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ECONOMIC CONDITIONS AND STRATEGY WITH GILLNET FISHERMANS IN THE PANDEMI ERA COVID-19 (DISEASE CORONA VIRUS 2019)

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ABSTRACT

This study aims to analyze the economic conditions of fishing households; fishermen's income and survival, the direction or trend of changes in consumption and investment (savings) spending, analyzing the effects on household purchasing power, and analyzing fishermen's survival strategies to face the Covid-19 pandemic. The study was conducted at three locations in the waters of Bantaeng Regency, South Sulawesi Province. Type of survey research. Research sample of Gill Nets fishermen. The analytical method used in quantitative descriptive analysis includes; (1) income analysis; $PD = TR - TC$, (2) analysis of the purchasing power of fishing households; $Db = (Yt / C) \times 100\%$ and analysis of the direction of consumption and saving expenditure trends; $MPC + MPS = 1$ and $APC + APS = 1$ (3) percentage descriptive analysis. Research results (1). Covid-19 pandemic influences the amount of fishermen's income. Revenue decreased. The percentage decrease is not linear with the household primary expenditure. Spending has fallen below 10% while fishermen income has fallen above 20%. (2) The resulting effect is that purchasing power has fallen to 77.70%, the ability of fishermen to meet household needs is only 49.73% (-50.27%). (3) fishermen survival strategies, optimizing household economic resources, attracting savings, releasing assets and forming investment capital.

Keywords : Covid-19, economic conditions, gillnet fishermen income, consumption and investment, fisherman household survival strategies

Introduction

Covid-19 Pandemic (Corona Virus Disease 2019), with Hasteg #dirumahaja requires that people limit their range of movement and economic activity. The government's call for distance and home alone has a significant impact on the socio-economic community.

Covid-19 is a global disaster. Government preparedness faces an impossible situation for the increasingly epidemic of Covid-19 that is needed by the community. Self-isolation, lockdown makes the economic rate more severe. The level of consumption weakened which affected several economic supporting indicators. Food supply and declining demand caused prices to rise. This will cause scarcity of goods, which ultimately triggers social unrest. (Putra Sitompul, 2020).

Detailed calculation of the socio-economic community, gave birth to a policy of refocusing activities and budget reallocation to accelerate the handling of Covid-19, related to health issues and social assistance to overcome economic problems. Maintain the availability of basic commodities and maintain the purchasing power of the community, especially laborers, day laborers, UMKM, farmers and fishermen. (Covesia.com, 2020)

Purchasing power is the ability of a person or society as consumers to buy goods and services or consume a product. Purchasing power is characterized by an increase or decrease in the ability of an individual or group of people

(Hernaningsih, 2015; Adhawati *et al.*, 2017b; Pomantow *et al.*, 2019). Purchasing power is obtained from the comparison of buying ability in the previous period and the current period. Pandemi covid-19, caused a shift in the purchasing power of fishing households and correlated with the level of welfare. The condition of fishing households experiences economic instability. According to Molcajete *et al.* (2007) although no one has managed to neatly define the scope of the economy. But certainly, the economy is the business of life that is most closely related to individual and social actions, concerning the material conditions of welfare. Covid-19 has devastated the welfare of fishermen as individuals or social groups. The economic activity of fishermen dropped dramatically and the income of fishermen also changed, even according to Winarno (2020) dipping to the bottom of the abyss.

Fishermen live in economic and social limitations. Economic limitations appear in the low income level of fishermen. Limited income is not sufficient to meet all primary and secondary needs both food and non-food consumption. Fishermen are unable to take part in profitable market economic activities. According to Ayu (2020) a strategy to help increase purchasing power is to utilize non-cash food assistance programs, conditional cash transfers, cash for work (cash intensive work) and work cards. But over time, the policies and assistance received by fishermen have not been able to stabilize the fishermen's financial condition.

the correlation between economic activity and fishermen income looks very strong. The strength of the fishing household is starting to waver. The new normal condition which is sounded as a continuation policy that will be imposed by decision makers, gives little hope and is welcomed with joy by fishermen. Although fishermen do not understand the concept of new normal in detail, but a simple understanding of fishermen is that they will be able to return to their activities even with a few restrictions. The important point for fishermen is to be able to move, go to sea like before and have income again.

This study aims to analyze the economic conditions of fishermen, analyze how much the income of fishermen and the ability to survive fishermen. analyze the direction or tendency of consumption expenditure to change. analyze how much effect is caused on the ability or purchasing power of fishermen, and how the strategy of maintaining fishermen maintain the balance of the household economy. While the usefulness of research is to find solutions and strategies for fishermen to maintain the balance of the household economy, in the face of the COVID-19 pademic.

Materials and Method

The research was conducted in two stages. The first phase, March-November 2019 and the second phase, February - May 2020. The study was conducted in three locations, namely location one (Bissapu), location two (Bantaeng) and location three (Pa'jakukang) in Bantaeng district, South Sulawesi Province. Data analysis using quantitative descriptive analysis includes; (1) income analysis with the equation $PD = TR - TC$, where TR is the value of catch and TC is the total cost. (2) analysis of fishermen household purchasing power with the equation $Db = (Yt / C) \times 100\%$ where (Yt) is total income and C is household expenditure, analysis of consumption expenditure and savings directions with the equation $MPC + MPS = 1$ and $APC + APS = 1$ where MPC is marginal propensity to consume, MPS is marginal propensity to saving, APC is average propensity to consume and APS is average propensity to saving (3) descriptive percentage analysis to analyze fisheries survival strategies. This type of research is a survey research that is research that takes samples from one population using a questionnaire (Sugiyono, 2015). The population of the research is gill nets fishermen. The research sample was taken 10% from a population of 187 fishermen, respectively; 36 samples at location one, 53 samples at location two and 98 samples at location three. (BPS Bantaeng Regency, 2018; BPS South Sulawesi, 2019)

Results

1. Fisherman Catch Value.

Catch value is the most influential factor on fishermen income (Wibowo, Triarso and Suroyya, 2018). Catch value is the value of money received from fishing activities carried out by fishermen in a certain period (Adhawati *et al.*, 2017a). The catch value is obtained by multiplying the number of catches and the selling price of the catch commodity. The catch value of fishermen before and pandemicovid-19 at the three study sites is shown in Figure 1.

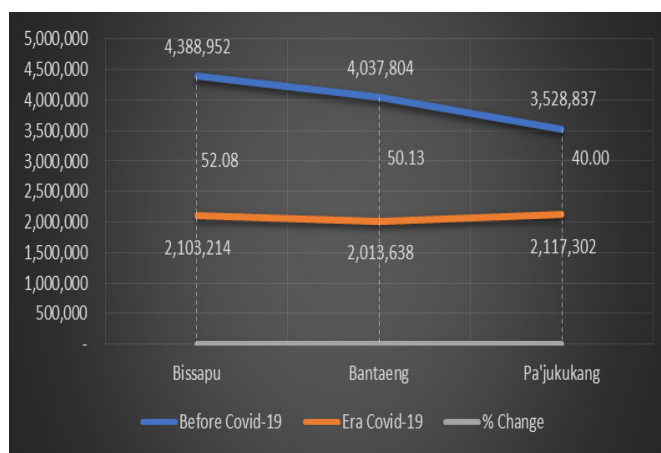


Fig. 1 : Catching Value Before and In the Covid-19 Pandemic

Figure 1. Shows a change in the value of fishermen's catches. Covid-19 pandemic caused the catch value of gill net fishermen in the three research locations to drop significantly on average by over 40%. At location one (Bissapu) the value of catches decreased by 52.08%, at location two (Bantaeng) 50.13% and at location three (Pa'jakukang) 40.00%.

2. Total Cost

Fisheries socio-economic indicators, such as fishing costs and income, play an important role in economic analysis (Lam *et al.*, 2011). Understanding the cost structure will bring business actors to the business advantage. (Steven, 2018). Costs are all sacrifices incurred for a production process expressed in units of money according to the prevailing market price, both those that have occurred and will occur. Costs consist of fixed costs and variable costs. Some costs can easily be determined as fixed or variable costs (Pascoe, Vieira and Thebaud, 2015). Fixed costs are costs incurred with the same value, during the period of the activity takes place, and variable costs are costs incurred with a different amount of value based on the activity during the period of activity takes place. At the three study sites, the intended costs consisted of; investment depreciation costs, boat maintenance costs, fishing gear, engines, diesel costs, oil, consumption, cigarettes etc. The total cost of the fishermen before and in the Covid-19 pandemic era at the three study sites is shown in Figure 2.

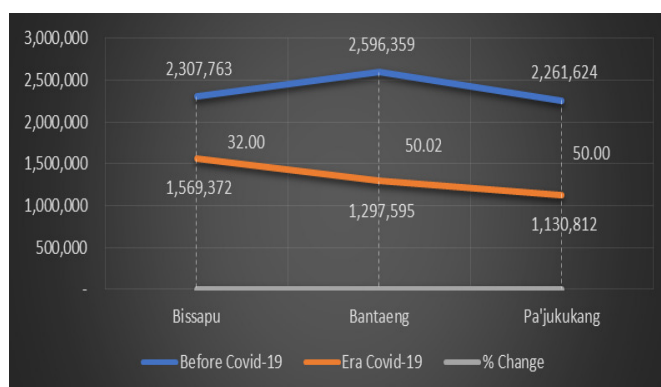


Fig. 2 : Total Cost of Catching Business Before and In the Covid-19 Pandemic

The reduction in fishing activities by fishermen in the face of the Covid-19 threat correlates with the total cost of fishing. Figure 2 shows a decrease in the amount of costs incurred by fishermen. Fishermen at location two (Bantaeng)

and location three (Pa'jukukang) experienced a 50% reduction in costs while fishermen at location one (Bissapu) experienced a 32% reduction in costs.

3. Fishermen's Income

Income is the value of money that is ready to be spent or household income obtained from services or businesses within a certain period. In the context of the study, income is derived from the reduction between the value of the catch and the costs incurred during the period. Fishermen income at the three study sites is shown in figure 3.

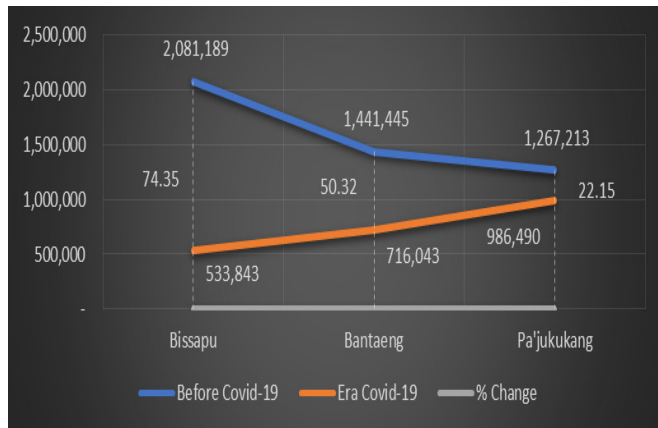


Fig. 3 : Fishermen Income Before and In the Covid-19 Pandemic

Figure 3. Shows that the covid-19 pandemic, influences the average income of fishermen. Under conditions of not working fishermen do not have income, the level of welfare of fishermen drops, the financial ability of fishermen to meet household primary needs is limited (Adhawati and Mallawa, 2019). Household income affects consumption (Jang and Chang, 2014). Covid-19 pandemic caused a decrease in fishermen's income at location one (Bissapu) by 74.35%, fishermen at location two (Bantaeng) 50.32% and fishermen at location three (Pa'jukukang) by 22.15%.

4. Household Expenditures

Household expenditure is household aggregate expenditure which is carried out routinely in one period. For research content aggregate expenditure is grouped into 5 basic expenditure groups namely; food, housing, health, education and clothing. Fisheries household expenditure before and in the co-19 pandemic era, at the three study sites, can be seen in figure 4.

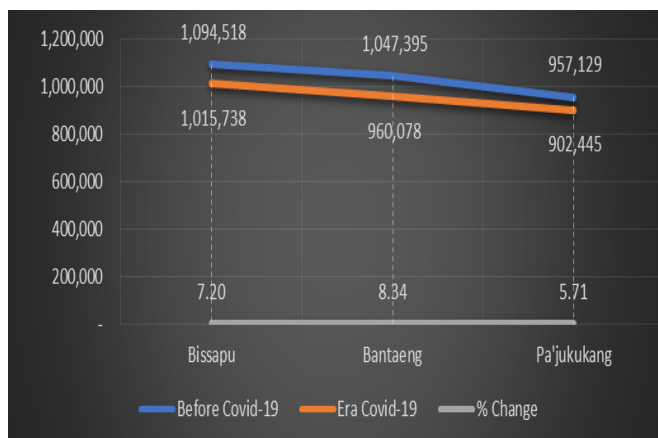


Fig. 4 : Fishermen Household Expenditures Before and In the Covid-19 Pandemic

Expenditures are the primary basic needs of fishermen. Figure 4. shows that the covid-19 pandemic did not have a significant effect on the amount of household expenditure. In a situation facing a covid-19 pandemic, fishermen in location one (Bissapu) only limit or reduce household aggregate expenditure by 7.20%, as well as fishermen in location two (Bantaeng) and in location three (Pa'jukakang), respectively only limit or reduce household expenditure by 8.34% and 5.71%.

Discussion

Fishermen's Income and Household Purchasing Power

Purchasing power is the ability of fishermen to meet household primary needs. The indicator used to measure the ability of fishermen is income (Adhawati 2018). Revenue is an important indicator of adaptive capacity. Reduced income will increase the vulnerability of life (Triyanti & Firdaus, 2016). Covid-19 pandemic caused fishermen's income to decrease significantly. Fishermen in the study location do not have other sources of income other than as fishermen. Hasteg #dirumahaja, Home from work (HFW) although not intended specifically for the fishing profession, but has a significant effect on the catch of fishermen. Before the covid-19 pandemic occurred fishing activity was relatively high at 6 days a week. Fishermen's adherence to government appeals and triggered by the decrease in demand for catch commodities, causing fishermen to reduce fishing activities. The decrease in fishing activities causes the value of catches, operational costs and income of fishermen to decrease (figures 1, 2 and 3). Ironically, the decline in income is not followed by a decrease in household aggregate expenditure (figure 4). Facing the Covid-19 pandemic, fishermen only reduce household spending below 10%. The percentage decrease in expenditure is not linear with the percentage decrease that occurs in fishermen income. In the three study sites the average income of fishermen dropped above 20% (figure 3). This condition triggers a shift in the ability of fishermen to provide for the family's primary needs. The purchasing power of fishermen decreases as shown in figure 5.

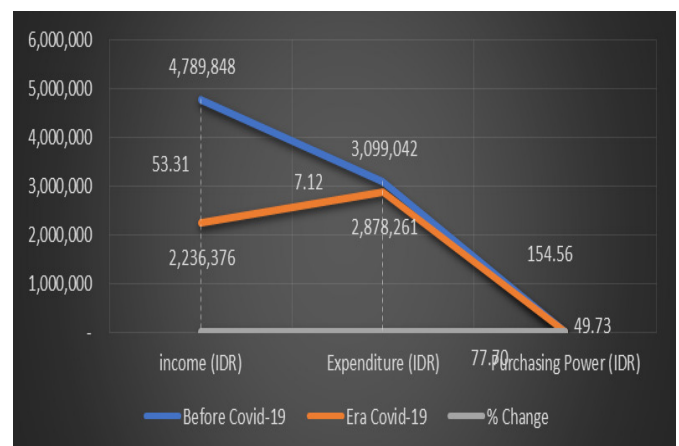


Fig. 5 : Purchasing Power of Fishermen Before and In the Covid-19 Pandemic.

In the period before the covid-19 pandemic, the purchasing power of fishermen was 154.56%, in the era of the covid-19 pandemic, the purchasing power of fishermen fell to 77.70%, so that the ability of fishermen to meet their household needs remained at 49.73% (-50.27%).

Fisherman Survival Strategy

The condition with the position of fishermen's survival ability of 49.73% (figure 5.) brought fishermen to the economic condition is very alarming. the economic balance of shaken fishing households. A change in the direction of aggregate consumption and fishermen's savings. Even according to Mimit *et al.* (2016) it raises poverty opportunities. in difficult conditions in normal conditions (non covid-19) to be able to survive, fishermen usually take advantage of the patron-client relationship that is a special relationship that is a personal relationship and contain intimacy. Fishermen make use of horizontal relationships such as kinship and institutional relationships, vertical relationships such as ponggawa-sawi relations and optimize household resources by making savings or spending restrictions (Sinaga, Widiono and Irnad, 2015; Sudiyono, 2015; Sufirudin, 2016). In the co-19 era pandemic where economic difficulties occurred evenly and thoroughly in all fishing households. to get help by utilizing horizontal and vertical relationships there is very little chance to be done. therefore to be able to survive, the fishermen in the research location carry out a strategy, optimizing their household economic resources, as follows.

1. Attract (Use) Savings

Attracting savings as a fisherman's survival strategy, is built on the assumption that all income received by fishermen is spent on buying consumer goods, ie goods and services produced by the domestic business sector, and the residual income that is not spent is saved as household savings for fishermen. The savings value of fishermen households before and in the Covid-19 pandemic is shown in figure 6

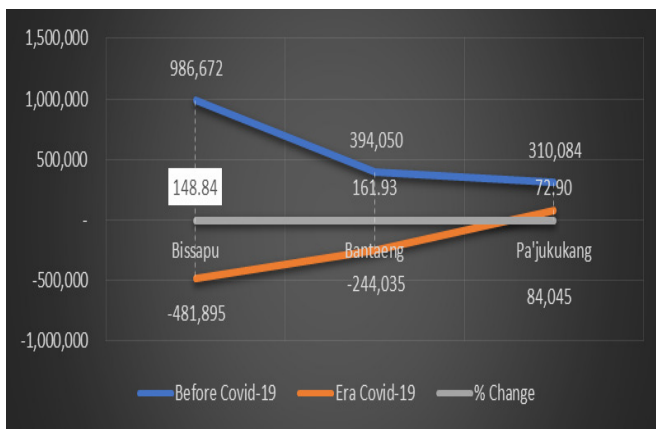


Fig. 6 : Fishermen Household Savings Before and In the Covid-19 Pandemic

The covid-19 pandemic affected fishermen household savings. Figure 6. shows the withdrawal of fishermen's savings in very large amounts. The percentage of withdrawal of savings to cover household aggregate expenditure by fishermen in location one (*Bissapu*) reached 148.84%, followed by fishermen in location two (*Bantaeng*) by 161,923% and fishermen in location three (*Pa'jukukang*) by 72.90%. Withdrawals of savings above 100% by fishermen in location one and location two, causing the savings to be minus Rp.481,895 and Rp.244,035 / month, respectively.

2. Releasing (selling) Assets

Releasing assets in the form of immovable assets (electronic goods, gold jewelry) and movable assets (motorized vehicles) is intended by fishermen as an effort to cover the lack of reserve funds (savings) owned by

households to meet the family's primary needs. The flow of funds received by fishermen from selling movable and immovable assets, can help fishermen a little, to meet family consumption needs. However, there is almost no savings or expenditure limitation behavior seen by fishing households. Figure 7. shows that there was an imbalance between the amount of funds received by fishermen from selling movable and immovable assets as a source of income for fishermen with the amount of fishermen's household consumption expenditure. When households are in difficult conditions, marginal consumption actually increases more than before (without covid-19).

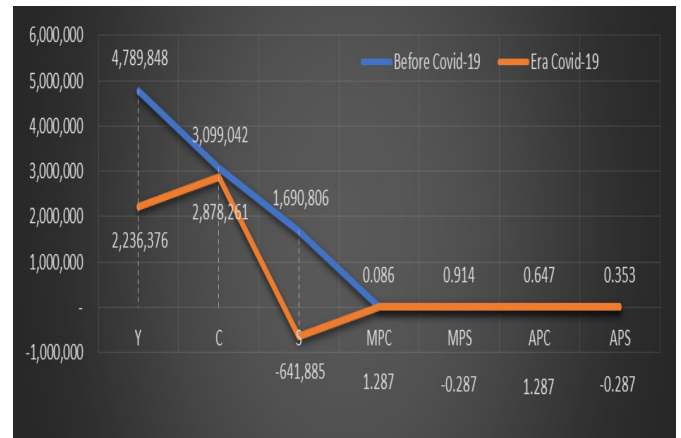


Fig. 7 : Direction of Consumption and Savings of Fishermen Before and In the Covid-19 Pandemic.

Before the covid-19 pandemic, the direction of marginal consumption (MPC) of fishermen households was 0.086, this value was smaller than the marginal fishermen's savings (MPS) of 0.914, where the average direction of consumption (APC) of fishermen was 0.647 greater than the average the average direction of savings (APS) for fishermen is 0.353. Pandemi covid-19 reverses the direction of consumption and savings of fishermen. The fishermen's MPC looks even greater, rising by 1,287 points. This means that fishermen's MPC rises beyond the ability of fishermen, so to meet household consumption needs, fishermen withdraw savings / sell movable assets by 0.287 points. Covid-19 causes the purchasing power of fishermen to be very low, fishermen are in an expansion condition that is a condition where the amount of fishermen's income is lower than the total household aggregate expenditure. This condition is further aggravated by not supported by austerity movements. The desire or inclination toward consumption is greater. Fishermen may not be able to survive facing the covid-19 pandemic, if fishermen remain in an expansionary condition, with consumption patterns in an increasingly greater direction.

3. Government policies and third party assistance.

The relatively long covid pandemic period (March-May) has a significant effect on the survival power of fishermen. #*Dirumahaja* government policy does not generate revenue. Economic assistance received by fishermen in the form of logic from the central government and regional governments, both in the form of nine staples (groceries) for daily living needs and assistance in the form of money given directly into the fishing households (Akhmad and Hidayat, 2020), have not been able to bring fishermen in the research location, back to the condition of household

economic balance. what fishermen need is economic activity. According to John *et al.* (2017) to get out of the problem (poverty), productivity is needed. this is in line with the theory of keyness in Sadono Sukirno (2004) economic balance can be achieved by providing assistance that will form savings (investment). Therefore facing the covid-19 pandemic situation, what fishermen need is assistance that will form investment capital. fishermen lean back and hope fully on policy makers. Fishermen hope that there are urgent and bold policy measures, not only to withstand a pandemic and save lives, but also to protect fishing households from economic collapse through capital formation (investment), and to be followed by policy strategies that are able to drive market demand for captured commodities. fisherman. Fathoni, Rachman and Arasy (2019) stated that fishermen would end up in economic balance if recovery of market demand for fishermen's catches was carried out.

Conclusion

Covid-19 pandemic affects the amount of household income and the direction or trend of investment (savings) of fishermen. Fishermen's household expenditure dropped below 10% and fishermen's income dropped above 20%. The percentage decrease in household expenditure and fishermen income are not linear. This condition triggers a shift in the ability of fishermen to provide the family's primary needs. The effect on the ability or purchasing power of fishermen is the decrease in purchasing power up to 77.70%, so that the ability of fishermen to meet their household needs is only 49.73% (-50.27%). Overcoming this problem, in order to be able to maintain the economic balance of fishermen's households, fishermen adopt a survival strategy by optimizing household economic resources, attracting savings, releasing assets and hoping for third-party cash assistance that will help shape investment capital

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