DOI <https://doi.org/10.18551/rjoas.2018-12.38>

INSTITUTION'S BUSINESS ROLE TO IMPROVE SMALLSCALE FISHERMAN'S HOUSEHOLD INCOME

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ABSTRACT

Fish resources on the sea, which are accessible and classified as common property, cause competitive rivalry among fishermen. It mainly affects 87.5% of small-scale fishermen's in Indonesia that are identified in poverty. The encountered problems are that marketing and production of the institution are not optimal and the fishermen's mindset is still subsistence. One of solutions to increase small-scale fishermen's revenue is by processing the fish catches in a traditionally smoked fish method. In addition, to strengthen the institution of local economy, government implements a PNPM program by establishing a business institution called as KUB / Poklashar. The sampling method was a purposive sampling. Data analysis used chi square test to analyze the relationship between business institution with household incomes and the saving amounts of fishermen. From the results, it yielded positive impacts among the members of business institution, particularly in the household income and the saving amounts of fishermen.

KEY WORDS

Business, institutions, income, smoked fish, business.

Fish resources are common goods that attract many parties to exploit their potentials, enacting intensely competitive and open competition among fishermen.

At present, the number of small-scale fishermen of catches in Indonesia is 87.5% of the total (KKP, 2014). Thus, economic activity is still dominated by small scale fishermen who have low productivity due to traditional-based capacity of equipments and identified with poverty.

Poverty in the fishermen households consists of structural poverty that occurs because the social structures of fishermen tend to benefit large fishermen (capital owners); meanwhile, cultural poverty happens when cultural factors do not support natural progress and poverty is caused by natural conditions. One of some dominant factors causing structural poverty among fisherman households is institutional factor, e.g., marketing institution and production institute (Tain, 2011).

Institutional sourced from the fulfillment of basic needs that form the rules and norms in society will be the basis of the establishment of an institution and become the essence of the culture that is within it (Ratmoko, 2011).

With the conditions experienced by small-scale fishermen, their efforts to increase the income is to process the catch simply by using smoked fish method. Strengthening economic institutions built from local fishing communities is also indispensable and acts a solution to existing structural poverty.

One of the Government programs related to strengthening local economic institutions through the PNPM Mandiri or Self-Empowerment National Community Development Program in the form of Rural Business Development (PUMP) provides a number of productive economic funds to the group of fishermen / cultivators (KUB) and processors and marketers (Poklashar) as early establishment of fishery cooperatives (CTF, 2015).

There are four function of institutional are 1) creating a fair market, 2) preventing market failure by improving economies of scale and minimizing transaction costs, 3) maintaining macroeconomic stability (market stabilizing) and 4) provides market security (market legitimizing). (Arsyad, 2010).

From the introduction, the objectives of the research are to analyze the role and relationship of business institutions in an effort of increasing the income of small-scale fishermen.

METHODS OF RESEARCH

The method used in this research is a case study research. According to Nazir (2003), case studies are investigating the status of research subjects with respect to the specific phases of the whole personality. The subject of the research can be individuals, groups, institutions and communities. The purpose of the case study is to provide a detailed overview of the background, traits and characteristic of the case or status of the individual for generalization.

Sampling method uses multi stage clusters method because the sampling frame is not available or too large so that it takes a long time and big cost in the preparation of study. The clusters method classifies the unit of analysis in the population into clusters, which are units from which the sample will be taken. The number of groups taken as the sample must be randomly selected. Sampling is performed through certain stages. Thus a population can be divided into first-level clusters, then from first-level cluster, the groups are then divided into second-order cluster and so on (Singarimbun, 1987).

In the first stage, districts that have a lot of small fishing fleet motor with engine power with at least 6 PK are selected. One of them is Trenggalek Regency, Indonesia, because the number of fishing fleet is quite large, amounting of 9656 people. The second stage is choosing the district with the condition of diversity among fishermen at the district level. In this case, Watulimo District is selected, with the largest number of fishermen of 6,897 people with 12 villages. The third stage is a selection of area that has the highest number of neighborhoods and the result goes down to Tasikmadu Village with 43 households. Furthermore, selected households meet the conditions of availability of necessary instruments e.g., outboard motor with 12 PK powered engine and fishing line).

From the survey, there are 8 respondents using fishing lines and producing smoked fish, meanwhile the fishing households with fishing rods that do not cultivate also sought 8 respondents. Thus, the total samples are 16 respondents. Data analysis method uses qualitative and quantitative approach. The qualitative approach is used to analyze the relationship between fisherman's association with the owners of capital (pengamba / middleman) and the daily business (borrowing in stalls, bank user and others) and identify the role of KUB / Poklashar in the increase of in small fisherman households' income. The quantitative approach is used to analyze those relationships by using chi square test. Chi-Square test is used to test the hypothesis about the comparison between the observed or actual frequency with the expected frequency. Chi-Square test is one of the non parametric statistical test and useful to test the relationship or influence of two nominal variables and measure the strength of the relationship between one variable with other nominal variables (C = Coefficient of contingency). Chi Square formula is:

$$X^2 = \frac{\sum(f_o - f_e)^2}{f_e} \quad (1)$$

Where: X^2 = Chi – square value; f_o = Frequency data amount; f_e = Frequency that expected.

Hypothesis as follows:

- H_0 means no relationship between variables;
- H_1 means there is relationship between variables.

There are two ways to make a decision:

Comparing Chi-Square result with Chi-Square table:

- If Chi-Square calculates < Chi-Square table, then H_0 is accepted;
- If Chi-Square calculates > Chi-Square table, then H_0 is rejected.

Based on the probability:

- If the probability is ≥ 0.05 , then H_0 is accepted;
 - If the probability is < 0.05 , then H_1 is accepted.
- SPSS 16 is used to analyze statistical data with chi square.

RESULTS AND DISCUSSION

Related to the financial resources, the fishermen commonly rely on personal fund, pengamba, KUB and cooperative institution. In the village of Tasikmadu, all fishermen have cooperation with pengamba / middlemen in the fishing operations business which is known as patron-client system. It is a partnership between two parties. In this study, the patron is pengamba / middleman while the client is a fishing pole. This system occurs because pengamba / middlemen control the marketing of fish in the research area so that fishermen do not know the actual selling price of fish other than that pengamba / middlemen also provide a capital loan because the fish catch is not erratic. The bigger the loan given by the pengamba / middlemen, the lower the "bargain" position of the fisherman. The simplest attachment is pengamba / middlemen that provides the cool box and ice blocks so that the fisherman sells the catch to the pengamba / middlemen while the stronger attachment is pengamba / middlemen also lends money, machine or ship to fishermen with reciprocity is the fishermen get the price of the catch is lower in accordance with the amount of loans provided. The following types of capital owners who give loans to respondents can be seen in Table 1 below.

Table 1 – Kind of Capital Owner that give Loan to Respondent

No	Kind of Capital Owner	Amount (person)	%
1	No loan	6	37,5
2	Pengamba'	2	12,5
3	KUB/Cooperation/Bank	4	25,0
4	Pengamba and Cooperation/KUB	4	25,0
	Jumlah	16	100,0

It can be seen in Table 1 that pengamba / middlemen 'is a non-formal capital institution that lends a big amount of fishing loans to fishermen using patron-client system but fishermen begin to reduce the attachment by borrowing to KUB, cooperatives or using their own capital collected from the proceeds save. This happens because the patron-client system is perceived as unfavorable to fishermen if they are too dependent on pengamba / middlemen.

The Government's efforts through the National Community Empowerment Program (PNPM) Mandiri since 2009 have succeeded in establishing the group of Fishermen (Kelompok Usaha Bersama - KUB) as well as the growing Group of Processors and Marketers (Poklashar). At the location, it grows to 56 KUB with 11 KUB small fishermen and 1 Fisheries Cooperative unit while the number of Poklashar as many as 10 Poklashar with 3 Poklashar for fogging business. Based on the result of chi square test, it can be seen that there is a significant correlation between business group (KUB / Poklashar) with household income of small fisherman and the amount of saving that can be seen in Tables 2-3.

Table 2 – Chi Square test of Respondance Household Income with Business Institution's

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.349 ^a	1	.012		
Continuity Correction ^b	4.063	1	.044		
Likelihood Ratio	6.904	1	.009		
Fisher's Exact Test				.041	.020
Linear-by-Linear Association	5.952	1	.015		
N of Valid Cases ^c	16				

a. 4 cells (100,0%) have expected count less than 5. The minimum expected count is 3,50.

b. Computed only for a 2x2 table

Based on the result of chi square test analysis in Table 2, the value of pearson chi-square is greater than chi square table ($6,349 > 3,811$) with P value less than 5 percent ($0,012 < 0,005$) so it can be concluded that H_0 is rejected and H_1 accepted which means there is a positive relationship between the participation of fisherman households into members of the business enterprise with the income of small fishermen households.

If the small fishermen join the business entity, the income will increase. Otherwise, if small fishermen do not participate in business entity, the income will be low. It occurs because one of the business entity's role in fishing business is to provide capital loans to the members so that the attachment of fishermen with pengamba ' / middlemen 'is reduced which resulted in the purchase price of fish from pengamba ' / middlemen higher while in the business of curing capital loans and location marketing in the tourism area increases the selling price of smoked fish.

Table 3 – Chi Square Test of Respondent Household Saving with Business Institution's

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.874 ^a	1	.048		
Continuity Correction ^b	2.133	1	.144		
Likelihood Ratio	4.020	1	.045		
Fisher's Exact Test				.126	.072
Linear-by-Linear Association	3.632	1	.057		
N of Valid Cases ^b	16				

a. 3 cells (75,0%) have expected count less than 5. The minimum expected count is 3,06.

b. Computed only for a 2x2 table

Based on the result of chi square test analysis in Table 3, pearson chi-square value is greater than chi square table ($3,874 > 3,811$) with P value less than 5 percent ($0,048 < 0,005$). So it can be concluded that H_0 is rejected and H_1 gives meaning of a positive relationship between the participation of fishermen households into members of the business entity with the amount of savings they have. So if the small fishermen join the business institutions then the amount of their savings relatively larger, otherwise small fishermen do not participate in the business then the amount of their savings relatively smaller. This is because fishermen's households that are members of business institutions often hold meetings at least once a month and hold *gotong royong* (joint service). In the meeting, the members are required to pay monthly dues, create voluntary savings, make savings and loan and apply as members to make saving as regular thing.

CONCLUSION

KUB / Poklashar is a business institution established by fishermen based on the result of mutual agreement supported by the Government which aims to help members to be more independent in conducting business activities so as to increase their household income. The role of the business entity is: (1) to provide economic capital for the member (economic of scope); (2) to provide training in business activities related to product quality improvement and improvement of business management; (3) facilitate access to information and technology (technology transfer), (4) improve access to marketing (networking), (5) increase productivity and business efficiency that can be seen from the economical of scale and (6) increase bargaining power. The government has gradually provided evaluation with the main certificate granting for the business institution performing well to be encouraged to form a fishery cooperative that suits the needs and self-managed by the members. From the research result, one fishery cooperative has been successfully formed by Forum KUB small fisherman in karanggongso. Based on chi square test results obtained a positive relationship between being a member of a business institution with household income and the amount of household savings.

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