

## **Determinants Labor Productivity Fishing In the Province Of Business Maluku**

**Dr. Asmaria Latuconsina**  
*Universitas Pattimura Ambon*

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**ABSTRACT :** *This research focuses on the study of fisheries activities such as fishing effort traditionally in Maluku in general rendah. Tujuannya productivity is to identify the determinants and factors limiting factor → fisheries development activities, as well as determining the productivity improvement strategies aimed at expanding employment opportunities, access to markets, an increase in income, and poverty reduction. Achievement of this goal is done through a survey of activity in the duo locations: Central Maluku regency dan Berta Tual, Southeast Maluku. Basil survey data is processed and statistically analyzed with econometric specification. The results showed that the average productivity in Central Maluku higher and Tual, Southeast Maluku. In Central Maluku tondo many uses fishing rod and fishing nets bobo as the base, rather than in Southeast Maluku which many use fishing nets dan usual biases. Family size, experience, hours of fishing and Ages of the market has a positive effect on the productivity of fishermen in Central Maluku district. As for age, education, engine boat, credit facilities, training, and income beyond a negative effect on the productivity of fisheries in Central Maluku district. In Southeast Maluku district and the city of Tual, age, number of family members, the boat engine and the credit facility has a positive effect on the productivity of fishermen. As for education, experience, training, access to markets, and fisheries revenue beyond a negative effect on productivity.*

**KEY WORD:** *Fishing, catching, labor, productivity.*

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### **I. INTRODUCTION**

Optimizing the management of fisheries resources in Maluku Province will be realized when the production activity has been supported by labor productivity is increasing. The problem is a labor productivity in fisheries actually showed a downward trend that has implications for poverty reduction slowdown. The purpose of this study is to look at the determinants of labor productivity in the fisheries fisherman on Maluku province. The method used is descriptive method is a survey, conducted in 9 (nine) villages in three (3) districts in Central Maluku and 9 villages in the district and the city of Tual Kei Kecil. The unit of analysis is the business unit of fishing with a random sampling technique distrikasi. Teknik data retrieval is lapangan. Data literature study and analyzed quantitatively and qualitatively.

### **II. LITERATURE STUDY**

Variability and mobility are the main characteristics of the production factors labor and directly related to the production rate and the effective utilization of capital at the level of a particular technology. Qualified labor always produces Marginal Physical Product of Labor (MPPL) as an indicator of labor productivity to a greater or elasticity relationship between output and human resource elastic. Aquah and Abunyuwah (2011) using Logit Analysis for socio-economic factors that influence the decision be reviewing enj i Midsection fishermen in Ghana. The analysis suggests that both fishing effort as a family business requires skills (attitude), pasarbasil output (catch), credit facilities, training, family size, is the deciding factor.

**MODEL ANALYSIS :** To analyze the determinants of fishermen basil means also specify the data used labor produktivitas cross (cross section). Which became the dependent variable in this study is labor productivity in fishing gear, which is obtained from bacillus tangkapandalam one month divided by the number of workers in gear unit. As an independent variable is; age of the respondent (a), education respondents (a2), the number of family members (a3), experience the respondents (X4), boat engine (X5), the number of hours at sea (X6), credit facility (X7), training (X8), access to markets (X9), the cost of structured (X10), and outside the fisheries income (X11), Variable-powered boats, access to credit facilities, training, structured cost, and access to the market in the form of dummy variables (ie D = 0 if no and yes j1ka D 1).

Education variable (X2) in the form of a score is the number 1 if SD, number 2 if SLIP, number 3 If SMU, figure 3.5 if the SMK, and 4 if the college.

Model analysis using multiple linear regression model:

### III. RESULTS DISCUSSION

Average monthly fishing productivity in Central Maluku district is much higher (3993 kg) of fishing productivity in Southeast Maluku district only (572 kg). This is because in Central Maluku district 57% of respondents using trolling and fishing gear hohate (pool in line) and 15% using nets bobo, compared with the city of Tual, Southeast Maluku clan who are using regular fishing (71%) and 8.4 % tried seaweed cultivation. The average age of respondents in Central Maluku 38 years and 39 years in Southeast Maluku, is a highly productive age, but both Central Maluku and Maluku Tenggara, respondents aged above average quite large at 64.7% 63% clan.

The education level of the respondents among the lowest in Central Maluku because 50% of respondents elementary education, compared with 42.5% in Southeast Maluku high school education. The average experience of respondents almost equally well in Central Maluku and Maluku Tenggara is 16 years and 14 years. Namur many respondents in Central Maluku experienced kurangdari • 16 years ie 54%. While in Southeast Maluku 57% of respondents experienced more than 14 years. Responden in Central Maluku 76% have a clan-powered boats in Southeast Maluku 81% of respondents used a boat engine, but in most of the Southeast Maluku motorized engine wear. Hours of respondents fishing in Central Maluku minimum 12 hours, maximum 3097, and an average 201 hours. Were largely (56%) of respondents have hours sail above average. Whereas in Tual, Southeast Maluku and the City, the respondents have an average of 164 clock hours of fishing in the Central Maluku sebulan. Sama, respondents with above average sea-hour-ratasebanyak 52.6%. It is identical to the experience of respondents diusahakan fishery. Both in Central Maluku and Maluku Tenggara, respondents are very low in-access to credit facilities (14% and 19%). Likewise also the training acquired by the respondent. In Central Maluku district 33.53% of respondents received training from the Department of Fisheries. While in Southeast Maluku only 5.2% of respondents received training from the Department of Peri right. All respondents in Central Maluku and Maluku Tenggara and Tual catch fish with the aim of capturing kepasar. Namunataorientasi market in Central Maluku broader than and Tual, Southeast Maluku. All respondents either in Central Maluku and in Southeast Maluku district and the city of Tual already preparing structured cost (89% and 100%). This suggests that fishermen in the province of Maluku already noticed the efficiency in fisheries. Income respondents outside fisheries highest encountered in the Village WaiSalahutu District of Central Maluku district of Rp. 200,000,000 per month. Average revenue outside fisheries in Central Maluku Rp 1,291,360, - per month. However, only 14.5% of respondents have income above the average. They are found in DesaWaaisubdistrict and village SalahutuUreng and Asilulu in District Leihitu. While 85.5% had incomes below the median. In Southeast Maluku district and the city of Tual, the average income of respondents in luarperikananRp 431 795, -. In a proportion of the respondents have income outside of fishing below average.

Results of statistical calculations 1.di shown in the table below.

**Table 1.**  
**Results of Simple Linear Regression Central Maluku and**  
**According Southeast Maluku Regency Model**

Model	Maluku Tengah		Maluku Tenggara	
	coefficient b	t	coefficient b	t
1. Constants	247 (397)		159,5 (120,65)	
2. Age (X1)	-5,891 (2,796)	-2,107*	1,7 (2,738)	0,623***
3. Education (X2)	-76,549 (27,365)	-2,798*	-7,799 (4,068)	-1,917**
4. Number of Family Members (X3)	6,940 (15,527)	-0,447***	18,619 (14,917)	1,248***
5. Experience (X4)	3,998 (3,427)	1,1666**	-15,235 (2,993)	-5,090*
6. Engined Boat (X5)	-33,084 (63,080)	-0,524***	123,120 (64,888)	1,897**
7. Total Hours at sea (X6)	3,493 (0,361)	9,671	3,591 (0,376)	9,558*
8. Credit Facility (X7)	-22,080 (53,011)	-0,417***	45,645 (80,646)	0,566***
9. Training (X8)	-81,120 (93,913)	-0,864***	-141,543 (101,722)	-1,391**

10. Access to Markets(X9)	88,263 (381,000)	0,232***	84,122 (43,654)	-1,927**
11. Structured costs(XIO)	-8,219 (63,300)	-0,130***	-235,080 (64,319)	-3,655*
12. Outside income Fisheries(Xi I)	-0,079993 (000)	-0,218***	-0,08246 (0,000)	1,971*
	R square	0,293	R square	0,316
	Ajusted R	0,269	Ajusted R	0,295
	F Change	12,534	F Change	15,456
	Durbin Watson	1,370	Durbin Watson	1,448

Description

In Table 1 above shows that if the independent variable not changed, the minimum productivity in Central Maluku pertenaga 246.5 kg per month of work, while in Southeast Maluku district and the city of Tual, 159.5 kg. In Central Maluku district, the negative effect of age on productivity and statistically significant. This means that more and more aged fisherman, productivity will be reduced. While in Southeast Maluku, positive effect on the respondent's age produktivitas nelayan. With increasing age of one year, the productivity of fishing will increase 2 kg in a month. Education variables negatively affect the productivity of fishing, both in Central Maluku and Southeast Maluku District and City of Tual. The influence of family size on the productivity of fishermen positive in both districts. This means that the greater the number of family members of fishermen, fishing will be even greater desire to get a lot of catches to be sold in order to meet the needs of the family. By itself will increase the number of fishermen and fishing hours. Respondents' experiences positive and significant effect in Maluku Tenggara and Maluku Tengah. Sedangkan in Tual, respondents experience negative and highly statistically significant. Engine boat negatively affect productivity in Maluku district in Southeast Maluku Regency Tengah. Sedangkan positive effect, significant large clan. In Southeast Maluku if respondents do not use the machine as a driving force, the productivity of only 159.5 kg per fisherman. If fishermen wear of engine power, productivity increased to 282.62 kg per fisherman. The influence of the number of hours fishing on the productivity of fishermen positive in both districts. Relationship obviously as more and more of the hours at sea, the more the catch itself higher productivity.

Effect of fishermen access to credit facilities negatively affect productivity in Central Maluku district, while in Southeast Maluku positive effect means that if the respondent does not use fasilitas kredit, productivity is only 160 kg per fisherman. If the respondent-access to credit facilities, productivity rose to 205.15 kg per worker. Effect of training on the productivity of both negative fishermen in Central Maluku district and in the district and the city of Tual, Southeast Maluku. The market is very positive influence on the productivity of fishermen in both districts. If there is no market, productivity fishermen only 246.5 kg per fisherman in Central Maluku, and 159.5 kg per fisherman per month in Southeast Maluku. With the expanding market, productivity in Central Maluku rose to 335 kg per fishing and in Tual, Southeast Maluku and 244 kg per fisherman. Preparation of a negative effect on the cost of structured keduakabupaten. This fact shows that the cost of structured notes are clear, and if there are components that are rising will make fishermen decided not to go to sea because of efficiency considerations.

The influence of the amount of revenue outside jugs fishery negative in both districts. This means that if the respondent feels fisheries revenue beyond the already high to meet the needs of his family, will make fishermen reduce their fishing hours so that the catch be reduced. With sendirinya productivity is reduced.

#### IV. CONCLUSION

Average productivity in Central Maluku district more tinggidi banding Southeast Maluku District and City of Tual. In Central Maluku many menggunakan trolling rod and net catch bobo as the base, while in Southeast Maluku district and many of Tual City menggunakan regular nets, fishing and seaweed farming usual. Family size, experience, hours of fishing and access to the market has a positive effect on the productivity of fishermen in Central Maluku district. As for age, education, boats bemesin, credit facilities, training, and income outside negatively affect the productivity of fisheries in Maluku Tenggara and Maluku Tengah. Di Tual, age, number of family members, the boat engine and a positive effect on credit facility nelayan. Sedangkan

productivity of education, experience, training, access to markets, and revenues outside the fishery negatively affect productivity. Factors credit facilities, training, in Central Maluku negatively affect produktivitas. Bukan means that the credit facilities and increased training led to decreased productivity, melainkan walaupun credit facilities and training low, productivity continues to increase. Similarly, the factors of training and access to markets in Southeast Maluku district and the city of Tual negative effect on productivity, giving the sense that although the training is low, narrow market, but fishermen still increase productivity. The number of family members both in Central Maluku and in Tual, Southeast Maluku and positive effect indicates that the number of family members causing fishermen to increase productivity, since hares meet the demands of family life. Factors outside the influence of income on the productivity of fisheries both in Central Maluku and Maluku Tenggara negative effect. This means that low-income outside the fisheries sector fishermen would lead to increase productivity by increasing the number of hours of fishing.

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