

Journal of Economics, Business, and Accountancy Ventura Volume 15, No. 3, December 2012, pages 403 – 408
Accreditation No. 80/DIKTI/Kep/2012

PRODUCTIVITY AND SOCIAL ECONOMIC CONDITIONS OF RUBBER SMALLHOLDER'S IN KABUPATEN BANYUASIN, SOUTH SUMATRA PROVINCE

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ABSTRACT

Rubber is one of the top foreign exchange earners in Indonesia. Seventy percent of the land in Indonesia used for the cultivation of rubber consists of smallholding and the remaining 30 percent are large plantations. There are 34,827 rubber smallholders in the South Sumatra Province and account for 87 percent of rubber cultivation in the province. However, they contribute only about 55 percent of the total rubber production. In contrast, large rubber plantations which account for only 13 percent of rubber cultivation contribute 45 percent of the rubber production which shows that rubber plantation productivity is very low. The objective of this study is to describe the productivity and socio economic profile and the affect of socio economic for rubber smallholders' productivity. The total sample used for the study was 433 respondents consisting of 280 poor households and 153 non poor households. Data cross tabulation was used in this study. The results show the socio economic profile reflects the level of rubber farmers education plays the role in the productivity of rubber plantation, the average working hours of the poor rubber farmers for each age group is fewer than those who are not poor families, and the factor of the duration of working hours is certainly associated with the area of the land to be prepared.

Key words: *Rubber Smallholders, Socio Economic, Productivity.*

PRODUKTIVITAS DAN KONDISI SOSIAL EKONOMI PERKEBUNAN KARET PLASMA DI KABUPATEN BANYUASIN SUMATERA SELATAN

ABSTRAK

Karet merupakan salah satu devisa yang paling tinggi di Indonesia. Tujuh puluh persen dari lahan di Indonesia yang digunakan untuk penanaman karet adalah perkebunan plasma, dan 30 persen sisanya adalah perkebunan besar. Terdapat 34.827 petani karet plasma di provinsi Sumatera Selatan dan totalnya adalah 87 persen dari budidaya karet di provinsi tersebut. Namun, mereka hanya memberikan kontribusi sekitar 55 persen dari total produksi karet. Sebaliknya, perkebunan karet besar yang totalnya hanya 13 persen dari lahan karet menghasilkan 45 persen dari produksi karet yang menunjukkan bahwa produktivitas perkebunan karet rakyat sangat rendah. Penelitian ini bertujuan untuk mendeskripsikan produktivitas dan kondisi sosial ekonomi dan pengaruh sosial ekonomi pada produktivitas karet rakyat. Jumlah sampel yang digunakan adalah 433 responden yang terdiri atas 280 rumah tangga miskin dan 153 rumah tangga non-miskin. Tabulasi data silang digunakan dalam penelitian ini. Hasil penelitian menunjukkan bahwa kondisi sosial ekonomi yang mencerminkan tingkat pendidikan petani karet berperan terhadap tingkat produktivitas perkebunan karet, jam kerja rata-rata petani miskin untuk setiap kelompok usia tampak lebih sedikit dibandingkan yang tidak berasal dari keluarga miskin, dan faktor lama jam kerja terkait dengan luas lahan yang akan digunakan.

Kata Kunci: *Perkebunan Karet Kecil, Sosial Ekonomi, Produktivitas.*

INTRODUCTION

It has been the fact that Indonesia is an agrarian state with 42.76 percent of its population depending on the agricultural sector (BPS 2009). Agriculture is the primary sector in the economy of Indonesia. Agriculture has a real role as a producer of foreign exchange through exports. Therefore it is necessary the holding of the development in the agricultural sector so it can compete in the domestic market and overseas. The agricultural sector was that of the national economy as it increased by 0.22 percent during the monetary crisis of 1997. In fact, the Indonesian economy decreased about 13.68 percent then.

The agricultural sector, showing its strategic role in saving Indonesian economy during the economic crisis, was the plantation sub sector. At that time, most economic sectors suffered setback and even paralysis in 1998. In such situations, the plantation subsector showed its contribution to the growth rate between four percent and six percent per year. As Indonesian economy began to improve, the contribution of the growth of the plantation subsector continued to show consistent performance.

The rapid growth of some estates has impacts on the economy of Indonesia. Based on the data of the Directorate General of Plantations (*Direktorat Jenderal Perkebunan* 2004), the total number of plantation in 1999 was about 14.7 million hectares with production of 17.4 million tons and it increased 16.3 million hectares in 2003 with 19.6 ton production. For example, during the 2000-2003 periods, the rate of growth of the plantation sub sector was always above the national rate of economic growth. In 2001, when the national economic growth rate was about 3.4 percent, the plantation sub sector grew at a rate of about 5.6 percent. In 2003, the contribution of plantation sector was around 8.35 percent out of the Indonesian total export of non oil gas.

As a developing country where the provision of employment is a matter of urgency, the plantation sub sector has a sig-

nificant contribution. Until 2003, the number of workers absorbed by the plantation sub sector was estimated to reach approximately 17 million inhabitants. The contribution in providing employment becomes its own added value because the plantation sub sector provides employment in rural and remote areas.

The plantation sub-sector is one of the sub sectors that have an important contribution in terms of the creation of added value as reflected in its contribution to gross domestic product (GDP). In terms of absolute value based on the prevailing prices, the plantation GDP continued to increase from about Rp 33.7 trillion in 2000 to around Rp 47.0 trillion in 2003, an increase of the rate of about 11.7 percent per year.

The above description shows that the plantation sub sector has a role in one of the mainstay in the economic growth in Indonesia, either in booming economy or in times of economic crisis. Rubber is one of the top foreign exchange earners. Indonesia has the biggest rubber plantation in the world, but ranks only second after Thailand in terms of production. Its other competitor is Malaysia. Indonesia's rubber production was only 2.6 million tons in 2006, less than Thailand's three million tons (Apriantono 2008). Production per hectare needs to be rapidly increased by improving efficiency and using modern technology as well as high quality seeds if Indonesia aims to be the biggest rubber producer country in the world by 2020.

Seventy percent of the land in Indonesia which is used for the cultivation of rubber consists of smallholding and the remaining 30 percent are large plantations (Rhomdon 2003). The size of rubber smallholdings ranges from less than 1 hectare to 15 hectares (Direktorat Jenderal Perkebunan / Directorate of Central Plantation 2004).

In an effort to achieve Indonesia's position as the world's biggest rubber producer and to increase the role of plantation sub-sector in contributing to the foreign exchange, it is necessary to develop rubber smallholdings. Kabupaten Banyuasin is an

important rubber smallholding area in Indonesia. It is located in the South Sumatra Province. In the Kabupaten Banyuasin, the total area used for rubber cultivation is about 100,592 hectares that is 11.18 percent of the total rubber hectare in South Sumatra. The total hectare of rubber smallholdings in this regency is 87,386 hectares or 86.87 percent of rubber cultivation in the province. Only 13,206 hectares or 13.13 percent of land used for planting rubber belongs to big companies and government-owned corporations (BUMN). However, they contribute only about 55 percent of the total rubber production. In contrast, the big scale rubber estates which account for 13.13 percent of total rubber hectare produce 45 percent of the rubber in this regency (BPS 2009). These figures indicate that the productivity of rubber smallholdings in this regency is very low. The objective of this study is to describe the productivity and socio economic profile. There is need to study the affect of socio economic for rubber smallholders productivity.

THEORETICAL FRAMEWORK

Socioeconomic status (SES) is an economic and sociological combined total measure of a person's work experience and of an individual's or family's economic and social position in relation to others, based on income, education, and occupation. When analyzing a family's SES, the household income, earners' education, and occupation are examined, as well as combined income, versus with an individual, when their own attributes are assessed (Erick 2005).

Socioeconomic status is typically broken into three categories, high SES, middle SES, and low SES to describe the three areas a family or an individual may fall into. When placing a family or individual into one of these categories any or all of the three variables (income, education, and occupation) can be assessed. According to Lareau (2007) Education also plays a role in income. Median earnings increase with each level of education. As conveyed in the chart, the highest degrees, professional and doctoral

degrees, make the highest weekly earnings while those without a high school diploma earn less.

Higher levels of education are associated with better economic and psychological outcomes (i.e.: more income, more control, and greater social support and networking). Education plays a major role in skill sets for acquiring jobs, as well as specific qualities that stratify people with higher SES from lower SES. On the idea of concerted cultivation, where middle class parents take an active role in their children's education and development by using controlled organized activities and fostering a sense of entitlement through encouraged discussion. Laureau argues that families with lower income do not participate in this movement, causing their children to have a sense of constraint. A division in education attainment is thus born out of these two differences in child rearing. Lower income families can have children who do not succeed to the levels of the middle income children, who can have a greater sense of entitlement, be more argumentative, or be better prepared for adult life.

Education in its broadest, general sense is the means through which the aims and habits of a group of people lives on from one generation to the next. Generally, it occurs through any experience that has a formative effect on the way one thinks, feels, or acts. In its narrow, technical sense, education is the formal process by which society deliberately transmits its accumulated knowledge, skills, customs and values from one generation to another, e.g. instruction in schools.

It has been argued that high rates of education are essential for countries to be able to achieve high levels of economic growth. Empirical analyses tend to support the theoretical prediction that poor countries should grow faster than rich countries because they can adopt cutting edge technologies already tried and tested by rich countries. However, technology transfer requires knowledgeable managers and engineers who are able to operate new machines or produc-

Table 1
Level of Education and Latex Production per kg per year by Family Heads of Rubber Farmers in Kabupaten Banyuasin, South Sumatra

Level of Education	Production per kg per year			
	≤ 1000	1001 - ≤ 2000	2001 - ≤ 3000	> 3001
Uneducated	3 (100 %)	0 (0 %)	0 (0 %)	0 (0 %)
Primary School	66 (100 %)	0 (0 %)	0 (0 %)	0 (0 %)
Junior High School	81 (89 %)	10 (11 %)	0 (0 %)	0 (0 %)
Senior High School	24 (13.6 %)	78 (44.3 %)	62 (35.2 %)	12 (16.8 %)
Above Senior High School	0 (0 %)	18 (18.6 %)	36 (37.1 %)	43 (44.3 %)
Total	174 (40.2%)	106 (24.5%)	98 (22.6%)	55 (12.7%)

Source: Research data of 2010, analyzed using SPSS 19.

tion practices borrowed from the leader in order to close the gap through imitation. Therefore, a country's ability to learn from the leader is a function of its stock of "human capital". Recent study of the determinants of aggregate economic growth has stressed the importance of fundamental economic institutions and the role of cognitive skills.

At the individual level, there is a large literature, generally related back to the work of Jacob Mincer, on how earnings are related to the schooling and other human capital of the individual. This work has motivated a large number of studies, but is also controversial. The chief controversies revolve around how to interpret the impact of schooling.

Working time is the period of time that an individual spends at paid occupational labor. Unpaid labors such as personal housework are not considered part of the working week. Many countries regulate the work week by law, such as stipulating minimum daily rest periods, annual holidays and a maximum number of working hours per week.

Some economists have recommended moving to a 21 hour standard work week to address problems with unemployment, high carbon emissions, low well-being, entrenched inequalities, overworking, family care, and the general lack of free time, though others have pointed to European laws designed to

shorten the work week as a failure (Coote et al. 2012, Schachters et al. 2012, James 2006). Actual work week lengths have been falling in the developed world (Samuel 2011).

Working time is a quantity that can be measured for an individual or, in the aggregate, for a society. In the latter case, a 40-hour workweek would imply that employed individuals within the society, on average, worked 40 hours per week. Some industrialized nations legally mandate a maximum work week length of between 35 and 45 hours per week and require 2 to 5 weeks per year of holiday.

If the work week is too short compared to that society's ideal, then the society suffers from low availability of labor and human capital. All else being equal, this will tend to result in lower real incomes and a lower standard of living than what could be had with a longer work week in the same society.

In contrast, a work week that is too long will result in earning more money at the cost of stress-related health problems as well as a "drought of leisure." Furthermore, children are likely to receive less attention from busy parents, and childrearing is likely to be subjectively worse. The exact ways that long workweeks affect culture, public health, and education are debated.

Several nations have imposed limits on working time in an effort to combat unem-

Table 2
Age and Daily Average Working Hours of Family Heads of Rubber Farmers Households on Their Own Rubber Plantation in Kabupaten Banyuasin

Age	Average Working Hours/Daily	
	Poor Household	Not Poor Household
≤ 45 years old	4.79	6.01
46 – 64 years old	5.02	5.58
≥ 65 years old above	4.87	5.80

Source: Research data of 2010, analyzed using SPSS 19.

Table 3
Preparation of Land Area of Rubber Plants by Family Heads of Rubber Farmers in Kabupaten Banyuasin

Household	Area of Rubber Plants					Total
	1 Ha	1.5 Ha	2 Ha	2.5 Ha	3 Ha	
Poor	189 (67.5%)	23 (8.2%)	59 (21.1%)	0 (0%)	9 (3.2%)	280 (100%)
Not Poor	0 (0%)	1 (0.7%)	16 (10.5%)	6 (3.9%)	130 (85%)	153 (100%)
Grand Total	189	24	75	6	139	433

Source: Research data of 2010, analyzed using SPSS 19.

ployment. The theory is that less work hours per a worker will create a demand for more workers, and give those that are already hired more leisure time. This has been done both on a national level, as in France's 35-hour workweek, and on the company-union level, for example the agreement between Volkswagen and its union to temporarily reduce the workweek to 29 hours to preserve jobs. This policy is controversial among economists.

RESEARCH METHOD

The location of the research is in Kabupaten Banyuasin, South Sumatra Province. The number of the samples for poor household (low productivity) is 280; while for household which is not poor (good productivity) is 153. So the total sample taken is 433 respondents. The data collection consists of primary data. Descriptive analysis was used to analyze the profile of socio-economic characteristic of rubber smallholders including aspects of education of family head and latex production, age of family head, working hours, managed land area. The descriptive analysis is conducted using SPSS version 19 with cross tabulation.

DATA ANALYSIS AND DISCUSSION

Education of Family Labor and Latex Production

Based on the educational characteristics of the family heads of rubber farmer households, the level of their education plays the role in the productivity of rubber plantation as shown in Table 1.

In that fact, improving the latex production of the rubber farmers can be done through the improvement of education. The improved education as a measure of improved quality of human resource can be done through formal or informal way. However, it is difficult to formally improve the education quality of the human resource, particularly for most of the family heads of the rubber farmer households because of their age. One of the ways to improve the quality of this human resource is by having them participate in the activities of agricultural extension or training conducted by the government or competent institutions/ companies.

Age of Family Heads – Working Hours – Prepared Land Area

The age of the family heads of the rubber farmer households is very determining in pro-

ductivity particularly the ones related to capacity of working hours, preparation of land area, and additional activities apart from rubber plantation? The capacity of doing the activities on rubber plantation will differentiate between those conducted by the old farmers and those conducted by the young ones.

A conclusion can be drawn from Table 2 that in Kabupaten Banyuasin the average working hours of the poor rubber farmers for each age group is fewer than those who are not poor families.

The factor of the duration of working hours is certainly associated with the area of the land to be prepared. Based on the result of the study, most poor rubber farmers prepare smaller land areas than those who are not poor.

Table 3 also shows that of the total number of 433 respondents, 189 family heads of rubber farmer households (43.6%) prepare 1 hectare of land, 24 (5.5%) 1.5 hectares, 75 (17.3%) 2 hectares, 6 others (1.4%) 2.5 hectares, and the rest 139 (32.1%) 3 hectares.

The data presented in Table 3 also depicts a condition why the rubber farmers suffer from poverty: it is the narrow land area that causes to produce less latex. The data in Table 3 show that all poor rubber farmers (100%) prepare only one hectare of land. These farmers are also dominant in numbers for land preparation of 1.5 hectares (95.8%) and 2 hectares (78.7%).

CONCLUSION, IMPLICATION, SUGGESTION AND LIMITATIONS

The conclusion of this research follows:

Based on the educational characteristics of the family heads of rubber farmer households, the level of their education plays the role in the productivity of rubber plantation. The improved education as a measure of improved quality of human resource can be done through formal or informal way. One of the ways to improve the quality of this human resource is by having them participate in the activities of agricultural extension or training conducted by the government or competent institutions/companies.

The average working hours of the poor

rubber farmers for each age group is fewer than those who are not poor families.

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