CHAPTER II

LITERATURE REVIEW

2.1 Literature Review

Indonesia lies most of its economy on the agricultural sector. It can be seen by the majority of its people that work in this sector. In Indonesia, agricultural sector is a strong sector in the country's economy and its role as the country's national development buffer is considered important (Ali, J., Delis, A., & Hodijah, S., 2015). As the sector that is put as the priority of the government, agricultural sector provide many job opportunities for the people and raise their quality of life. Other than giving the people a better quality of life and job opportunities, agricultural sector is proven to be effective and efficient in increasing the products variation, quality and production processes, and the regions' development. However, even though the number of worker absorbed in the agriculture sector is not always increasing, this sector remains the main sector that helps some regions to develop its economy.

Naibaho (2015) stated that rubber is one of plantation commodities that have important role in the national economy. The demand for rubber products is high due to the widespread use of rubber in which caused the demand for raw materials also increased. Even though the demand of rubber keeps increasing in time, there are still several weaknesses that exist in the rubber producers such as; rubber seedlings, farmers owned

capital, rubber garden maintenance, rubber plantation tapping, and farmer groups. However, those weaknesses are followed by some strengths of the rubber plantations in the research area itself that can help the producers meet the demand in the market, they are; climate and land conditions, availability of labor force, farmer's experience, and rubber plantation spacing. In several regions in Indonesia, Jambi for example, the rubber plantation in the reality shows a great amount of potential space so that rubber is admitted to be the main production of the province. This condition becomes the main reason behind the dependency of the people on the rubber plantation and production processes.

However, Häuser et. al., (2015) argued that rubber cultivation can result on significant increases in households' income and hence can help those households to move out of poverty. It is supported by Liu et. al. (2006) in which they found that per capita income and expenditure of the people have increased over a period of 15 years due to rubber production in a township of Xishuangbanna, Yunnan. Farmers started to switch from swidden agriculture or shifting agriculture into rubber cultivation that profited the most and in the other case it happened that the ethnic minorities in Southern Yunnan even expanded rubber cultivation into neighboring Laos. Many cases related to the conversion of land into labor plantation happen in Indonesia. This conversion happened due to the increasing of the rubber demand; thus, the government, private companies, and investors try to meet them by converting the land into rubber

plantation. When a land is converted into a different plantation, the need for worker will be different where it can be less or more worker needed. Häuser et. al., (2015) added that almost 90% of respondents perceived that rubber cultivation in their region affect them positively in term of economic situation. It happens not only in other countries but in Indonesia as well. Some regions are considered as the top rubber producers in the country and they are the producers who every year try to produce in order to meet the demand. It causes the increasing of the economic condition through many sides such as income, gross domestic product, and the most important is labor absorption.

Based on Feriyanto & Sriyana (2016), wage rate is one of the most important variables that can determine the demand of labor and this variable is used by the government to protect the worker in the labor market. Knabe and Schöb (2008: 33) in Mrnjavac & Blazevic (2014) explained that "A minimum wage is an inferior policy to wage subsidies. If the government is willing to spend the same amount of money directly on wage subsidies that it would otherwise have to spend indirectly to finance the cost of minimum wages through higher expenditures on unemployment and welfare benefits, it could achieve more favorable employment and income effects." Seeing the importance of minimum wage to the economy, more research especially related to the rubber cultivation came up. Based on Effendi (n.d.), the smallholder in rubber plantations are relatively sensitive to changes in wage levels in the

production of cost structure. It shows that the rubber producers in here tend to be labor intensive. Labor intensive means that they tend to absorb more people to help them to produce more volume of production. In addition, Effendi (n. d.) has proven that the minimum wage of woker has negative relation with labor absorption. Moreover, many studies have found the relation between these two indicators. The evidence shows that the high rate of wage will actually lowering the labor absorption and increase unemployment (Bashir & Kadiri, 2012 in Feriyanto & Sriyana 2016). In Dewi, Prihanto, & Edy (2016), minimum wage of province has negative effect on the labor absorption significantly. It is supported by Alexandi & Marshafeni (2013) who wrote that the increasing of minimum wage will cause the company to increase its cost of production, and to face this issue, the company tend to demand less worker so that it will lead to unemployment.

Labor absorption can be affected by many things in the economy, such as; total wage, material of the production, production, and the number of the company (Arifin & Azhar, 2011). In the rubber production, the producers are divided into three main producers, they are the smallholder, state owned company, and the private company. All of them are spread in any province that produces rubber in Indonesia. The number of company may increase when there is an addition in investment and it can decrease when they face bankruptcy. When the number of company or unit increases, the need for worker will increase as well in order to fulfill the

companies' demand. It happens because when the number of producer increases, each unit of producer will need people to work for them and produce. This condition affects the supply and demand of the labor in the labor market. Moreover, this finding is supported by the research of Purmiyanto (2010) who stated that the level of wage and the number of industry significantly influence the labor absorption. Donny (2018) mentioned that a company that runs in rubber industry named PT Bumi Borneo Abadi is just opened in Kahayan Hilir and will need 250 workers that consist of experts, technician, and workers. Another article in at the end of 2017 reported that a factory of PT. Multi Kusuma Cemerlang in Samarinda has absorbed 3.800 workers since its operation started and is very beneficial for the people there (Diresmikan, Pabrik Karet Alam Kaltim Serap 3.800 Pekerja, 2017).

Nofriandi (2016) in his research stated that the area is one of the most important things in rubber plantation. The more and the better the quality of the land, the more production the farmer can conduct. However, there are several researches that are conducted to see the effect of area of production on the labor absorption and the results are varied. Tambunan (2015) stated that rubber plantation is not only affecting the economy generally but the development of rubber plantation area affects the region in term of labor absorption specifically. In "Pola Penyebaran Tanaman Karet di Indonesia" (2015), it is stated that rubber has a very important role in Indonesia since it provides job for around 1.4 million families and

gives a very significant contribution on the country's non-oil and natural gas foreign exchange. It also has a very important role in stimulating the economy by increasing the opportunity of new economies around the rubber plantation. However, as explained in Dewi, Prihanto, & Edy (2016), the potential area in agricultural sector has negative effect on the labor absorption. Many researches have been conducted among the economists related to the role of areas on the agricultural production and at the end labor absorption. The results consist of the positive and negative effect yet we can say that it gives some effect to both the production and labor absorption.

Kasman (2009) managed to say that the effort to develop three main commodities (coconut, rubber, and cacao) will certainly increase the role of these commodities in increasing the labor absorption and export revenues. Rubber is very important nowadays since many other industries depend themselves on the rubber production. In "Pengembangan Industri Plastik dan Karet Hilir Prospektif" (n. d.), it is stated that rubber is one of the most important commodities in which will affect the other industries in many ways. Since the use of rubber is very often in many industries such as tire and other parts of plane, the need to increase the number of company and industry related to it is considerable in order to grow the economy of the country. Based on Lestariani (2016) about the effect of the number of producer, investment, and production on labor absorption, it

proved that all of these variables; the number of producer, investment, and production have significant effect on labor absorption.

Table 2.1. List of Authors, Journals/ Writings, and Statement

No	Name of the	Title of Journal/	Statement		
110	Author	Writings	Statement		
1.	Jonni Ali, Arman	Analisis Produksi dan	Rubber plantation is very important		
	Delis, and Siti	Pendapatan Petani	for Indonesia because this industry		
	Hodijah	Karet di Kabupaten	absorbs a huge number of people.		
		Bungo (P. 201)			
2.	Paula Naibaho	Analisis Ekspor Karet	Rubber is one of the most important		
		dan Pengaruhnya	commodities because of its		
		terhadap PDRB di	important role in the country's		
		Provinsi Jambi (P. 28)	economy.		
3.	Häuser et. al.	Environmental and	Rubber plantation can help		
		Socio-Economic	households move out of poverty		
		Impacts of Rubber	and increases their income as well.		
		Cultivation in the			
		Mekong Region:			
		Challenges for			
		Sustainable Land Use			
		(P. 5)			
4.	Liu et. al	Environmental and	Per capita income and expenditure		

	ı				
		Socioeconomic	of the people have increased over a		
		Impacts of Increasing	period of 15 years due to rubber		
		Rubber Plantations in	production in a township of		
		Menglun Township,	Xishuangbanna, Yunnan.		
		Southwest China (P.			
		251)			
5.	Häuser et. al.	Environmental and	Almost 90% of respondents		
		Socio-Economic	perceived that rubber cultivation in		
		Impacts of Rubber	their region affect them positively		
		Cultivation in the	in term of economic situation.		
		Mekong Region:			
		Challenges for			
		Sustainable Land Use			
		(P. 5)			
6.	Jaka Sriyana and	Labor Absorption	Wage rate is one of the most		
	Nur Feriyanto	Under Minimum	important variables that can		
		Wage Policy in	determine the demand of labor and		
		Indonesia (P. 17)	this variable is used by the		
			government to protect the worker in		
			the labor market.		
7.	Željko Mrnjavac	Is Minimum Wage a	A minimum wage is an inferior		
	and Sanja	Good Policy for Poor	policy to wage subsidies. If the		
	Blažević	Worker in Croatia? (P.	government is willing to spend the		

		37)	same amount of money directly on
			wage subsidies that it would
			otherwise have to spend indirectly
			to finance the cost of minimum
			wages through higher expenditures
			on unemployment and welfare
			benefits, it could achieve more
			favorable employment and income
			effects.
8.	Muhammad	Pengaruh Upah Buruh	The smallholders in rubber
	Rizka Maulana	terhadap Permintaan	plantations are relatively sensitive
	Effendi	Tenaga Kerja di	to changes in wage levels in the
		Sektor Perkebunan	production of cost structure.
		Karet Rakyat di	
		Kabupaten Banyuasin,	
		Sumatera Selatan. (P.	
		93)	
9.	Rezky Fatma	Analisis Penyerapan	Minimum wage of province has
	Dewi, Purwaka	Tenaga Kerja pada	negative effect on the labor
	Heri Prihanto, and	Sektor Pertanian di	absorption significantly.
	Jaya Kusuma Edy	Kabupaten Tanjung	
		Jabung Barat. (P. 19)	
10.	Kholidah Azhar	Faktor – Faktor yang	Labor absorption can be affected by

	and Zainal Arifin	MempengaruhiPenyer	many things in the economy, such		
		apan Tenaga Kerja	as; total wage, material of the		
		Industri Manufaktur	production, production, and the		
		Besar dan Menengah	number of the company.		
		pada Tingkat			
		Kabupaten/ Kota di			
		Jawa Timur. (P. 104)			
11.	Purmiyanto	Analisis Faktor –	The level of wage and the number		
		Faktor yang	of industry significantly influence		
		Mempengaruhi	the labor absorption.		
		Penyerapan Tenaga			
		Kerja pada Sektor			
		Industri Manufaktur di			
		Kota Malang.			
12.	Nofiradi	Analisis Faktor –	The area is one of the most		
		Faktor yang	important things in rubber		
		Mempengaruhi	plantation.		
		Produksi Karet di			
		Kecamatan Mestong			
		Kabupaten Muaro			
		Jambi (P. 9)			
13.	Joel Tambunan	Indonesia Kaya akan	Rubber plantation is not only		
		Sumber Daya Alam	affecting the economy generally but		

		Namun	Miskin	the	development	of rubber
		Sumber	Daya	plantation area affects the region		s the region in
		Manusia.		term	of labor	absorption
				specific	cally.	
14.	Suryadi Kenedy	An Article entitled Rubber has a very important in			portant role in	
		"Pola Penyebaran		Indonesia since it provides job for		
		Tanaman K	Karet di	around	1.4 million	families and
		Indonesia"		gives a very significant con	nt contribution	
				on the	country's non-	oil and natural
				gas for	eign exchange.	

2.2 Theoretical Basis

2.2.1 Theory of Labor Absorption and Labor

2.2.1.1. Labor Absorption

Unemployment is one of the biggest issues that are always faced by developing countries. A high number of unemployment can actually affect on how the level of national income and people's welfare cannot reach the maximum level. There are many things that the government tries to do in order to face unemployment and one of them is by increasing the labor absorption in the country.

Labor absorption can be defined as gathering people who are able and have the willingness to work in a business where they can transfer their skills and give benefit for the business itself. In economics, it is explained that there are many factors of production such as land, capital, skill, and labor. The combination between labor and skill is one of the things that affect the labor absorption in the business. Many people are not absorbed in the labor market because of their low skill and this is what lead them into unemployment.

The increasing number of industry can significantly affect the labor absorption. However, a limited access to develop the labors' skill is another problem that would intervene the development of labor absorption.

2.2.1.2. Labor

Labor can be defined as the citizen of a country wsho are in the working age. Moreover, labor can also be defined as the people who work, or are searching for job, and those who do other activities such as studying and housework. Based on UU Number 13 Year 2003 Chapter 1 Verse 2, labor is every individual who is capable of doing and producing goods or services in order to fulfill his own needs or the people around. From all the definitions above and many other definitions, it can be concluded that labor is every

individual who fulfill the age requirement and capable of producing goods and services in order to purchase his needs.

a. Classification of Labor

Labor can be classified in several classes and they are all based on certain standard. Below are the classifications of labor:

> Based on the Citizen

1. Labor

Labor are all the citizen who are capable to do job. People who are classified as labor are those who are aged from 15 to 64 years old.

2. Non Labor

Non labor is the people who are not able to work and do not want to have job even there are jobs provided. People who are classified to this class are those who are aged below 15 and above 64 years old.

➤ Based on Work Limitation

1. Labor Force

Labor force covers those who are in the productive age; 15 to 64 years old, and already have job but are not working in the

moment. It also includes people who are still seeking for jobs.

2. Non Labor Force

Non Labor Force covers those who are aged above 10 years old and they have their own activities such as studying, housework, and others.

➤ Based on Quality

1. Educated Labor

Educated labor refers to labor that have skill in certain things in which they received it through studying in formal or non-formal education institution.

2. Skilled Labor

Skilled labor refers to labor that have certain skills that he receives through work experience. Skilled labors are those who work at one thing for some period of time so that they are good at that job and skill.

3. Non Educated and Skilled Labor

Non educated and skilled labor refers to the labor who does not have well education

background and work experiences and they only use their strength to do the job.

b. Issue Related to Labor

There are several things that become the issue of labor in Indonesia, they are;

1. Job Opportunity

The issue related to job opportunity is when the supply of the labor is more than the job opportunity provided. It will cause not all of the labor force get the job that they need.

2. Quality of the Labor

The quality of the labor in Indonesia is still low due to the quality of education and the lack of working experience. It causes the low skilled labor get some difficulties in the process of getting job and the beginning of unemployment.

3. Labor Distribution

The issue related to the labor distribution is that how labor force are spread and distributed in only one or two places. Thus, the competition is very tough for those unskilled and uneducated labor.

Labor is very important for the development of a country's economy. The classic theory of Adam Smith (1729 - 1790) stated

that the effective allocation of labor is the root of economic development. More of the theory of labor came from Malthus (1798) who wrote an essay entitled "Principles of Population". He was not sure at first about the development of economic through agriculture because when the number of population increases, the land is not increasing at all even it decreases. To meet the goal of economic development, he stated that the importance of specialization in work so that the productivity will be optimum.

Concerning the demand of labor. Demand of labor is derived demand that it depends on several things as follow:

a. The Production of the Company

When the demand for product A increases, the demand labor for producer A will increase as well, and it happens *vice versa*. When the demand for product A decreases, the company will reduce its production. To minimize the cost of production, the company will start to cut the workers, and in other words, no labor demand.

b. Labor productivity

When the production of the company with certain number of workers is enough to fulfill the demand of the products, the company will not hire more workers. It happens in *vice versa*, which means when the production of the company with certain number of workers is not enough to meet

the demand of the products, the company will hire more workers in order to fulfill the demand.

c. Technology

The producers will start replacing the workers with technology when the price of workers is higher than technology. It will happen in the other way around, when the price of other factor of production is expensive, the labor demand will be high.

2.2.2 Theory of Wage

Wage can be defined as the price that is paid to the worker or labor for his services in producing goods and services. Wage is also defined by Soekirno (2005) as a payment for the services that the workers give to the businessman. Moreover, based on law, wage is the right of the workers that they receive in the form of money from the businessman. In addition, the amount of wage that they receive should be based on the work agreement or law, including the incentive for the workers and their family. Wage is very important in determining the labor demand and supply in the labor market.

There are several theories of wage that are very important as follow:

a. Subsistence Theory of Wage

Subsistence Theory of Wage is a theory that explained how when the supply of labor increases, the wage will decrease and at the end will decrease the supply of labor. It will happen in the other way around, when the supply of labor decreases, the wage will increase in which at the end will increase the supply of labor.

b. Marginal Productivity Theory of Wages

Marginal Productivity Theory of Wages refers to how the company will pay the labor based on their contribution in the production processes. When they show a high contribution, the wage that they get will be high and when the contribution is low, the wage that they will receive will be low as well.

c. Modern Theory of Wage

Modern Theory of Wage is a theory that believes how the price of labor depends on the interaction of labor and supply demand in the labor market. In this theory, many things regarding to the supply and demand of labor are discussed such as the development of technology, derived demand, and the other production factors.

2.2.3. Theory of Production

Theory of production explains about the study of the economic process in which the production factors are processed in

order to create products or output. Production uses many resources to create product and these resources are called as factor of production.

Moreover, there are three aspects of production process as follow:

- a. Quantity of the goods or services
- b. The form of the goods or services that are produced
- c. Temporal or spatial distribution of the goods or services produced

Production function pictures the relationship between the level of input used in the production with the level of output of the production. A simple production function shows the relationship between the inputs used by the company or a firm with the number of labor used in the production in order to produce the products. In the theory and practices, there are several factors of production that are needed in order to create or produce goods and services as follow:

- a. Human Capital (Labor or Worker)
- b. Capital
- c. Natural Resources (Land)
- d. Skill (Technology)

In order to create products, all these factors of production should be combined effective and efficiently so that the production processes can be conducted as expected.

2.2.4. Theory of Company and Industrial Business

Company is defined as a unit of business that runs an economic activity that has a goal to produce goods or services. A company is usually located in a certain location and has its own administration record related to the production and the cost structure.

Industrial company is divided into some classes;

- 1. Big Industry (It has 100 workers or more)
- 2. Medium Industry (It has 20 99 workers)
- 3. Small Industry (It has 5 19 workers)
- 4. Household Industry (It has 1-4 workers)

The classification of the industry above is only based on the number of workers who work in the industry or company, without paying attention on the usage of technology and the capital that the company spends on the business.

2.3 Hypothesis

- a. The effect of rubber production on labor absorption is positive.
- The effect of the size of rubber plantation on labor absorption is positive.
- c. The effect of provincial minimum wage on labor absorption is negative.
- d. The effect of the number of company on labor absorption is positive.