	500.000	500.000	4.950.000
3	1.500.000	-	200.000	1.000.000	600.000	600.000	3.900.000
4	1.000.000	150.000	-	-	250.000	150.000	1.550.000
5	1.500.000	500.000	-	250.000	250.000	500.000	3.000.000
6	2.500.000	1.000.000	250.000	1.500.000	150.000	500.000	5.900.000
7	1.000.000	500.000	-	250.000	-	150.000	1.900.000
8	500.000	-	-	-	250.000	150.000	900.000
9	750.000	250.000	-	150.000	150.000	200.000	1.500.000
10	1.250.000	500.000	-	200.000	-	100.000	2.050.000
11	1.500.000	1.000.000	-	150.000	200.000	100.000	2.950.000
12	1.250.000	-	-	-	200.000	150.000	1.600.000
13	2.000.000	500.000	250.000	250.000	200.000	150.000	3.350.000
14	1.750.000	250.000	-	-	250.000	200.000	2.450.000
15	1.500.000	150.000	-	-	150.000	100.000	1.900.000
16	2.000.000	500.000	200.000	300.000	250.000	200.000	3.450.000
17	2.500.000	500.000	-	350.000	100.000	200.000	3.650.000
18	1.250.000	-	-	150.000	-	200.000	1.600.000
19	1.000.000	-	-	150.000	-	150.000	1.300.000
20	1.500.000	250.000	500.000	150.000	500.000	500.000	3.400.000
Σ	29.400.000	7.200.000	1.600.000	5.800.000	4.500.000	5.050.000	53.550.000

Source: Primary data of research results, 2020

The income generated by the farming family in Eris Village, which is calculated using the total income of the cultivator plus the main income as a cultivator. All income is summed up, then the wife's income is calculated both from fishery and non-fishery are all summed up.

Based on the results of each of the husband's income and wife's income are all summed up, then reduced by the total expenditure of the family of the breeder, namely expenditures from clothing, food, boards, etc. The result of this reduction is called the family's net income. For the calculation of family, income can be calculated, it will be taken the average income of the family of fish breeders in Eris Village, so that in calculating how much the percentage of income contribution of women as wives of

fish farmers to the income of the family, then we can quickly calculate it. The average income of fish farming families in Eris Village, Eris Subdistrict, can be seen in table 8.

Table 8. Income of fish breeder family in Eris Village

No.	Family Income	Number of Fish Culture Families	percentage (%)
1	1.000.000 – 3.000.000	7	35
2	3.100.000 – 4.000.000	6	30
3	4.100.000 – 5.000.000	4	20
4	> 5,000,000	3	15

sum	20	100
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Source: Primary data of research results, 2020

The net income of the fish farming family is the husband's income plus the wife's income. The results showed that out of 20 respondents who were husbands the total amount of their income in one (1) month was Rp 80,900,000 while all respondents who were wives there were 20 people, their income totaled Rp 41,000,000, so the husband's income plus wife's income was Rp 80,900,000 + Rp 41,000,000 = Rp 121,900,000.

To get a net result per month, it must be reduced again by the total expenditure of the family of fish farmers. The result for total expenses (Table 11) amounted to Rp 53,550,000. So the net result per month amounted to Rp 121,900,000 less than Rp. 53,550,000 = Rp 68,350,000 per month. Taken by the average individual, the net income per month is Rp 68,350,000 divided by 20 people = Rp 3,417,500 per month, this means that each family's net income is Rp 3,417,500.

3.2. Contribution of Fish Breeder's Wife's Income to Family Income

The contribution of wives in a household is not only complementary in reproductive function but women also make a big contribution to the economy and welfare of households and communities (Elfindri, 2003). Working women will increase household income, which automatically improves well-being in the family.

The participation of the wife of a fish breeder in Eris Village in various activities both non-fishery nor fishery business in supporting her family life, both as a Housewife has made a significant contribution, to cover the lack of income from the head of the family. The results prove that the increase in family income is due to wife participation because of trying to work in increasing the family income. Pangemanan, J.F. (2018) stated that the family income increased by 80% due to the diversity of businesses conducted by the wife of a fish breeder in Eris Village. The participation of the wife of the fish breeder has a positive effect on the family income.

The contribution of the income of the wife of the fish breeder in Eris Village is quite large in helping the family's economic life. The results illustrate that the total income of the wife of fish breeders from 20 respondents, both from the type of work in the fishery as many as 5 people, non-fisheries as many as 15 people (Table 10). The net income of the family of fish breeders is calculated from the total family income minus the total expenditure of the family so that the contribution of the income of the wife of the fish breeder to the family income can be calculated as follows.

$$= \frac{\text{Wife's Income}}{\text{Family Income}} \times 100\%$$

$$= \frac{41.000.000}{121.900.000} \times 100\%$$

$$= 33.63\%$$

This result shows that the contribution of the income of the cultivating wife is 33.63%, where this contribution has an important role in the survival of the family can be met and support the needs in the family and community in Eris Village. This result shows that one-third of the family's living cost is the contribution of the wife of the fish breeder, which is why the wife not only serves the family and relies only on income from the husband but this contribution in addition to taking care of the household is also very important in supporting the income and meeting the needs of the family dependents.

IV. CONCLUSION

The participation of the wife of the fish breeder in Eris Village in various activities both non-fishery nor fishery business in supporting her family life, both as a Housewife has made a significant contribution, to cover the lack of income from the head of the family.

The contribution of the income of the cultivating wife is 33.63%, where this contribution has an important role in the survival of the family can be met and support the needs in the family and community in Eris Village. These results show that one-third of the family's cost of living is the contribution of the wife of the fish breeder.

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