

A Study of Workforce's Mobility from Agriculture to Non-Agriculture Sector in Ulu Ere Sub-District, Bantaeng Regency

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Abstract: *The agricultural conditions in rural areas have recently changed especially in term of labor productivity. This narrow area of land causes a decrease in family income from farming, and encourages farmers to make decisions to work in other sectors, weakening of labor absorption of agricultural sector, indicating the existence of change of economic structure, from agriculture sector of non-agricultural sector. The main consideration of the mobility is the decreasing income which subsequently changes the management and post-production phases of agribusiness. Furthermore, occurring mobility gives impact to the existing stability of the agribusiness system. This study aims to: 1) Reveal and analyze the effect of labor mobility income in Ulu Ere Sub-District of Bantaeng Regency, 2) The Influence of Land Area, 3) Number of Family Dependent to Labor Mobility in Ulu Ere Sub-District, Bantaeng Regency, 4) Age of Labor Mobility in Ulu Ere Sub-District, Bantaeng Regency. Methods of data collection used were observation, interview, and questionnaire. Data analysis used was descriptive qualitative and quantitative with logistic regression. The results show that: 1. Income has a significant positive effect obtained by smaller sig value (<) from 0,05 (0,000 < 0,05), 2. Land area have positive significant not significant equal to 0,014 with significant level equal to 0,014 (0,014 > 0,05), 3. The number of family dependents has positive and insignificant effect is greater sig value (>) than 0,005 (0,956 < 0,05), 4. Age influence positive but not significant with value (>) 0,05 from (0,768 > 0,005) to labor mobility from agriculture sector of non-agricultural sector in Ulu ere Sub-District of Bantaeng Regency.*

Keywords: Income, Land area, Number of family dependent, Age of Labor Mobility

1. Introduction

The development of today's structure of economy influences the labor structure of the agricultural sector. The diminishing contribution of the agricultural sector and the increasing role of the industrial and service sectors have changed the views of the people not to choose the agricultural sector as a source of livelihood. In accordance with Todaro's (2007) assertion, population factors can be a constraining factor for general development and for employment in particular. Mantra (2008) states that population mobility can be divided into two: the mobility of the vertical population and the mobility of the horizontal population. From an overview of labor problems in rural areas, it is often argued that high population growth rates result in an abundance of manpower, so that the agricultural sector becomes a major force in managing all aspects of labor.

Fajri (2009) argues that in the average occupation of rural areas people is farmers yet work outside the agricultural sector has begun to become a hope for the absorption of labor, which continues to increase, so that the reference of these factors is the ownership of land area, income, age, and education, marital status, work management.

According to Suryana (2008), labor mobility occurs from the sector of the non-agricultural sectors in the absence of a place of labor in the agricultural sector, which is allegedly caused by the saturation of the use of labor in the agricultural sector and the economic opportunities obtained because it is supported by assets and skills to move in the non-agricultural sector in the midst of the society that will be the number of labor mobility from the agricultural sector to the non-agricultural sector.

Economically, the agricultural sector has no longer be able to be the main pillar of people's livelihood due to its depreciating income. According Darojah (2012) this resulted in reduced farmer income, resulting in the number of workers who switched jobs to non-agricultural sector in order to earn the suitable income to meet their needs. Thus, it is allegedly caused by the saturation of the use of labor in the agricultural sector and the economic opportunities obtained are utilized because it is supported by the assets and skills to move in the non-agricultural sector (Setyawati, 2014). On the basis of the preceding explanations, it is deemed necessary to conduct a study on: Workforce's mobility from Agricultural Sector to Non-Agricultural Sector"

2. Materials and Methods

a) Research site

The research was done purposively, that is in Bantaeng District, on the grounds that it was directly elected with the consideration that the area is a region that has farmers of high labor mobility taken from the village representing Ulu Ere Subdistrict of BontoTallasa Village and BontoDaeng which were still within the scope of rural areas in Bantaeng Regency.

b) Design and Variable of the Research

This research applied qualitative and quantitative descriptive approach of general description of labor mobility in agriculture sector to non-agriculture sector.

c) Population and Sample

In this study, the population and sample obtained by way of purposive sampling (direct election) was as much as 81

respondents. Sampling in this research was conducted in 2 villages namely BontoTallasa Village and BontoDaeng Village. That in BontoTallasa Village the sample was 48 people and in BontoDaeng Village was 33 people, by which the taken sample was determined by the formula (Sugiono, 2007). Overall, there was 2824 farmers from BontoTassasa and 1948 farmers from BontoDaeng.

d) Date collection

Types of date collected include quantitative data and qualitative data sourced from respondents who directly involved the various things or conditions that exist in the field by using participation observation or observation that involves directly in the field observation activities and observe the actual conditions of the field. While the quantitative data obtained from the respondents with the type of data studied namely the age of respondents, education, income, and the number of household members. These data were collected through survey methods, by direct interviews with respondents and labor mobility based on prepared questionnaires.

e) Date analysis

The analysis used was quantitative research that will be analyzed quantitatively and qualitatively. The labor mobility of agricultural sector to non-agricultural sector was then analyzed descriptively. The survey conducted on the respondents were divided into two parts: the people who do mobility and the fixed. Then the respondents who do the mobility were given one (1) and fixed (not switched) were given zero indicator (0).

Based on the categorization of the specified variables, then the model of logistic regression (stochastic model) was formulated as follows. :

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Whereas:

β_0 = Constanta;

β_1 = Logistic coefficient

Y = Workforce mobility, consists of two indicators; Y = 1, mobile; and Y = 0, fixed

X1 = Income (Rp)

X2 = Land area (Ha)

X3= number of family dependents (person)

ϵ = transgressor variable

Criteria of decision making in this study using the following stages: To test the overall effect of independent variables on dependent variables suing Likelihood Ratio test which has the same meaning with the F test in linear regression, Gujarati (2007). Likelihood Ratio test formulation by Maddala (2006), as follows :

$$LR \text{ statistic} = \frac{URSS}{RRSS} \alpha = \left(\frac{RRSS}{URSS} \right)^{-n/2}$$

$$-2 \log_e \lambda = n(\log_e RRSS - \log_e URSS)$$

Whereas :

α : LR statistic

RRSS : sum of free residual quadrate

URSS : sum of bound residual quadrate

This research uses probability value for decision making. Criteria of decision making that if probability > 0,05, mean there is no significant influence between independent variable to dependent variable and If probability \geq 0,05, meaning there is significant significant influence between independent variable to dependent variable.

This research uses probability value for decision. Then, if Probability > 0,05, mean there is no significant influence between each independent variable to dependent variable.

The formulation of decision making is when $H_0: b_i = 0$, meaning there is no real influence between each independent variable to the dependent variable and $H_1: b_i \neq 0$, meaning there is a real influence between each independent variable to the dependent variable.

The decision criterion that if the probability is ≥ 0.05 , it means that there is a significant influence between each independent variable on dependent variabel.

3. Result of the Research

Table 1: Analysis Results logistic RegressionTo Labor Mobility From Agriculture Sector Of Non-Agricultural Sector In Ulu Ere Sub-Distric of Bantaeng Regency

Variable	B	S.E.	Wald	df	Sig.	Exp(B)
Income (X1)	0.006	0.001	18.433	1	0	1.006
Land area (X2)	0	0	5.995	1	0.014	0.999
Number of family dependent (X3)	0.052	0.444	0.014	1	0.906	1.054
Age (X4)	-0.016	0.087	0.087	1	0.768	0.984
Constant	-8.089	2.629	10.153	1	0.004	0

The date shows the results of logistic regression of income variable obtained by smaller sig value (<) from 0,05 (0,000 <0,05) this is in accordance with hypothesis which states that income variable has a significant positive effect to labor mobility from agricultural sector to non-agriculture sector, variable coefficient of Land Area of 0.014 with a significant level of 0.014 (0.014 > 0.05). The result of the variable Number of family dependents obtained greater sig value (<) than 0.05 (0.906 <0.05) and age variable with a significant score of 0.768 (<) of 0.05 (0.768 <0.05) in UluEre Sub-District of Bantaeng Regency.

4. Discussion

This research shows that income has positive significant value based on value (0,000 <0,05). While the land area has positive significant value with the value of 0.014 (0.014 > 0.05), the number of family dependents is obtained with the value of 0.906 (0.906 > 0.05), and age with a significant value of 0.768 (<) of 0.05 (0.768 <0.05). This indicates that labor mobility in the agricultural sector to non-agricultural sector is highly determined by the potential income gained from non-agricultural sector.

This can also be seen in the results of research Gustiyanto (2005), in the study of economic vol. IV No. 1/2005 under the heading "Factors Affecting Space Mobility in Lumpatan Village of Sekayu Sub-district of MusiBanyumas Regency (Family of Farmer Case Study)", it is found that the dominant

factors affecting shuttle mobility in Lumpatan village are income which having positive influence, education negatively affecting and also the extent of agricultural land for marital status and sex have no significant effect.

The income received by the farming community is determined by the productivity of the farm. Yet, in reality, the agricultural sector is no longer able to provide adequate income for farmers. The urgent cost of living demands force farmers to work hard to find other sources of income besides farming. Non-agricultural activities are usually occupied are farms, trade, laborers, drivers, and others. When compared with the income of farmers from farming with non-agricultural activities then income in non-farms is far greater than the income of the agricultural sector. Hence, if the level of income offered by non-agricultural economic activities is higher than agricultural activities, then the labor will be more mobility in non-agricultural activities than agriculture so that income has a significant positive effect on labor mobility.

Based on the results of the analysis, it explain that land ownership tend to be involved in agricultural activities. Conversely, land ownership can be an indication of the wellbeing of households that take advantage by participating in non-farm activities. The area of agricultural land tenure is something that is highly important in the production process or farming and agricultural business. In farming, for example, the ownership or control of narrow land is definitely less efficient than the wider land. The narrower the business land, the more inefficient the farming undertaken unless the farm is run in an orderly manner. The area of ownership or mastery relates to the efficiency of farming. The use of input will be more efficient if the area of controlled land is greater. Ownership of agricultural land has a significant effect on the decision to move from agricultural sector to non-agricultural sector. This means that the land owned and processed by the farmers, both own land, rental land and profit-sharing land have a real yet insignificant effect on the decision to perform mobility.

The higher number of family dependents, then the decision to make the mobility from the agricultural sector to non-agricultural sector is the greater. It is true that the number of family dependents who average more than 2 people per family affects the amount of household expenditure, which means that relying solely on agricultural sector is not sufficient to meet the needs. The preferred solution is to work outside the agricultural sector because most household expenditures show that household income is not concentrated to meet basic needs. Hence, it has positive but not significant effect on labor mobility to non-agriculture sector.

The age variable has no significant influence on the decision of the farmers to do mobility, meaning that the old and young age of the respondent has no influence on the decision to do the mobility to the non-agricultural sector.

5. Conclusions and Recommendations

Partial income has a positive and significant influence on farmers' decision to move to non-agricultural sector. While the ownership of land area, the number of dependent of family and age of agriculture is the most dominant factors

that have positive yet not significant effect to farmer decision to do mobility to non-agriculture sector. Mobility from agricultural sector to non-agricultural sector that occurs related to factors that influence outside the model, it is suggested to other researchers to examine other factors that affect the mobility of farm laborers, among others, motivation, and others. Hence, further researches are needed to reveal the issue.

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