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THE INFLUENCE OF WORKFORCE AND INVESTMENT ON THE PERFORMANCE OF THE FISHERY SECTOR IN BEKASI DISTRICT

Fauzan Shodiq[1] , Achmad Rizal[2], Evi Liviawaty[2], Atikah Nurhayati[2]

[1]) Students of the Faculty of Fisheries and Marine Sciences, Padjadjaran University
[2]) Staff Lecturer at the Faculty of Fisheries and Marine Sciences, Padjadjaran University
, Fisheries Study Program, Faculty of Fisheries and Marine Sciences, Padjadjaran University
Jl. Raya Bandung - Sumedang Km 21, Jatinangor 40600
Email: fauzanshodiq@gmail.com

ABSTRACT

This research aims to to analyze the effect of the number of workforce and investation to the performance of the fisheries sector in Bekasi Regency. This research was conducted in Bekasi Regency. The research began in March 2019 until September 2019. The method used was the correlation test and multiple linear regression analysis and explained in quantitative description. Data obtained through desk study studies on the number of workforce, investation value, and production value in the fisheries sector in the form of workforce data from 2009 to 2017 in Bekasi Regency. Based on the results of research the variable number of workforce (X1) in the fisheries sector and investation value (X2) in the fisheries sector influence the performance as seen from the production value (Y) of the fisheries sector in Bekasi Regency. The most significant factor affecting the performance of the fisheries sector in Bekasi Regency is X2, the investation value of the fisheries sector, while X1, which is the number of the workforce, does not significantly influence. The solution that is needed is the role of the government in facilitating fishermen, fishery product processing businesses and cultivators to increase the value of fisheries production while increasing the number of workers from year to year in Bekasi Regency.

Keywords: *Total Workforce, Investation, Performance Of The Fisheries Sector, Bekasi Regency*

INTRODUCTION

Bekasi Regency is one of the districts in West Java, with a population of 2017 of 3.5

million (BPS 2018). Population density in Bekasi Regency is 2,748 people /km^2, the number of households in 2015 was 869,454, with an area of 1,484.37 km^2, 23 sub-districts and 187 villages. The districts with the smallest number of villages are Central Cikarang, Bojongmangu and Muaragembong, while the sub-district that has the highest number of villages is Pebayuran District. The largest district is Muaragembong (14,009 Ha) or 11.00% of the total area of the district (Jabarprov 2017).

Bekasi Regency in 2017 has an investment plan of 3,549,869,670,000 rupiah, with a targeted workforce of 15,049 people. The investment design value is divided into several sectors, one of which is the fisheries sector. The value invested in the fisheries sector is 911,050,000 rupiahs whose value is greater than the planned target. the value of realized labor is 8,739 people whose value is smaller than the target set (PMPTS 2018). Based on the number of forces and the value of investment in 2017 in Bekasi Regency can affect performance in Bekasi Regency as Budiharsono said (1996) that There are several factors that can affect performance in an area including natural resource factors which include natural resources and human resource potential (labor force). The next factor is the economic factor because this factor plays a major role in the size of investment in a region, and this factor also affects interest rates, the contribution of economic sectors, *demand* market, infrastructure availability and the level of technology. Government policies can also affect the performance of an area because it is related to regulations that are applied in an area.

Development performance in an area can be seen from the value of Gross Regional Domestic Revenue (GRDP), because according to A. Rizal (2013) GRDP of an area is a reflection of the development performance of the region. Based on BPS data (2018) the value of Bekasi Regency's GRDP for the fisheries sector for 2015 was 2,338,145.9 rupiahs, for 2016 it was 2,479,075.4 rupiahs, and for 2017 it was 2,264,023.7 rupiahs, seen from these values it turns out to be fluctuating. The number of labor force and investment are two factors that can affect performance in Bekasi Regency, while the value of Bekasi Regency's performance can be seen from the value of its GRDP. Looking at fluctuating GRDP data, it is necessary to review how the relationship between the number of labor force and investment to the performance in the fisheries sector in Bekasi Regency.

RESEARCH METHOD

The research method is carried out with technique *literature survey* data collected both through decision surveys which are then analyzed quantitatively and presented descriptively. The data used consists of primary data and secondary data. Primary data is more focused on the performance of the fisheries sector both economic, social, environmental and institutional sectors as well as the problems faced. This primary data is needed to find

out how far the performance of the fisheries sector in the region.

Secondary data was obtained through *desk study studies* to gather information on previous research and the latest developments regarding the number of labor force, investment, and performance, especially in the fisheries sector in general. Secondary data used includedata on the *time series* number of fisheries workforce, the value of fisheries investment and the value of fisheries production in Bekasi Regency for 9 years.

These two factors are independent variables which will be known how much influence each variable has on the performance of the fisheries sector. At the same time to find out the most influential factors significantly. Data analysis methods used in this study are quantitative description methods, testing the model used consists of correlation tests, multiple linear regression analysis, f test, t test, and the coefficient of determination.

RESULTS AND DISCUSSION

Results of data analysis using *SPSS 16 software.* In order to obtain the best regression results, it must meet the following statistical criteria:

Correlation

Test correlation test is used to determine the degree of relationship and contribution of independent variables to the dependent variable. The independent variable in this correlation test is the number of Bekasi Regency fisheries workforce and the amount of Bekasi Regency fisheries investment while the dependent variable is the amount of Bekasi Regency fisheries production value. The correlation between the number of fisheries workforce with the value of fisheries production is a strong correlation that is equal to 0.780 because it is at a vulnerable value of 0.60-0.799 and has a positive correlation value close to 1 which means that if the fisheries workforce (X1) has increased the number of values fisheries production (Y) will also increase.

Table 1. Correlation Test Results

		Fishery Production Value (Y)	**Fisheries Work Force (X1)**	**Fishery Investment Value (X2)**
Pearson Correlation	Fishery Production Value (Y)	1,000	, 780	, 906
	Fisheries Workforce (X1)	, 780	1,000	, 733
	Investment Value Fisheries (X2)	, 906	, 733	1,000

Sig. (One-tailed)	Value Fishery Production		(Y),007,	000
	Labor Force Fisheries	(X1),007,		012
	Investment Value of Fisheries	(X2),000,	012	
N	Value Fishery Production (Y)	9	9	9
	Workforce Fisheries (X1)	9	9	9
	Fishery Investment Value (X2)	9	9	9

While the correlation between the value of fisheries investment with the value of fisheries production is a very strong correlation that is equal to 0.906 because it is at a vulnerable value of 0.80-1,000 and has a positive correlation value close to 1 which has meaning that the value of fisheries investment (X2) has increased the amount of value of fisheries production (Y) will also increase.

Table 1 test results are then adjusted to the Watson durbin table to obtain *dl* and *du* values andvalues *dl* of 1.4083 andvalues *du* of 1.7672 are obtained. After that it is interpreted in the autocorrelation framework table and the results are in accordance with the value of durbin watson du <DW> 2 and dl <DW> du. Which means accept H0, there is no correlation in the model. With this, it can be concluded that the model that has been created does not experience correlation.

Multiple Linear Regression Analysis

The method of multiple linear regression analysis is used to see the effect of the number of labor force and investment on the performance of the fisheries sector in Bekasi Regency. Multiple linear regression analysis is formulated with the following equation:

$$\boldsymbol{Y = (7{,}623E + 10) + (1{,}518E + 7)X_1 + 24{,}955X_2}$$

Table 2. Regression Results of Freshwater Ornamental Fish Exports in Bandung City

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	7,623E+10	5,897E+10		1,293	,244
	Angkatan Kerja	1,518E+7	1411E+7	,251	1,076	,323

Perikanan (X1)					
Nilai Investasi Perikanan (X2)	24,955	8,047	,722	3,101	,021

Note : * Real At Level 5

Determination Coefficient Test

Coefficient test measures how far the model's ability to explain the dependent variable (Fisheries Sector Performance). The correlation between variations in the dependent variable (Performance of the Fisheries Sector) of R 0,922 means the relationship between the variables of the number of the Labor Force, fisheries investment, and the performance of the fisheries sector is in the good category. The value of predictors (symbol [a]) explains the variables used in the model, namely the number of fisheries workforce and fisheries sector investment. As for the coefficient of determination (R Square) of 0.849 which means that the performance variable of the fisheries sector can be explained by the independent variables namely the number of labor force and fisheries sector investment is 84.9%, while the rest (100% - 84.9% = 15.1%) is explained by other factors not included in the regression model (for example, government and fisheries and marine service policies of Bekasi Regency)

F Test

F Test is used to find out whether the independent variables studied together have a significant effect on the performance of the fisheries sector in Bekasi District .

It is known that the significant value is 0.003 and is smaller than $\alpha = 0.05$. And also the F-count of 16,918 is known to be greater than the F-table of 0.0517, thus Ha is accepted and Ho is rejected, which means that the independent variables studied together have a significant effect on the performance of the fisheries sector in Bekasi Regency at the level of trust 95%. Means that the variable number of the workforce and investment in the fisheries sector together have a significant effect on the performance of the fisheries sector in Bekasi Regency.

Table 3. F Test Results

Source of Variation	Df	Mean Square	F	Significant
Regression	2	1,761E + 22	16.918,	003
Residual	6	1,041E + 21		

Total	8

T Test

T test was performed to determine the effect of the independent variables individually researched on performance fisheries sector in Bekasi Regency. Based on the Table, it can be seen that the variable of fisheries investment has a significant effect on the performance of the fisheries sector in Bekasi Regency up to the 95% confidence level. This is indicated by the significant value of fisheries investment which is smaller than the value of α = 0.050, which is 0.021, while the fisheries workforce does not have a significant significant effect on the performance of the fisheries sector because the significant value is greater than the value of α = 0.050 which is 0.323 . The t-table value obtained is 1,943, the t-count of fisheries investment is greater than 1,943 which is 3,101 so that the fisheries investment variable has a significant effect on the performance of the fisheries sector in Bekasi Regency. For the fisheries workforce has a smaller t-count of 1.076 from the t-table of 1.943, thus the fisheries workforce variable does not have a significant influence on the performance of the fisheries sector of Bekasi Regency.

Table 4. T Results From Calculate

Variables	Regression Coefficient	t	Significance
(Constant)	7,623E + 10	1,293	, 244
Fisheries	Workforce 1518E + 7	1,076	, 323
Fisheries Investment Value	24,955	3,101	, 021

Workforce

Workforce in Bekasi Regency is influenced by the total population each year has increased can be seen in table 3 from 2015 to 2017 the number of residents in Bekasi Regency has increased but the growth rate has decreased every year which indicates that population growth can still be controlled properly. A decline in the rate of population growth in an area this is caused by a decrease in birth and death rates. But the decline in birth rates is faster than the decline in mortality. According to Sutyastie (2017) Significant labor growth with population growth during the demographic bonus period. A large number of working

age population will give a big gain to the GRDP.

Investment

Investment value can be seen from the amount of Gross Regional Domestic Product (GRDP). According to the investment value for the fisheries sector in Bekasi Regency it is only 0.1 percent of the total investment in all sectors in the Bekasi regency. The low investment value can be caused by the contribution of input and output of the fisheries sector to the economic structure is still low compared to other sectors, this shows that the input and output of the fisheries sector that is used to increase economic growth is still low (Kohar et al 2012).

The reason for the small value of investment in the fisheries sector is that the sub-sector included in the fisheries sector is still limited, still relying on primary sectors such as aquaculture and capture fisheries. Whereas the secondary and tertiary sectors have not yet been maximally utilized as in the manufacturing, trade and ship repair sectors. From the data owned by the fishery product processing sector only starting in 2017, the number of fishery households (RTP) owned is about 76.Fishery

Table 4. Number of Households (RTP) in Bekasi District

Year of	RTP Cultivation	RTP Cultivation Cultivation of	RTP Ornamental Fish	HH Capture Fisheries	TotalRTP
2009	3698	45	81	727	3824
2010	3680	86	81	727	3847
2011	3844	88	81	727	4013
2012	5493	84	67	727	5644
2013	5577	139	52	727	5768
3014	5608	154	54	727	6543
2015	5608	154	54	727	6543
2016	5608	191	54 54	727	6580
2017	4868	212	48	727	5931

Conclusion

Based on the research Effect of the Number of Labor Force and Investment on the Performance of the Fisheries Sector in Bekasi District, the conclusion obtained is the variable number of the workforce in the fisheries sector and the value of the investment in the fisheries sector affect the

performance of the fisheries sector in Bekasi Regency. The most significant factor affecting the performance of the fisheries sector in Bekasi Regency is the value of its investment, while the number of the Workforce does not significantly influence. This is due to the high amount of investment given to the Bekasi Regency fisheries sector not accompanied by a sufficient number of fisheries workforce in Bekasi District. depending on the season, and the weather in Bekasi Regency if the season and weather are not suitable for fishing activities, the number of fishermen will decrease or not increase, for fishery products processing business data obtained only in 2017 there is no data collection on the number of processing business actors fisheries products in bekasi district and can indirectly reduce the value of fisheries production in Bekasi Regency.

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