

Decisions Factors Affecting Youngs Work in Agricultural Sector at Oku District South Sumatera Indonesia

Fifian Permata Sari¹, Munajat²

¹University of Baturaja, Agribusiness Study Programe, Ratu Penghulu Street, Karang Sari Baturaja South Sumatera Indonesia, e-mail: fifianpermatasari[at]gmail.com

²University of Baturaja, Agribusiness Study Programe, Ratu Penghulu Street, Karang Sari Baturaja South Sumatera Indonesia, e-mail: ajat.uabr[at]gmail.com

Abstract: *This study aims to analyze the decision factors affecting youth working in the agricultural sector, at centre of rubber farming, OKU District, South Sumatera Indonesia. This research was conducted at OKU District, South Sumatera Indonesia in April 2017. The method used in this study is a survey method, and using simple random sampling as sampling method. This research will examine 40 samples of 357 youth in OKU District, from 40 samples of youth decision to work on agricultural sector and not, criterion of respondent as sample with degree of deviation of 15%. The collected data is tabulated and then processed by using logistic regression analysis. The results of the research showed that the price of rubber (X2), land area of families (X4) and opportunities of working outside the rubber farming (X5) is significant to the youth decision to work on rubber farming in OKU District, South Sumatera Indonesia.*

Keywords: decision factor, young worker, agricultural sector

1. Introduction

Rubber is an export commodity that is able to contribute in an effort to increase Indonesia's foreign exchange. Indonesia's rubber exports over the past 20 years continue to show an increase from 1.0 million tons in 1985 to 1.3 million tons in 1995 and 2.0 million tons in 2006 to reach US \$ 4.2 billion. A number of locations in Indonesia have suitable land conditions for rubber plantations, and most are in Sumatra and Kalimantan (Kusmiran, 2006).

The area of rubber plantation in 2015 is recorded to reach more than 3.6 million (Ha) scattered throughout the territory of Indonesia. Among them 85% are rubber plantations owned by the people, and only 7% of state-owned large estates and 8% of large private estates. National rubber production in 2015 reached 3.2 million tons. And this amount will still be enhanced by rejuvenating and empowering the empty/unproductive lands suitable for rubber plantations (BPS Indonesia, 2015).

The Indonesian Rubber Companies Association (Gapkindo, 2014) states that Indonesia is planning a reduction of up to 300,000, with the expectation that prices could recover above US \$ 3. According to Gapkindo, the export reduction policy looks useful although not automatically, where rubber prices start to slightly improve towards the end of the year 2012 and is expected to improve in 2017. One of the plantation crops that become the mainstay and become the main source of livelihood of the population is as a rubber farmer. Until now the price of rubber is still low. At the farmers' level, rubber prices range from Rp 7,000 to Rp.8,900 per kilogram, while prices have increased to Rp 10,000 per kilogram in some

areas, based on information from the Ministry of Trade of Jakarta in 2015, explaining that the quality of raw rubber for the South Sumatera region that has not been able to compete with the country.

Work is one tool to meet human needs, both material or non-material. As a tool, the work is always attached to the status symbols that underlie one's view of the work. At the social system level, a cumulative view of a job is a community representation that greatly influences action in choosing a job. Thus, it should be suspected if the rejection of agricultural work is not simply caused by economic factors. Evidently, when the monetary crisis hit Indonesia in 1997, many workers who lost their jobs in the city and back to the village, are not willing to work in the agricultural sector, although the sector is relatively open to a variety of qualified workers. Many prefer to stay idle longer until they get jobs that are considered appropriate outside the agricultural sector (Rozany et al, 2000).

Statistical data showing that although from 1976 to present, the nominal wage rate of rubber agricultural work continues to increase, but in real terms, the wage rate tends to be static. Compared to the industry, the rate of agricultural wage increases is only about half the industrial wage rate (Kasryno, 2000). One of the regions in South Sumatera Province which has large rubber plantation area is Ogan Komering Ulu (OKU) District which is 71,807.50 (Ha) or 9.1% of total rubber plantation of South Sumatera Province. The harvested area and rubber production of each Regency in OKU can be seen in Table 1.

Table 1: Harvest area and production of smallholder rubber plantation specified according to the Regencies within the Ogan Komering Ulu District in 2016

No	Planting area (ha)					Amount
	Regency	Production (ton)	Produce	Not yet produce	Not produce	
1	Lengkiti	5.744	4.198	4.547	1.092	9.837
2	Sosoh Buay Rayap	3.405	2.481	2.240	687	5.408
3	Semidang Aji	3.459	2.152	312	7	2.831
4	Ulu Ogan	2.536	1.906	1.906	964	4.779
5	Muara Jaya	293	215	356	90	661
6	Peninjauan	714	519	173	140	832
7	Lubuk Batang	1.021	5.101	5.215	368	10.684
8	Sinar Peninjauan	10.603	7.731	4.165	413	12.309
9	Baturaja Timur	6.324	4.609	600	4.020	9.229
10	Lengkiti	1.686	1.219	772	244	2.235
Amount						71.807,50

Source: Central Bureau of Statistics OKU, 2016

Table 1 shows that the position of production of high rubber plantation in OKU District is Lubuk Batang Regency is 10,603.52 Ton with total area of 12.309 Ha (Central Bureau

of Statistics OKU, 2016). Furthermore, the agricultural labor force by age group in OKU can seen in Table 2 below.

Table 2: Agricultural labor force by age group in OKU, 2016

No	Age	Year				
		2008	2009	2010	2011	2012
1	15-24	21,10	20,76	14,93	17,78	13,57
2	25-54	40,50	42,39	73,07	70,92	75,66
3	55+	7,80	7,20	11,99	11,28	10,76
Amount		69,40	70,35	99,99	99,98	99,99

Source: Central Bureau of Statistics OKU, 2016

Based on Table 2, it is well known that the percentage of the population of age 25-54 is very high. It means that in OKU District, the workforce is more productive than the non productive age. The greater number of productive age populations means more available manpower. The large number of productive age population can be one of the supporting achievements of regional economic development. The new village is a village whose majority of the population

works as rubber farmers. The large potential of large plantation areas is assumed to be the area with the majority of the gardening population, the potential of the existing plantation area in OKU District can be a good example in analyzing the balance between the people and the majority of people still relying on plantations. Furthermore, the amount of population in OKU can seen in Table 3 below.

Table 3: The amount of population by sex in OKU, 2016.

No	Age (year)	Male (person)	Proportion (%)	Female (person)	Proportion (%)	Amount (person)	Proportion (%)
1.	0-5	49	4,35	47	4,17	96	4,26
2.	6-10	90	7,99	82	7,28	172	7,64
3.	11-15	85	7,54	93	8,26	178	7,91
4.	16-20	86	7,63	86	7,64	172	7,64
5.	21-25	70	6,21	65	5,77	135	6,00
6.	26-30	88	7,81	83	7,37	171	7,60
7.	31-35	93	8,25	84	7,46	177	7,86
8.	36-40	74	6,57	72	6,40	146	6,49
9.	41-45	100	8,88	87	7,73	187	8,31
10.	46-50	82	7,21	76	6,75	158	7,02
11.	51-55	96	8,52	100	8,88	196	8,71
12.	56-60	75	6,66	88	7,82	163	7,24
13.	61-62	73	6,48	71	6,31	144	6,40
14.	66-70	27	2,39	25	2,22	52	2,31
15	>71	31	2,75	29	2,57	60	2,67
Amount		1126	100	1125	100	2251	100

Source: Central Bureau of Statistics OKU, 2016.

Table 3 shows that OKU had the majority young peasants at working age between the ages of 16 to 20 years that is as much as 172 or about 7.64%. Indonesia is the fourth most populous country in the world after China, India and the United States. With the current population in Indonesia reaching 237.6 million people. The total population of 34

percent are youths namely the population aged 15-35 years. Age is a very prime age for humans and at that age usually people start to enter the world of work. Problems that have not been resolved in the world of employment in Indonesia is the problem of unemployment. In line with this, Disnakertrans (2012) stated that the number of open

unemployment or the populations who are looking for work in Indonesia is high as many as 7,244,956 people and 40 percent of them are high school graduates or equivalent. Research on youth decisions on agricultural work is generally still focused on youth as a whole (aged 15-35 years) with varying degrees of education and employment in the agricultural sector. Nevertheless, amidst increasing education to the countryside and the large number of job seekers nowadays, it is rare to see research on the perception of educated job seekers in agricultural work. Ministry of Agriculture (2012), suggests looking for a job is the activity of someone who at the time of the survey person is looking for a job, such as those who have never worked and are trying to get a job, has ever worked, because something stopped or dismissed and trying to get a job, and work or have a job, but because something is still trying to get another job. The industrial sector is one of the sectors which is the choice of youth today. Malau (2011) revealed that there was a surge in the number of workers in the industrial and construction sectors in August 2011. Recorded, the number of workers in the industrial sector increased by 840 thousand people, while in the construction sector increased the workforce of 750 thousand people. In line with that, Rinihastuti (2010) stated in his research results in Sidoleren Village that the cause of village youths prefer to work in the small and home industry sector is the view of employment in the industrial sector is more fun, relaxed, earn a fixed salary each month with larger amount.

Purposes

The young people in OKU mostly work in the non-agricultural sector, preferring to work in companies in OKU District, mainly in leasing and market, some young people choose to work as employees daily at PT. Minanga Ogan Plantation, in addition there are also working as employees in stores, restaurants and other informal businesses. Based on the above problems then the implementation of this study aims to analyze the decision of youth working in the agricultural sector of rubber centers in OKU District, South Sumatera Indonesia.

2. Research Method

The research method used is a survey method of youth in OKU Distruct with the population method were all youths in OKU with a population of 357 sampling. The sampling methods used is simple random sampling. Only rubber youth farmers were taken as samples using the slovin formula. So, this research will examine 40 samples of youth who had a decision to work on rubber farming and not, criterion of respondent as sample with degree of deviation of 15%. The collected data is tabulated and then processed by using logistic regression analysis. with the aim of analyzing youths working on rubber farming. The data obtained in this study is calculated in percentage of each component variable. The percentage value as a reference to explain quantitatively each component of the two variables above. To classify the height, medium and low of youth motivation is used interval with the following formula:

$$K = \text{Log} \left[\frac{1}{1-p} \right] = \alpha + a_1X_1 + a_2X_2 + a_3X_3 + a_4X_4 + D_1 + e$$

Information:

- K = Youth decision
- 1 = Youth opportunities working on rubber farming
- 0 = Youth opportunities not working on rubber farming
- α = Constanta
- X₁ = Education (Th)
- X₂ = Rubber price (Rp/kg)
- X₃ = Number of families (orang)
- X₄ = Land area of families (ha)
- D₁ = Opportunites of working outside rubber farming (1 = there is, 0 = nothing)
- e = error

Testing criteria:

- H₀ = There is no correlation between factors to youth decisions in working on rubber farming.
- H₁ = There is an association between factors on youth decisions in working in rubber farming.

3. Result and Discussion

Analysis of Youth Decision Working on Rubber Farming in Lubuk Batang Baru Village Lubuk Batang Subdistrict Ogan Komering Ulu Regency

Factors identified to affect youth working in rubber farming are education (X1), rubber price (X2), number of families (X3), land area of families (X4), and opportunities working outside rubber farming (X5). To analyze the youth's decision to work on rubber farming, data collection was then tabulated and then processed using logistic regression analysis.

Table 4: Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	28,464	5	,000
	Block	28,464	5	,000
	Model	28,464	5	,000

Source: Primary data, 2017

From the analysis of omnibus test with Chi-Square technique obtained Chi-Square value 28.464 with Sig value. 0.000 less than 0.01 means jointly education (X1), rubber price (X2), number of families (X3), land area of families (X4) and opportunities of working outside rubber farming (X5) have significant effect on 99% or α 0.01 trust toward youth decision to work on rubber farming in OKU District, South Sumatera Province, Indonesia.

Table 5: Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	21,982 ^a	0,509	0,71

Source: Primary data, 2017

Table 5 shows the coefficient of determinant of logistic regression that is 0,710 so it can be said that the contribution of education variable (X1), rubber price (X2), number of families (X3), land area of families (X4) and opportunity of working outside rubber farming (X5) influence the estimation of youth decision to work on rubber farming OKU

District by 71%, while the remaining 29% is influenced by other factors are not included in this research.

Table 6: Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1 ^a	X1	-20,188	8316,515	,000	1	,998 ^{ts}	,000	,000	.
	X2	2,532	1,512	2,805	1	,094*	12,579	,650	243,454
	X3	1,215	1,193	1,037	1	,308 ^{ts}	3,370	,325	34,913
	X4	3,405	1,451	5,507	1	,019 ^{**}	30,109	1,752	517,295
	X5	+2,623	1,546	2,877	1	,090*	,073	,004	1,503
	Constant	18,705	8316,515	,000	1	,998	132861519,111		

Source: Primary data, 2017

Ts = Not significant

** = Significant on α 0,05

* = Significant on α 0,1

X1 = Education

X2 = Rubber price

X3 = Number of families

X4 = Land area of families

X5 = Opportunity of working outside rubber farming

So from the result of logit analysis got the model of youth decision to work in agricultural sector:

$$K = \text{Log} [1 / (1-p)] = 18,705 + -20,188 + 2,532 + 1,215 + 3,405 X4 + 2,623 + 0,05$$

Based on Table 6 where five independent variables are education (X1), rubber price (X2), number of families (X3), land area of families (X4) and opportunities of working outside rubber farming (X5) can be analyzed in detail as following:

Educational variable (X1)

Education does not significantly influence the youth decision to work on rubber farming either at the level of α 0.05 and the level of α 0.1 because it obtained a significance value of 0.998 percent. With the coefficient value obtained for -20.188 this means an increase in education by 1 year will be likely to determine the decision of youth to work on rubber farming. This is in line with the results of Soedjati (2010) study which states that the higher the educational level among job seekers, the lower the motivation to work as a farmer as a basic livelihood in the countryside.

Land area of families (X4)

Land area of families is significant to the youth's decision to work on rubber farming at the level of trust $\alpha = 0.05$, where the result value 0,019 below the significant level $\alpha = 0.05$ with the coefficient value of 3.405, this means the addition of 1 Ha of land will increase the decision of youth to work on rubber farming in OKU District is 3,405 percent. Lubis and Soertarto (2001) stated that in fact the factors that determine the shifting consistency of the work of parents and children in the agricultural sector is due to the lack of land and resources. Variable land area is significantly influence to decision of youth to work on rubber farming, because of the more land owned, eating will be bigger also earnings of youth working on rubber farming.

Opportunities of working outside rubber farming (X5)

The opportunities of working outside rubber farming (X5) is significant to the youth decision to work on rubber farming at the level of trust $\alpha = 0,1$, because it is still below the value obtained that is 0,090, the value of coefficient of +2,623 this means that the increase of employment opportunities outside rubber farming of 1% will likely increase the decision of youth to work on rubber farming in OKU District by 0,090 percent. The variable significantly influenced due to the difficulty of youth get the opportunity to work outside rubber farming because working outside rubber farming especially in formal jobs requires skill and special education.

4. Conclusion

Based on the results of the research, it can be concluded that the price of rubber (X2), land area of families (X4) and the opportunities of working outside rubber farming (X5) is significant to the youth decision to work on agricultural sector in OKU District, South Sumatera, Indonesia.

References

- [1] Central Bureau of Statistics, OKU. 2016. Population Census of OKU District. South Sumatera Province. Indonesia.
- [2] Ministry of Agriculture. 2012. Agriculture and Mining, Harvested area and production of smallholder rubber plantation specified according to District within Ogan Komering Ulu District.
- [3] Central Bureau of Statistics, 2015. Indonesia Rubber Statistics 2014. Central Bureau of Statistics. Jakarta.
- [4] OKU District Manpower and Transmigration Office. (2012). Recap of OKU Workers by Destination of 2012. Disnakertrans of OKU Regency.
- [5] Gapkindo. 2014. The fall of Indonesian rubber price. (<http://www.gapkindo.org/maret-2015>). Retrieved 10 May 2017.
- [6] Kasryno, Faisal. 2000. Human Resources and Agricultural Land Management in Rural Indonesia. Agro Economic Forum. Vol 18 No. 1 and 2. Pg. 26-51 Center for Agricultural Socio Economic Research. Agricultural Research Agency. Bogor.
- [7] Kusmiran, T. 2006. "Rubber Is Still Ngaret" [Kompas Online]. <http://www.dayakologi.com/kr/ind/2005/122/utama.htm> [26 July 2015].

- [8] Lubis DP, Endriatmo Soetarto. 2001. Consistency of Livelihood Patterns between Parents and Children in Rural Communities. Bogor: Center for Development Studies. Research Institute IPB.
- [9] Malau A. 2011. The Number of Work Force in the Industrial Sector rises in August 2011. [internet]. Quoted on October 6, 2013. Available from: <http://www.tribunnews.com/bisnis/2011/11/07>
- [10] Rinihastuti D. 2010. Selection of Work in Small and Home Industry Sector (Case study on Youth in Sidoleren Village, Gebang District, Purworejo District). [essay]. [Internet]. [downloaded on November 25, 2013]. Available from: <http://dglib.uns.ac.id/pengguna.php?mn=showview&id=12684>
- [11] Rozany, A. N. et al. 2000. Agricultural Sector As A Temporary Activity For Rural Migrants. Agroeconomic Bulletin Vol. 1 No. 1, p. 1-5. Center for Agricultural Socio Economic Research and Development. Bogor.
- [12] Soedjati, HW. 2010. Effect of School Education Level on Working Motivation In Agricultural Sector In Karang Nanas Village, District Sokaraja Banyumas Regency. Agroeconomic Bulletin Vol. 7 No. 1, pp. 8-155. Center for Agricultural Socio Economic Research and Development. Bogor