

**THE ANALYSIS ON FACTORS AFFECTING INCOME LEVEL OF FISHERMAN
(A CASE STUDY ON FISHERMAN IN THE COASTAL AREAS OF KRANJI
VILLAGE OF PACIRAN SUBDISTRICT IN LAMONGAN REGENCY)**

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**THE ANALYSIS ON FACTORS AFFECTING INCOME LEVEL OF FISHERMAN
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This study aims to identify the simultaneous and partial effects of capital, age, work hours, experience, selling price, and catches on the income of fishermen in the Kranji village of Paciran subdistrict in Lamongan regency. The variables of this study, i.e. capital, age, work hours, experience of selling prices, and catches, were examined thoroughly using observation, interview, and documentation.

The population of this study are 730 fishermen, from which 90 people were selected as the sample. The data was analyzed using multiple linear regression.

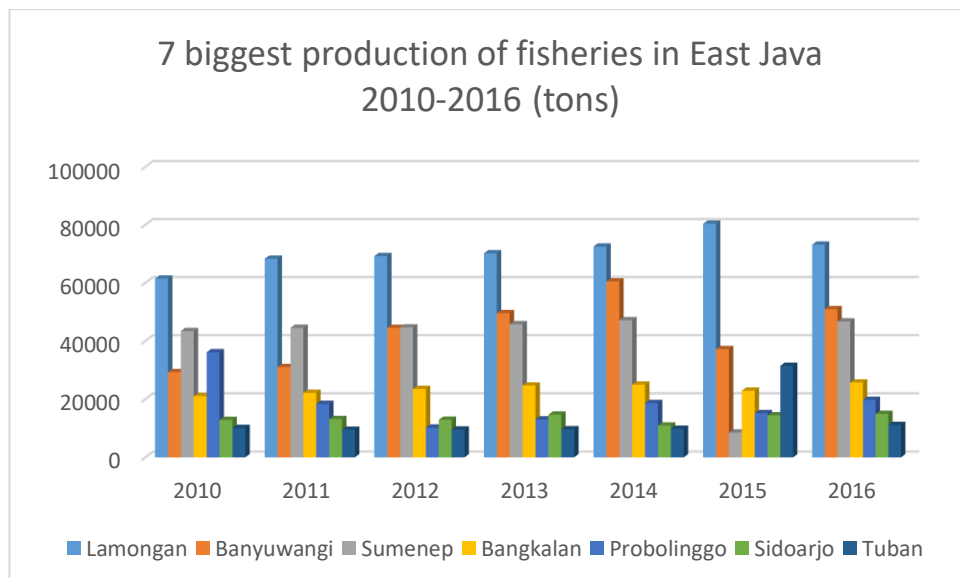
This study finds that capital, age, work hours, experience, selling price, and catches simultaneously have significant influences on the income of fishermen in Kranji Village of Paciran subdistrict in Lamongan regency. Furthermore, capital, age and work hours partially don not have any significant influence the income of fishermen in Kranji village of Paciran subdistrict in Lamongan regency. While the experience, selling price, and catch variables partially have a significant influence on the income of fishermen in Kranji village, Paciran subdistrict, Lamongan regency. In addition, selling price is dominant in influencing the income of fishermen in Kranji village of Paciran subdistrict in Lamongan regency at 29.1%.

Keywords: *capital, age, work hours, experience, selling price, catches*

INTRODUCTION

Studies on fishing communities largely focus on its socio-economic aspects. Their results indicate that fishing community is one of the social groups that are intensely affected by poverty. Poverty is caused many interrelated factors, and it weakens the ability of communities to develop their region and improve their social welfare. Therefore, poverty is one of the main issues in the development of coastal areas (Michel, 2010). The background of the problem is the lack of fishing equipment and the high price of fuel oil as well as the business capital needed in fishing activities at sea. On the other hand fishermen need to meet their daily needs, this has resulted in many people who work as fishermen in the poverty line because their incomes are not proportional to their consumption levels. According to the data from Statistics Indonesia, the number of poor fishermen in Indonesia in 2011 is 7.87 million people, 25.14 percent of the total national poor population of 31.02 million (Robin, 2012).

Lamongan remains a regency with the largest contribution to East Java's fisheries, shown in the following table.



Source: Statistics Indonesia of East Java Province 2010-2016

The table above shows the annual increase of fisheries production in Lamongan regency; 61437 tons in 2010, 68302 tons in 2011, 69216 tons in 2012, 70150 in 2013, 72497 in 2014, and 80361 in 2015. However, a decline occurred in 2016, from 80361 tons to 73142 tons.

From the explanation above, the researcher is interested in identifying the impact on factors affecting income level of Fisherman with the variables: capital, age, work hours, experience, selling prices, and catches. Thus, the author conducted a study entitled The Analysis on factors affecting Income Level of Fishermen (A Case Study on Fishermen in the Coastal Areas of Kranji Village of Paciran Subdistrict in Lamongan Regency)

LITERATURE REVIEW

Fisherman Income

Fishermen income is the main source of fishermen to meet their needs life. According Sukirno (Rahim and Diah. 2012), in general, income is defined as remuneration for work, capital and natural production of certain activities by reducing various costs incurred from the value of production.

Technically, profit is calculated from the result of the reduction of total cost from total revenue. In economic analysis, costs are also classified into two: fixed costs and variable costs.

According to Sharma and Sharma (1981), Debertin (1986), and Soekarwati (1995) in Rahim and Diah (2012: 124), net income or business profits can be formulated as follows:

$$\pi = TR - TC \dots\dots\dots$$

Profit is denoted by π , total income is **TR**, and total costs are equal to **TC**.

Indonesian Fisheries

Indonesia has a vast and strategic range of marine and coastal areas and small islands that serve as the pillar of its national economic development (David Setia M., 2016). Indonesia's potential is so abundant that it can be expected to become the leading sector of its national economy. In order to make this potential optimally and sustainably used, this the government, community, and entrepreneurs must share responsibilities so that community income and state revenues that lead to people's welfare can be increased.

According to David Setia M. (2016), the sustainable potential of Indonesian marine fish resources of 6.5 million tons per year is spread in Indonesian waters and the Indonesian Exclusive Economic Zone (ZEEI), which is divided into nine main Indonesian territorial waters. Of all the potential resources, in order to maintain the sustainability of fish stocks, the number of permitted catches (JTB) is set to 5.12 million tons per year. Therefore, there are still opportunities to develop capture fisheries in areas where Fish Resource is still not optimally utilized.

Relationship between Capital and Fishermen's Income

According to Case & Fair in Economic Principles (2007: 268), capital is goods produced by an economic system that is used as input to produce goods and services in the future. The definition of capital consists of two types of capital. Capital is divided into two types, namely tangible capital and intangible capital. Tangible capital is the one used in the company. Intangible capital is the one that can be felt directly and is determined by each individual.

TYPES OF CAPITAL		
No	Physical Capital	Intangible Capital
1	Machine	Human Resource
2	Boat	Patent
3	Building	Knowledge
4	Inventory	Technology

Source: Case & Fair Issue 8 (2013; 268)

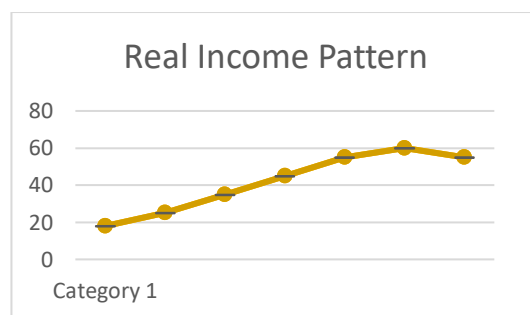
Capital goods are those produced by an economic system that is used as input to produce other goods and services in the future. Capital goods therefore produce productive services that are valuable from time to time. The capital category consists of two funds, namely tangible and intangible capital. The main category of intangible capital is, first, residential buildings (for example, offices, factories, warehouses, docks, shopping centers), second, equipment (machinery, trucks, cars, etc.), third, buildings and housing, and fourth, inventory of inputs and output stored by the company.

Capital for fishermen are main things that must be available for their activities in the sea, such as boat, fish net, diesel engine, diesel fuel, and skills. This capital is their means in fishing to earn income. Capital in fisherman activities

is absolutely necessary, because fishermen are not fishermen without their equipment, and their production is determined by the capital used in fishing. With large capital, fishermen will be able to catch fish. The capital is in the form of adequate fishing equipment.

Relationship between Fishermen's Age and Income

Age is the length of a person's life in year calculated from birth. Roger (2000) stated that age and income profile until to a certain extent, income increases with age. Beyond that limit, increasing age is accompanied by a decrease in income. The upper limit of the peak point is estimated at the age of 45 to 55 years. The age pattern of real income as a large worker has a form, as shown in this figure is called as age-income profile in a certain extent.



The image was obtained from Roger LeRoy Miller and Roger E. Meiners in Intermediate Economic Micro Theory, from page 585 to 587. It depicts age and income profiles to a certain extent, and that income increases along age and working period. Beyond that limit, increasing age is accompanied by a decrease in income. The upper limit of the peak is estimated to be at the age of 45 to 55 years. Their marginal physical products are lower than the average marginal physical products of older and experienced workers. Second, working day, or week and so on, which people are usually engaged in begins to decrease after 45 to 55 years old because his endurance and health begin to decline. Their productivity starts to decline and their income decreases. Until then they stop working, and their income line is gone.

Relationship between Fishermen's Work hours and Income

Work hours is the number of hours offered by the workforce, measured in weekly working hour unit. Lipsey (1985) in kiranasari yoshinta (2010) Work period

is calculated from the first time a person enters into a job until the time the research is conducted, which is measured in years. Working hours are very important in producing or producing more fish, the higher the working hours of fishermen in going to sea, will be able to produce more fish so that income will increase.

Revitalization of work hours in the lives of fishermen in Indonesia is determined by the duration of fishermen's operation, which is around 10-15 hours. They are out for work from 3:00 a.m. to 3:00 p.m. in Fridays, from 10:00 p.m. to 08:00 p.m. in other days. This is caused by several things, such as the destruction of marine ecosystems in Indonesian environment and overfishing. Those affect fishermen's level of income.

Relationship between Fishermen's Work Experience and Income

According to Notoadmojo (2003) in Darmayunita (2012), knowledge is the result of knowing, and this happens after someone senses a particular object. Without knowledge one does not have any basis for making decisions and determining actions for problems at hand. Based on the description, work experience can provide benefits for people in carrying out their work activities so that they do not feel any difficulty in working.

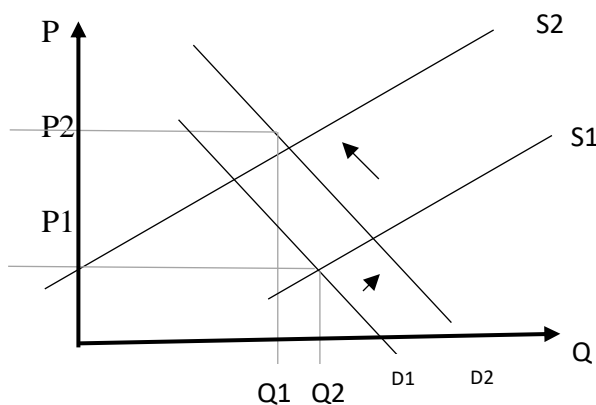
Work experience is a person's main capital to engage in a particular field (Sastrohadiwiryono (2005: 163) in Rofi (2012)). In addition, work experience is something or the ability possessed by employees in carrying out given tasks (Nitisemito, 2000: 86 in Rofi, 2012). This means that ease and difficulty faced by a person in his job is affected by his work experience.

Relationship between Price and Fishermen's Income

According to Suhartati (2003) in microeconomic theory, price is the price of a commodity (a certain item), whereas in macroeconomic theory, price is related to the overall price level. According to William J. Canton (1994) in Rhendria (2010) price is a number of values exchanged by consumers for the benefits of owning or using other products or services set by the buyer or seller for the same price for all buyers. In Case & Fair's book, price is the amount sold by a product per unit, and it reflects some of the available pay made by the public. Based on this

understanding, besides that price is a factor that influences one's income, prices can also measure the value of an item that will be sold.

Apart from the various names, in the life of fishermen, price is a sum of money or services or fish that are exchanged by buyers for the catch of fishermen or services carried out by labor. According to Monroe (1990) in Rhendria (2010) price is an indicator of how much sacrifice is needed to buy a product and an indicator of the level of quality.



Changes in the balance of price and quantity depend on the changes and supply themselves. The picture above shows that an increase in demand is accompanied by a decrease in unequal offers, which causes prices to increase and the amount of goods requested to decrease. This happens in the lives of fishermen, especially in income. In the life of fishermen, the price of marine fish is not fixed, so their income is not stable. During fish season, the price of fish tends to be low because the fish is so abundant, so the price tends to be low. On the contrary, during famine, the price of fish tends to be high, and the demand for fish decreases because the price of fish is high, so consumers are not interested in buying fish at high prices. The price of fish offered by producers to consumers are relatively stable and does not increase, which means that fishermen do not get more profit from the sales.

Relationship between Catches result and Fishermen's Income

Fishermen always expect fish catches to increase every day. This can cause fishermen's income to increase continuously. According to Suhartati in

Theory of Microeconomics (2003: 139), producers are considered to always choose a level of output (Q) that produce maximum total profits, conditions that maximize the difference between total income and total costs. This theory can be applied in the lives of fishermen. If they can choose, fishermen prefers maximum level of output that continues to grow every day, just as the theory of total revenue (TR) proposed by Roger (2000: 163) which states that various prices of units multiplied by the number of demand. This is the amount of income received by the seller of a valuable product, P for a number of Q units sold.

Marginal revenue (MR) is defined as the amount of changes in total income related to changes in one-unit amount of sales. Based on Roger's theory, it can be interpreted that the more fish caught by fishermen, the greater the potential income of fishermen. Fish is defined as an output unit that is able to generate income received by fishermen so that the more fish catches, the more potential income that fishermen can get.

Hypotheses

It is suspected that capital, age, work hours, experience, length of fishing and machine size have a significant effect on the income of fishermen in Kranji village of Paciran subdistrict in Lamongan regency.

RESEARCH METHODOLOGY

Research Population and Data Collection Methods

Based on its nature and form, the data used in this study is quantitative data. Based on its time dimension, the data used in this study is cross-section data. Furthermore, the data of this study is primary data in the form of direct data collected from interviews with respondents using research tools or interview guidelines, as well as from observations on things related to capture fishermen. In addition, secondary data was also used, obtained from the Statistics Indonesia (BPS) of Lamongan regency and East Java province.

This study uses non-probability sampling with *incidental sampling*. Incidental sampling determines samples by chance; anyone who are (incidentally) found by the researcher and considered suitable with the characteristics of the specified sample can be selected as the sample. For instance, in a study on factors

that influence fishermen's income, the characteristics of the sample are people whose age is above 15 years and work as fishermen, then anyone who are found at the fish auction place in the area can be sampled.

Arikunto (2008:116) said that In determining the number of samples, offered a minimum sample size for descriptive research, i.e. 10 percent of the population, while a very small population requires a minimum of 20 percent. The population of Kranji fishermen is 730. Thus, the number of samples this study is 73 people, 10% of the number of fishermen in Kranji village.

Analysis Method

In this study the researcher used multiple regression analysis because this study uses a multivariate variable with one dependent variable, which is a matrix. This method is useful to identify the magnitude of independent variable's influence on the dependent variable. The multiple linear regression model in this study is as follows.

$$Y = C + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + e$$

Where:

Y	= Fishermen's income in Kranji village (IDR)
C	= Constant
$\beta_1, \beta_2, \beta_3, \dots, \beta_6$	= Regression coefficient
X1	= Capital (IDR)
X2	= Age (year)
X3	= Work hours (hour)
X4	= Working Experience (year)
X5	= Selling Price (IDR)
X6	= Catches (Kg)

RESEARCH RESULTS AND DISCUSSION

The Characteristics of Respondents Based on Capital

The capital used by fishermen while at sea includes food or supplies while and diesel fuel. Meanwhile, while fishing, fishermen only need mineral water,

coffee and rice for breakfast, and their side dishes are obtained from their catches. The capital used by fishermen in one go to sea is as follows. The current price of diesel is IDR 5,150. The fishermen need 33 liters. One trip to the sea spends IDR 679,800, a small boat needs approximately IDR 257,500.

The Characteristics of Respondents Based on Age

When someone is elderly there is one reason to continue their work or not, because everyone has different thoughts. Including fishermen, they have no exception to the age to carry out their profession as fishermen. The data of this study show that the youngest respondent is 23 years old and the oldest respondent is 60 years old. To make it easier to describe the age of fishermen in Kranji village, the age division is done based on groups. The following data is the age of Kranji village fishermen.

The Characteristics of Respondents Based on Age

No.	Fisherman Age	Amount	Percentage (%)
1	20 – 29	30	33.33%
2	30 – 39	34	37.77%
3	40 – 49	19	21.11%
4	50 – 59	4	4.44%
5	>59	3	3.33%
Total		90	100%

From the table above, it can be seen that the age of fishermen starts at the age of 20 years. The distribution of respondents according to the age level of the biggest fishermen in Kranji village, Paciran subdistrict, Lamongan regency is at the age interval of 30-39 years with the number of fishermen of 34 people or 38%. While the distribution of respondents according to the age level of the smallest fishermen is at the age of >59 years with the number of fishermen of 3 people or 3.33%.

The Characteristics of Respondents Based on Work hours

The absence of fisherman workhours rules at sea causes differences in work hours between fishermen. The habits practiced by Kranji village fishermen in determining the duration of fishing are very different between each fisherman.

Many fishermen maximize their fishing time to get the maximum fish catch. The following data is about the fishermen fishing time in Kranji village.

The Characteristics of Respondents Based on Work hours

No.	Working Hours	Amount	Percentage (%)
1	10 Hours	22	24.44%
2	11 Hours	8	8.88%
3	12 Hours	9	10%
4	13 Hours	51	56.66%
Total		90	100%

It can be seen that the distribution of respondents with the largest work hours in Kranji village, Paciran subdistrict, Lamongan regency is at an interval of 13 hours. The percentage is 56.66%. While the smallest are 11 hours with a total of 8 fishermen. The percentage is also only 8.88%.

The Characteristics of Respondents Based on Experience

Experience is inseparable from the life of the fishermen in Kranji village. The experience is described as a characteristic of the success of a fisherman to his profession. In the life of fishermen, experience also influences the catch. Experience in the fishing profession is very much needed by every fisherman in Kranji village. Therefore, there is a need for data on the level of experience of fishermen to prove whether these variables significantly influence the income of fishermen in Kranji village. Data on fishermen experience can be presented as follows:

The Characteristics of Respondents Based on Experience

No.	Experience	Amount	percentage (%)
1	0 – 5	28	31.11 %
2	6 – 10	29	32.22 %
3	11 – 15	10	11.11 %
4	16 – 20	16	21.11 %
5	> 20	7	7.77 %
Total		90	100 %

From the above table it can be seen that the level of experience of fishermen starts at the age of 0 - 5 years. The distribution of respondents according to the age level of the biggest fishermen in Kranji village, Paciran subdistrict, Lamongan regency, is at the age of 6-10 years with the number of fishermen of 29 people or 32.22%. While the distribution of respondents according to the experience of the smallest fishermen was > 20 years at sea with the number of fishermen of 7 people or 7.77%.

The Characteristics of Respondents Based on Selling Price

The price of fish in Lamongan is greatly influenced by natural and weather conditions. As the concept of demand and supply where during a lean season which is usually influenced by natural conditions and weather will cause fisherman productivity to decline. This will have an impact on fish prices that soar above the average price. The opposite condition when the fish season where natural and weather conditions support fishing activities so that fish catches are abundant and cause fish prices tend to be cheap. The following is the comparison of the price of fish during the fish season:

The Characteristics of Respondents Based on Selling Price

No.	Fish Price	Amount	Percentage (%)
1	30.000	45	50%
2	35.000	33	36.66%
3	40.000	12	13.33%
Jumlah		90	100%

From the table above it can be seen that the distribution of respondents with the highest fish price in Kranji village, Paciran subdistrict, Lamongan regency is at an interval of IDR 30,000 with a total percentage of 50%, while those with the smallest is the price of IDR 40,000 with a percentage of 13.33%.

The Characteristics of Respondents Based on Catches

Fish catches are goods that can later generate income for fishermen. The more fish catches that fishermen get, the greater the potential income. Every fisherman in Kranji village has different fish acquisition. The following are data obtained from the respondent fishermen.

The Characteristics of Respondents Based on Catches

No.	Catch amount	Amount	Percentage (%)
1	6 - 8 kg	10	11.11%
2	9 - 11 kg	28	31.11%
3	12 – 14 kg	32	35.55%
4	15 – 17 kg	20	22.22%
Jumlah		90	100%

It can be seen that the distribution of respondents with the biggest catches in Kranji village, Paciran subdistrict, Lamongan regency is at an interval of 12-14 kg. The percentage is 35.55%. While the smallest one is 6-8 kg with only 10 fishermen. The percentage is also only 11.11%.

Normality Test

Normality test done to indicate whether the residue value is scattered normally or not. The procedure of the test done by using Kolmogorov-Smirnov with the condition: The hypotheses are as follows.

H0: residual is scattered normally

H1: residual is not scattered normally

If the value of sig. (p-value) > 0.05 then H0 accepted means that the normality is qualified. According to the table result, the value of sig. is 0.488 or higher than 0.05; then H0 is accepted. Thus, the normality is qualified.

Autocorrelation Test

The test can be done by using Durbin-Watson (DW-test) test. The underlying hypothesis is as follows:

$H_0 : \rho = 0$ (there is no autocorrelation in residual)

$H_1 : \rho \neq 0$ (there is an autocorrelation in residual)

According to Durbin-Watson table for n = 90 dan k = 6 (number of independent variable) du value is 1.801 and 4-du is 2.199.

This Result indicates the value of Durbin Watson test that is 1,824 between 1.801 and 2.199, then it can be concluded that the assumption of no autocorrelation is qualified.

Multicollinearity test

The result of the test indicates the value of tolerance $> 0,1$ then it can be concluded the multicollinearity does not occur between the independent variables. Multicollinearity test can also be done by comparing VIF value (Variance Inflation Factor) with number 10. If VIF value > 10 then multicollinearity occurs. In a nutshell, there is no multicollinearity in each independent variable. Then, the assumption test of no multicollinearity is qualified.

Heteroscedasticity test

Procedural test done by using scatter plot test. Homogeneity test underlies from hypothesis bellow:

H0: residual variance is homogenous

H1: residual variance is inhomogeneous

From the analysis indicates that the scatterplot diagram is scattering and not shaping particular pattern so there is no Heteroscedasticity occur, so it can be concluded that the residual have homogenous variance (constant) or in other words, there is no tendency of Heteroscedasticity.

Regression Equation

The regression model is presented below

$$Y = 1,678 - 0,000011 X_1 + 0,007 X_2 + 0,118 X_3 + 0,282 X_4 + 0,587 X_5 + 0,898 X_6$$

Regarding to the interpretation above, Age (X2), Work Hours (X3), Work Experience (X4), Selling Price (X5), and Catches (X6) has positive influence in Fishermen's Income in Kranji village. In other words, if there is the increasing of Age (X2), Work Hours (X3), Work Experience (X4), Selling Price (X5), and Catches (X6) increase, then it will be followed with the escalation of Fishermen's Income in Kranji village.

Coefficient of Determination (R²)

From analysis of Coefficient of Determination, we get the result of adjusted R (coefficient of determination) is 0.571. Means that 57.1% Fishermen's Income in Kranji village variable will be influenced by another independent variable which are: Capital (X1), Age (X2), Work Hours (X3), Work Experience (X4), Selling Price (X5), and Catches X6). Whereas another 42.9% of Fishermen's Income in Kranji village variable will be influenced by another variable undescribed in this study.

R values (coefficient correlation) is 0.774, correlation value indicating the relation of independent variables such as Capital (X1), Age (X2), Work Hours (X3), Work Experience (X4), Selling Price (X5), and Catches X6) with Fishermen's Income in Kranji village is consider as strong category because it exist in the range of 0,6 – 0,8.

F test

F test or model test is done to obtain the significance of regression analysis result or the appropriateness of expected model. If significant, then H0 is rejected and H1 is accepted. If the result is not significant then, H0 is accepted and H1 is rejected.

According to the result, F test is 20.736. While F Table ($\alpha = 0.05$; df regression = 6: df residual = 83) is 2.210. Because F test > F Table which is 20.736 > 2.210 or sig. F (0,000) < $\alpha = 0.05$ then regression model analysis is significant. It means, H0 is rejected and H1 accepted. Thus, dependent variable (Fishermen's Income in Kranji village) influenced significantly by independent variable (Capital (X1), Age (X2), Work Hours (X3), Work Experience (X4), Selling Price (X5), and Catches X6)).

t test

t test Partial

Independent Variable	t Count	Sig.	Information
Capital	-0.720	0.473	Not Significant
Age	0.060	0.952	Not Significant
Work Hours	0.194	0.847	Not Significant
Experience	2.074	0.041	Significant
Selling Price	2.135	0.036	Significant
Catches	3.174	0.002	Significant

Source: Primary data analysis

Based on the result, t test in this study is the independent variable which partially has a significant influence on the income of fishermen is Experience, Selling Price and Catches.

Discussion

The Influence of Experience on the Income of Fishermen in Kranji village

According to Notoadmojo (2003) in Darmayunita (2012), knowledge is the result of knowing, and this happens after someone senses a particular object. Without knowledge one does not have any basis for making decisions and determining actions for problems at hand.

Likewise, fishermen in Kranji village, although they are relatively young, with the most experienced Fisherman 6-10 years with 32.22% in analysis. As in capital, experience is an important part of fishing. In this study, Experience is one of the factors that significantly influence the income of fishermen. The more experienced the fishermen, the more knowledge in fishing, and the more fish they get. In Kranji Village also, more Experienced Fisherman they got more high position in a group of fishing. Thats why this variable has significant influence on income.

The Influence of Selling Price on the Income of Fishermen in Kranji village.

According to William J. Canton (1994) in Rhendria (2010) price is a number of values exchanged by consumers for the benefits of owning or using other

products or services set by the buyer or seller for the same price for all buyers. The Price of Fish in the context of this paper is the price of fish sold. The fish sold in the fish auction is distributed to factories, restaurants, and markets.

The results of the study show that fish traders in Kranji already have an agreed price standard. This is influenced by the magnitude of the price of fish in the uniform market. In general, fish are sold at IDR 30,000 - IDR 40,000, mostly IDR 30.000 at 50%.

The price of fish in Lamongan is greatly influenced by natural conditions and weather. As a concept of supply and demand where during a lean season which is usually influenced by natural conditions and weather will decline fisherman's productivity. This will affect the price of fish, making it soaring above the average price. In this research, Selling Price is one of the factors that significantly influences the income of fishermen.

The Influence of Catches on the Income of Fishermen in Kranji village

According to Suhartati in Theory of Microeconomics (2003: 139), producers are considered to always choose a level of output (Q) that produce maximum total profits, conditions that maximize the difference between total income and total costs.

In this study, catches is the most significant factor affecting the income of fishermen in Kranji village. The more fish caught, the more income that will be received by the fishermen. This reinforces the theory of Marginal Revenue by Roger (2000) about that the more fish caught by fishermen, the greater the potential income for fishermen. The most percentage of fish catch is 12 to 14 kg, or 35.55%.

The result of this research suggests that the income of Kranji fishermen can be influenced significantly by Catches. An increase in the Catches will increase the income of fishermen in Kranji village. Fish is defined as an output unit that is able to generate income received by fishermen so that the more fish catches, the more potential income that fishermen earn. Fishermen's catch fish is defined as output per unit that can be generated into the income of the fishermen, so that the more fish caught the more fishermen get new income potential.

CONCLUSIONS AND SUGGESTIONS

Conclusions

Based on the calculation of multiple linear regression analysis, the followings are obtained.

1. The simultaneous effect of each independent variable on income is calculated using F-test. The result of the multiple linear regression analysis suggests that independent variables simultaneously have a significant effect on income. Thus, it can be concluded that the hypothesis which states that the simultaneous influence of the independent variables on income can be accepted.
2. To determine the effect of individual (partial) independent variables Capital (X1), Age (X2), Work hours (X3), Experience (X4), Selling price (X5), Catches (X6) on the dependent variable, namely Income (Y) is done by t-test testing. Based on the test result found that there are three variables that have a significant influence on income, namely Experience (X4), Selling Price (X5), Catches (X6)
3. Based on the result of the t test, it was found that the catches had the largest t value. So that the catches has the strongest influence compared to other variables, and the Catches has the dominant influence on income.

Suggestions

Based on the conclusion above, several suggestions can be put forward to the company and other parties; they are as follows.

1. It is expected that the company can maintain and improve services to increase catches because it has a dominant influence on income, including improvement in technology.
2. Considering that the independent variables in this study are very important in influencing income, it is expected that the result of this study can be used as a reference for the future researchers to develop this

research by considering other variables outside the ones included in this study.

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