Research Article

THE ANALYZING FACTORS INFLUENCING OF ALLOCATION OF FARMER FAMILY LABOUR IN INDONESIA

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A B S T R A C T

The research aims to find out analysis of labour farmer to handle income household of rubber estate for traditional farmer and modern farmer and to find out the affecting actors of allocation of labour household fanner. Primary data are from sample traditional farmers and modern farmers. The sample size is 360 respondent household 2rmers in three districts are Musi Rawas, Muara Enim and Musi Banyuasin in South Sumatra. The data analysed by economic analysis and regression analysis.

The result showed. The affect factors of allocation of labour are positive affect to income farmer, farmer age, total of member household, formal education, rubber replanting and negative affect to productivity of rubber, saving household, replanting are.

INTRODUCTION

Plantation of natural rubber in South Sumatra very strategic because this province at 2016 representing area of especial producer of natural rubber in Indonesia totally production 576.676 ton or 35,66% from production of Indonesia rubber. Contribution of natural rubber to Domestic Product of Regional Bruto (PDRB) of South Sumatra equal to Rp.2.861 or 9,07% from total PDRB and from production of the rubber as much 62% representing input of state's stock exchange equal to US $ 280,4 million (34%) from South Sumatra also as source of requirement live about 429.846 KK or 2 million South Sumatra resident (Duty Plantation of Province South Sumatra, 2017).

Since year 1992-2016 Local Government in South Sumatra have the implementation, rejuvenation of self-supporting rubber / for the width of 1.248 ha through facility of aid of Local Government of regency that is Regency of Muara Enim for the width of 724 ha cover 362 farmer, Regency of Musi Banyuasin of pilot of project 24 ha, garden of entris 4,2 ha and training 240 farmer, and Regency of Ogan Komering Ulu for the width of 500 ha, garden of entris 24 ha, training 120 farmer (Supriadi And Nancy, 2016).

Local Government Sumatera. South arch have counted the cost to rejuvenate crop of rubber for the width of 100.000 ha that is about Rp 776,25 billion programmed as long of range of time 10 year (Duty Plantation of Province Sumatra. South, 2017).

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If entirety of the fund charged upon by budget of local government of course will weigh against. Therefore allocation of labour of family of farmer requires to be pushed in an optimal fashion and the facility to rejuvenate crop of his rubber self-supporting. Facility which can be given by local government for example aid partial (substance of rubber crop), technical construction and counseling (Supriadi Et at, 2016).

Pursuant to prospect, role and condition of plantation of rubber of people hence can be identified by formula of problems faced by farmer of rubber of people in South Sumatra that is existence of difference between expectation with fact that is:

In Fact the earnings of farmer of rubber of people in South Sumatra of generally relative still lower to range from Rp 6,4-Rp 7,9 million (Supriadi And Nancy, 2016) while expense of requirement live family of farmer of about Rp6,3 million per year (Ilyas, 2015) and expense of investment of rejuvenation of rubber plantation of about Rp7,76 million per ha. level of this Earnings not yet reached target of earnings of scale of farmer of plasma of PIR equal to US$1500 every domestic per annum. But that way farmer generally having leeway of about 235 hock per year. When exploited in an optimal fashion become in working expected to be obtained by addition of earnings about Rp 8,28 million per year (Arian, 2014). For that it is important to know farther the factor influencing behavior of domestic of farmer in executing rejuvenation of his rubber plantation.

From the fact and expectation inferential that becoming main problem is "how allocation of labour used in an optimal fashion in order to rejuvenation of rubber of people in

accelerateable South Sumatra" with a few the elementary question as following

1. How big ability of farmer of allocation of labour of family in an optimal fashion utilize to improve domestic earnings
2. Factors of any kind of influencing allocation of labour of family of farmer of people rubber?

This research in general aims to analyzes farmer family labour allocation ability at research region in South Sumatra in executing his rubber plantation rejuvenation self-supporting. Peculiarly, research aim to:

1. Analyzing the level of family labour allocation farmer ability in an optimal fashion utilize to improve domestic earnings
2. Analyzing factors influencing farmer family labour allocation

Result of this research is expected by good for

1. Explaining economic characteristic of interconnected people rubber farmer domestic of activity consume, people rubber farmer family labour allocation and production
2. Developing influence anticipation model is non economic economics beside to farmer domestic labour allocation to do rubber rejuvenation.

The Research Method

Research developed with erudite approach through inductive and deductive process. Network from erudite approach that way is identify problems, determining research target, develop hypothesis, design research procedure, doing analysis to information and data, and also interpret data and conclude

Place of Research is countryside chosen countryside or domestic of farmer in Province South Sumatra. Regional of research of Province of South Sumatra selected with considerable that this province can deputize other province in Indonesia pursuant to consideration of South Sumatra own wide of area of plantation rubber of wide people in Indonesia that is 27.5% from totalizing wide of area of plantation of people rubber. Despitefully the South Sumatra represent especial producer of rubber in Indonesia that is 35,6% from totalizing production. While time of this research will be executed to start September until November 2017.

Withdrawal of Sample wearied is sample in phases (multi stage sampling) by quota to regency, sub district and countryside. From 6 especial regency of producer of rubber that is Regency of Musi Rawas, Muara Enim, Musi Banyuasin, Ogan Komering Ulu, Ogan Komering Ilir, Banyuasin. Selected in intend (purposive) 3 regency that is Regency of Musi Rawas, Muara Enim and Musi Banyuasin wide area of crop more than 150.000 ha. From each;every the regency selected in intend 2 sub district that is Sub district Muara Kelingi, and Karyajaya (Regency of Musi Rawas), Sub district Babat Toman, River Keruh (Regency of Musi Banyuasin) and Sub district of Gelumbang and Mount Megang (Regency Muara Enim)

From every sub district selected in intend 2 countryside as delegation with criterion area of wide rubber that is Countryside Jaya Bakti, Countryside Karang Sakti, Countryside Sukaraja and Countryside Bukit Ulu (Regency of

Musi Rawas), Desa Toman, Bangunsarim Tebing Bulang, Kertayu (Regency of Musi Banyuasin), and Tebing Kelakar, Sukamenang, Parjito and Mount Megang Outside (Regency of Muara Enim). From every country side is later; then taken sample at random as much 30 sample of farmer from framework sample of chosen countryside. Quota Sample of farmer go forward and traditional 50% that is 15 farmer go forward and 15 traditional farmer.

Method of data collecting of through direct interview with farmer of sample and perform study of deepest to data collecting result. Interview done to use questionnaire comprising open question and closed related to expense variable, earnings, saving, requirement live and allocation of labour of farmer family

Data processing by using peripheral of software of computer SAS. Data which collected from survey processed to follow procedure for study of hypothesis which have formulated. Tabulation of data processed by using program Excel. Examination of Hypothesis of conducted with step hereunder:

1. Examination of conducted first hypothesis compared by descriptive is proportion (percentage) of allocation of labour used by family of farmer to get earnings. If with proportion (percentage) of labour of smaller than proportion (percentage) of earnings of domestic of make mean Ho refused to mean farmer of allocation of labour able to utilize to improve domestic earnings
2. Analyze regression to model of anticipation of econometrical to anticipate factor - factor influencing allocation of labour of farmer family.

RESULT OF SOLUTION AND RESEARCH

Analyze the Effort Rubber Crop farmer Earnings Mean, expenditure and potential [of traditional farmer Domestic saving and go forward [in] visible South Sumatra from Tables 2.

Tables 2 Traditional and Modren Farmer Domestic Saving Potency Mean, 2016

No	Regency	Totalize Earnings domestic (Rp•)	Domestic Expenditure (Rp-)	Potential Saving (Rp.)		
				Domestik	Sell of rubber wood	Amount
I	Traditional	7.247.000	5.194.000	2.024.000	1.220.000	3.244.000
2	Modren	8.575.O00	5.521.000	3.022.000	1.221.000	4.243.000

At] Tables 2 knowable that farmer domestic saving potency mean modren farmer equal to Rp3.022.000 per year of bigger than traditional farmer equal to Rp2.024.000 per year from statistical test result of traditional farmer domestic saving and go forward do not differ reality, at level significant 5%. When attributed to by a farmer compulsion save for its rubber plantation rejuvenation investment expense hence will not find difficulties because only about 8% from farmer saving of per year

Labour of Family of farmer used for business activity of rubber farmer, effort other farmer and outside effort farmer. Mean of Allocation of labour family of traditional and modren visible at Tables 3

Tables 3 Allocation of Labour Family of Traditional and modren Farmer in South Sumatera, 2016

No	Labour Allocation	Traditional Farmer		Go Forward Farmer Farmer Go forward	
		(hok)	%	(hok)	%
1.	Effort rubber farmer	225	35,60	245	39,58
2.	Effort other farmer,	45	7,12	27	4,36
3.	Outside effort farmer	78	12,34	82	13,25
4.	Not yet been exploited	284	44,94	265	42,81
	Amount	632	100,00	619	100,00

At Tables 3 explainable that sum up of labour used Modren farmer unfair of activity of effort farmer of rubber of mean 245 work man days (39,58%), cm-Am of this labour bigger than amount of effusing of labour which allocation of traditional farmer that is equal to 225 work man days (35,60 %.). For activity of outside effort farmer of traditional farmer of mean 78 work man days (12,34%) smaller than modren farmer 82 work man days (13,25%). Activity outside effort farmer which is a lot of is to the farm worker activity. Result of examination statistically do not differ reality at level of belief mean needn't in separate test.

Sum up mean family labour which is made available by about 632 work man days per year for the traditional farmer and about 619 work man days per year for the modren farmer. There are family labour leeway which not yet been exploited equal to 284 work man days per year (44, 94%) for the traditional farmer and equal to 265 work man days per year (42,81%) for the modren farmer. Labour leeway not yet been exploited big enough actually applicable to be optimal of family earnings. First Hypothesizing Examination of labour allocation and Labour Allocation Ability used by and farmer family operating income of rubber farmer can be tabulated 4

Tables of 4 Mean of alocation of Labour and Earnings Domestic of Farmer at Effort farmer of Rubber in South Sumatra of Year 2016

No	Allocation Labour of Traditional and modren Farmer.	Allocation Labour of Traditional Farmer [of] Farmer Go forward.	Allocation Labour of Modren Farmer.
1	Sum up energy family a. Effort rubber farmer b. Non effort rubber farmer	35,60 19,48	39,58 17,61
2	Sum up earnings household a. Effort rubber farmer b. Non effort rubber farmer	73,87 26,13	80,48 19,52

At Tables 4 seen that traditional farmer family labour allocation proportion and modren farmer used to the effort rubber farmer equal to (35,60%) and (39,58%) smaller in comparison with the family earnings proportion used to the effort rubber farmer equal to (73,87%) and (80,48%). This means first hypothesizing refused because proven the traditional and modren farmer labour allocation able to in an optimal fashion to the effort farmer But that way still there are leeway of labour of family exploited equal to 284 work man days per year (44, 94%) for the traditional Farmer and 265 work man days per year (42,81%) for the modren farmer. If the leeway used to work outside effort farmer with fee of Rp15.000 per hock make of additional potency earnings equal to Rp 4.260.000 per year for the modren farmer and Rp 3.975.000 for the traditional farmer.

Factor Influencing Labour Allocation

Labour allocation (Tk) influenced positively by earnings of farmer domestic (Yt), farmer age (Us), sum up family member (Jk), formal education (Pd) and influenced negatively by productivity (Qk), domestic saving (Ts), and the rubber plantation rejuvenation (D). Analyze regression of determinant of labour allocation (Tk) yield function of the following anticipator.

$$Tk = 343,9 + 0,013.Y + 0,494.U - 0,07.Qk + 14,4.Jk - 0,005 - T, + 1,696 - Pd + 9,237.D - 29,56.Lk$$

From function of the anticipator obtained coefficient determinacy (R2) equal to 0,10 with f value count bigger than F its tables of so that variation of from variable of eksogen can explain variation of variable of endogen at level of belief 95 %. Parameter of anticipator entirely have the positive sign to except productivity (Qk), saving RT (Tr) and wide area rubber (Lk) but sign of parameter from the variable as according to expected sign. Analysis of Second /conducted to see by partial is influence from each variable of hexogen yield number of like Tables 6

Tables 6 Result Analyze Determinant of Labour Use

No	Variable	Coefficient Regresi	Parameter Value	t_{count}	Significant
I	Intersep	Bo	343,9	12,355	0,0001
2	Domestic Earnings (Yt)	b,	0,013	-2,629	0,0036
3	Old age petani(Us)	b2	0,494	-1,235	0,2178
4	Rubber productivity (Qk)	b3	- 0,07	-4,711	0,0001
5	Sum up family member (Jk)	b4	14,4	-2,624	0,0091
6	Domestic Saving (Tr)	b5	- 0,005	-1,427	0,1544
7	Formal Education (Pd)	b6	1,696	1,961	0,0506
8	Rubber Rejuvenation (D)	b7	9,237	1,280	0,2015
9	Wide [of] areal rubber (Lk	b8	- 29,56	-3,642	0,0003

Boldness * Real Influence at level of belief 95
** Real influence at level of belief 99

Tables 6 show that as a whole variable hexogen have an effect on Hyatt and very real to labour allocation (Tk), explainable peculiarly that

1. Domestic earnings (Yj) have an effect on positively very real to labour allocation (Tk), equal to 0,013. This means domestic earnings (Yj) more amount determining to go up or descend unidirectional nya with labour use (Tk) equal to 0,013 work man days. This matter is logical because excelsior of allocation of labour hence excelsior of domestic earnings

2. Farmer age (US) have an effect on real and positive to work energy (Tk allocation) equal to 0,494. This means farmer age more amount determining to go up or its descend unidirectional with labour allocation (Tk). Allocation work as labour represent a[n logical matter because old to progressively old age hence motivate to work as labour will progressively lower.

3. Productivity (Qk) have an effect on negativity and very real to labour allocation (Tk) equal to - 0,07. This means productivity (Qk) more amount determining to fluctuate [his/its] contrarily instruct with labour allocation (Tk) equal to - 0,07 work man days. When height of productivity hence the farmer will lessen activity as labour

4. Sum up family member (Jk) have an effect on very real positive to labour allocation (Tk) equal to 14,4. This means amount of family member (Jk) more amount determining to go up or its descend

unidirectional with labour allocation (Tk) equal to 14,4 hock. This matter acceptable because more and more member of family more and more allocation of labour to get earnings of farmer family

5. Domestic saving (Tj) have an effect on negativity and real to labour allocation (Tk) equal to - 0,005. This means domestic saving (Tj) more amount determining to go up or descend contrarily instruct with allocation of labour of equal to - 0,005 work man days. This matter perceivable because proven the ambition save to motivate farmer for the allocation labour of this matter seen still lower because still there are leeway of farmer family

6. Rubber rejuvenation (D) have an effect on real and positive to labour allocation (Tk) equal to 9,237. This means rubber rejuvenation (D) more amount determining to go up or descend unidirectional with labour allocation (Tk) equal to 9,237 work man days. rejuvenation of Rubber need allocation of labour for activity of cultivation of rubber of pattern plant pause of rubber with crop of food and horticulture

7. Area rubber (Lk) have an effect on negativity and very real to labour allocation (Tk) equal to - 29, 56. W mean wide areal rubber (Lk) [of] more amount determining to go up or descend contrarily instruct with labour allocation (Tk) equal to - 29,56 work man days. This matter disagree with fact that wide progressively farm of effort areal of rubber will be ever greater labour allocation. This matter there the possibility of indication that family of farmer will use external labour family or labour of fee to extend area of its rubber.

CONCLUSION AND SUGGESTION

From result analyze and the solution hit analysis of allocation of labour of farmer in rejuvenation of rubber plantation of people hence earn drawing some the following conclusion:

1. Earnings mean farmer domestic modren farmer equal to Rp 8.576.000 per bigger year relative than traditional farmer equal to Rp 7.248.000 per year. Still there are leeway each traditional farmer about 284 per work man days per farmer and modren farmer about 265 per work man days per year, if this leeway exploited in an optimal fashion for the external activity effort farmer with wage rate Rp 15.000 per work man days, hence will be obtained a earnings addition equal to Rp 4.260.000 per year for the traditional farmer and Rp 3.975.000 per year for the modren farmer.

2. Traditional farmer family labour Leeway use and modren farmer to work outside effort farmer in an optimal fashion will add earnings equal to Rp3.975.000 per and Rp4.260.000 year per year will improve economic ability traditional and modren farmer to exceed 67% from investment expense rejuvenation of rubber plantation equal to Rp 7.762.500. Thereby entire/all farmer able to guarantee his rubber plantation rejuvenation investment expense at one blow or in phases.

3. Saving of Domestic of modren farmer equal to Rp3.022.000 per year bigger than traditional farmer equal to Rp 2.024.000 per year. If attributed to compulsion of traditional and modren farmer to save

equal to Rp 184.600 per year and Rp170.000 per year during 15 year that is start age 9 year up to economic age 24 of year of defrayal of investment rejuvenation of rubber plantation, hence will not find difficulties because only about 8% from saving of farmer per year.

4. Some factors influencing allocation of labour influenced by significant and positive by earnings of farmer domestic, farmer age, formal education, rejuvenation of garden and sum up family member, and the influence negatively by rubber productivity, domestic saving, wide area rubber

In the effort economic enableness needed going concern farmer domestic policy:

1. Development diversified effort and use of labour of family of farmer as source of best earnings for domestic of farmer through exploiting of leeway for activity outside effort farmer. Make-Up of technical ability farmer of rubber and improvement of productivity as according to potency through effort of use of a bit of blood and technical recommendation or fomentation related institution.

2. Gift of Aid of loan of capital for levying of technological packet of fomentation through credit with guarantee of certificate of garden farm. counseling And construction of institute of finance of farmer to muster fund of potential saving utilize to improve economic ability of farmer to guarantee expense of investment rejuvenation of his rubber plantation is moment of economic age. Macro policy of developed of economics standing up for farmer with reference to commerce policy, price, fiscal, monetary and the capital cultivation.

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