Full Length Research Paper

The Contribution of Agriculture Sector to the Economic Development (Case Study: North Sumatera)

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The agricultural sector is a very large sector in contributing to economic development in the Province of North Sumatera, where it can be seen from the results of the analysis used by the Method Location Quotient (LQ). The Provincial Government of North Sumatera is necessary to give attention to development in the agricultural sector by using a strategy of development in the agricultural sector. Besides the agricultural sector, the industrial sector is also important to be the leading sectors in North Sumatera province where agriculture and industrial sectors have a very close relationship that can influence together on economic development in the Province of North Sumatera. However, based on the calculation method of the Location Quotient (LQ) for the industrial sector only amounted to 0.9, which means that the industrial sector is not a sector of a base in the province of North Sumatera. Based on the calculation method of the Location Quotient (LQ) are some of the leading sectors in the province of North Sumatera, namely: agriculture at 1.5, the construction sector at 1.2, hotel and restaurant trade sector at 1.1, transport and communication sector amounted to 1, 1 as well as the services sector of 1.1.

BACKGROUND

Natural resources owned by Indonesia, especially North Sumatra Province is a gift from God Almighty to the people in North Sumatera where natural resources can be used as a source of livelihood of the people in North Sumatera.

North Sumatera Province has natural wealth that is extraordinary as fertile agricultural land and maritime as well as the availability of human resources who will manage the natural resources to be of real value in human life.

At this time it can be seen that the agricultural sector is very developed rapidly in its management by the public or by private companies where almost all agricultural land has been managed by public and private companies are used as agricultural land and plantations.

Here the role of government need to see how that should be done by public and private companies in the management of agricultural land given that the availability of agricultural land and plantation are limited.

North Sumatera Provincial Government should have a good strategy in managing natural potential, namely land that will serve as a source of public revenue and the region in the long term so that the land availability of a limited number will be of benefit to human life within a very long time and not limited.

Sustainable development is development that takes into account the future of the next generation where they also have the right to live with the availability of natural resources was created by the Almighty God so that when the natural potential is managed ineffective and inefficient it will eliminate the opportunity for the next generation to live.

Natural resources there are two, namely:

1. Natural resources are renewable such as sea and forest.

2. Natural resources that cannot be refurbished as: mining, oil.

The entire natural resources in the Province of North Sumatera will be able to contribute to economic growth in the Province of North Sumatera are managed each year.

Sukirno, 1994, said that there are several factors that influence economic growth, namely:

1. Land and natural resources is an economic potential to be managed.

2. The number of residents and the quality of human resources.

3. social system and community attitudes.

4. Broad market as economic growth is a place to market the results of production.

If we compare with the fact that of the Province of North Sumatera that the opinions expressed by the Sukirno is ideal for the North Sumatra Province because the condition is really happening in the Province of North Sumatra.

Land or land available in the Province of North Sumatera is very broad and flat so it is very appropriate to be used as agricultural land and plantations that are managed by public and private companies.

The availability of human resources in the province of North Sumatera are very numerous and scattered throughout the area in North Sumatera Province so it is not difficult to find employment.

Social system that is full of a sense of family and community attitudes are open to anyone who comes to North Sumatra province and a conducive environment that is well maintained.

The extent of the existing market will be able to accommodate all of the results of agricultural production and plantation so as not to complicate people to market their agricultural land.

Indeed, there are still many obstacles faced by public and private companies in managing natural resources in the Province of North Sumatera.

FORMULATION OF THE PROBLEM

Formulation of the problem is how to summarize all the problems that exist on the existing conditions in the area of North Sumatera Province which will serve as the focus of attention in this study.

So above the existing background it can be the formulation of the problem as follows:

"How big is the agricultural sector's contribution to economic development in the Province of North Sumatera".

RESEARCH PURPOSES

Based on the formulation of the problem, the purpose of the study is:

1. To determine how much influence the agricultural sector to the economic development in the province of North Sumatera.

2. To provide information to local governments of North Sumatera Province on the contribution made by agriculture to economic development in the province of North Sumatera.

Agriculture Sector

The agricultural sector is a sector with huge potential because it is a capital in carrying out development planning in each area so that the agricultural sector must be managed properly.

Agriculture is an attempt to Achieve maximum results with managing the plant and environmental factors. (Sri, consisted Harjadi, 1975).

Kuncoro, 2006, said that there are some explanations about the causes of poverty the which one of them is the population are dependent on the agricultural sector subsystems, traditional and apathy towards the environment.

In building the agricultural sector is not easy because there are many obstacles faced by communities in empowering agricultural land, among others:

1. Availability of working capital needed by farmers.

2. Availabilit of agricultural infrastructure needed by farmers.

3. Availability of agricultural seeds for farmers.

4. Availability of fertilizers and pesticides to farmers.

5. The availability of agricultural extension.

6. Availability of irrigation channels.

For the private companies also experienced the same thing in managing land in North Sumatera province such as:

1. The attitude of the bureaucracy that is always difficult for the company.

2. The Regulations are still overlapping.

3. The process permits a long, long time.

4. Corruption, Collusion and Nepotism.

Obstacles faced by the community and the company is the North Sumatera Provincial Government's task to overcome so that people and companies can manage the farm properly and easily.

North Sumatera Provincial Government must facilitate all the facilities needed by farmers and linking farmers to financial institutions that can assist them in managing agricultural land.

Similarly, the company has many obstacles that need to be the role of the North Sumatera Provincial Government to pay attention to the company in the management of all the company needs to manage land in North Sumatera Province.

Natural wealth in North Sumatera is the economic potential for the community and the North Sumatra region so as to be well managed in the time period is not limited.

The economic potential will contribute to economic development for the community and the region of North Sumatra Province which can be seen from the Gross Regional Domestic Product (GDP) of the Province of North Sumatera each year.

Gross Regional Domestic Product (GDP) is the amount of the value given by all sectors of the economy that exist in each region within a certain time.

Prathama, 2001, said that the Gross Domestic Product (GDP) is the value of final goods and services based on the market price produced by an economy over a period of using the factors of production.

North Sumatera Province has a value of Gross Domestic Product (GDP), which is good enough in the year to year, especially in the agricultural sector which is very dominant in contributing to the Gross Regional Domestic Product (GDP) of the Province of North Sumatera.

ECONOMIC POTENTIAL.

The economic potential is the economic sectors that contributed most on public revenue and local revenue managed over natural resources that exist in each region.

When the government wanted to create a development plan that starts with what is owned by the county on the natural wealth so that the success of the development will be achieved.

Economic potential can be the greatest contribution of the leading sectors in the economic development of communities and regions.

Seed sector is the biggest sector in contributing to economic development so that the leading sectors referred to as a sector of the country or regional basis.

Glasson, 1990, said that the concept of economic base divided by 2 is:

1. Sector basis ie activities of certain sectors in the region are already doing export product.

2. Sector non bases that certain sectors of activities in areas which do import products to meet the needs of the community life of the area.

To determine the dominant sector or sector basis in each region can use a method called the Method Location Quotient (LQ), so using this method will be visible contribution of each sector to the regional economy.

Methods Location Quotient (LQ) is a method of describing the condition of the sector in each region by comparing the area of a higher order.

Tarigan, in 2005, also said that the Location Quotient (LQ) is comparing the portion of employment / value added for certain sectors in our region compared with the portion of employment / value added for the same sector nationally.

Economic Development

Overall development is the goal of each country and region so that the role of the state and the area is very important in realizing the overall development and evenly in every area.

However, realizing this fact explains that it is not easy because a lot of the problems faced by countries and regions to develop as a whole.

In each region also experienced the same thing, namely the difficulty in establishing their respective regions where each region has its own characteristics different.

Blakely, 1988, said the process of local economic development are:

1. Preparation and institutional development.
2. Development of local alternative industries.
3. Development of the capacity of local producers to produce a better product.
4. Identification of new markets.
5. Transfer of knowledge.
6. Growth of new company / new business.

Natural wealth vary in each region would lead to differences in the economic development of the region, therefore it is necessary to study how the economic potential of each region.

Hoover & Giarratani in Dedi NS., Setiono, 2011, explains that there are three main things that become the foundation of knowledge about the region and the analysis region, among others:

1. Immobility factors of production.
2. Nature of the factors of production and goods which cannot be divided perfect.
3. Imperfections mobility of goods and services.

Economic development of the region should be supported by the availability of rich natural resources such as oil, gas, mining, etc., which provide a very high influence on the improvement and economic growth in the region so that the region should really manage these resources.

Laksani2010, said that economic growth is the extent to which economic activity would generate income for the people in a specific period.

Then Arsyad, 1997, said that economic growth is the increase in Gross Domestic Product (GDP) regardless of whether the increase was larger or smaller than the rate of population growth or whether the economic structural changes occur or not.

Previous Research

1. Marenda Isaac, 2008, describes the research findings based on the calculation Location Quotient (LQ) that exist in Tasikmalaya district consisting of 39 sub-district is as follows:

   a. The agricultural sector is the dominant sector contained in the 17 districts.

   b. The building sector is the dominant sector in 21 districts.

   c. The trade sector is the dominant sector in 24 districts.

2. Wahyu Putra Gantara, Tri Achmadi, 2012, explaining that the results of the calculation of Location Quotient (LQ) is the dominant sector in East Java is the South Beach area of East Java, namely in the sectors of agriculture, mining, finance, leasing, and business services.

3. SiscaVaulina, ElfiRahmi, 2013, said that based on research results of calculations using the method of Location Quotient (LQ) that the dominant sector in Indragiri Hilir is the agricultural sector.

RESEARCH METHODOLOGY

1. Place Research

In this study were used as the object of research is the Provincial Government of North Sumatera.

2. Types and Sources of Data

Data used in the study is quantitative data in the form of data on economic growth which Domestic Gross Regional Product (GDP) of the Province of North Sumatera in 2010-2012 and data on national economic growth which is the National Domestic Product 2010-2012.

   Data can be obtained in a number of North Sumatera and Indonesia in the 2010-2012 figures.

   Here can be seen the amount of each economic sector in contributing to the Gross Regional Domestic Product (GDP) of North Sumatera Province in the years 2010-2012.

   If we look at Table 1, it can be seen that the manufacturing sector as the first contributor to the economic development of the province of North Sumatera and was followed by the agricultural sector and trade, hotel and restaurant.

   Each sector that exist in Gross Domestic Product (GDP) of the Province of North Sumatera has increased every year so the necessary attention to the North Sumatera Provincial Government in taking care of the entire existing economic potential so well managed and sustainable.

To see a comparison between local and central it is necessary to see the contribution of each sector nationally as the following table:

3. Data Analysis

To analyze the data used in this research is the Location Quotient (LQ) where the analysis results using the Location Quotient (LQ) will be able to provide answers about which sectors are the most superior or sector of the base in the Province of North Sumatera.

The Formula Location Quotient (LQ) is as follows:

$$LQ = X_{iSU} / PDRBSU \ ------------------ \ X_{in} / PDBN$$

Where :

X_{iSU} i = Value-added sector in the province of North Sumatra.

X_{in} i = Value-added sector in Indonesia.

PDRBSU = Gross Regional Domestic Product (GDP) of the Province of North Sumatera.

PDBN = National Gross Domestic Product

$LQ > 1$ means the value of sector i in North Sumatera Province is greater than the value of i sector nationally.

$LQ = 1$ means that the value of the sector in the Province of North Sumatera i is equal to the value of i sector nationally.

$LQ < 1$ means that the value of the sector in the Province of North Sumatera i is less than the value of i sector nationally.

DISCUSSION RESULTS

1. The Contribution of Agriculture Sector to Economic Development.

The amount of the contribution of each sector to the economic development not directly make that particular sector in the area becoming a sector basis, but the results of the calculation of Location Quotient (LQ) to be answered about how much each sector's contribution to economic development.

   In Table 1 it can be seen that the industrial sectors that contributed most to the economic development of the region, followed by the agricultural sector and trade, hotel and restaurant.

   To see the magnitude of the contribution of each sector to the economic development of data used Gross Regional Domestic Product (GDP) of North Sumatera Province Years 2010-2012 and Gross Domestic Product of Indonesia in 2010-2012.

   Furthermore, both the data will be compared by using Method Location Quotient (LQ) and the results can be seen in the following table:

   Based on the analysis Location Quotient (LQ) can be explained as follows:

TABLE 1: REGIONAL GROSS DOMESTIC PRODUCT (GDP) NORTH SUMATERA THE PRICE OF CONSTANT 2010-2012 (InBillions Of Rupiah)

SECTORS	2010	2011	2012
Agriculture	23.040,20	29.390,57	30.778,67
Mining And Quarrying	1.400,65	1.496,84	1.525,32
Processing Industry	26.015,21	26.548,66	27.513,10
Electricity And Water	872,15	943,75	971,98
Building	8.066,15	8.754,63	9.348,16
Trade, Hotel And Restaurant	21.919,34	23.693,42	25.406,77
Transportation And Communication	11.633,90	12.749.43	13.858,26
Finance And Insurance	8.795,15	9.992,47	11.111,51
Office	11.976,15	12.969,81	13.947,74
Gross Domestic Product	113.718,90	126.587,60	134.461,51

Sumber : North Sumatera In Figures.

TABLE 2: GROSS DOMESTIC PRODUCT (GDP) INDONESIA 2010-2012

SECTOR	2010	2011	2012
Agriculture	304.777,1	315.036,8	327.549.7
Mining And Quarrying	187.152,5	189.761,4	192.585,4
Processing Industry	597.134,9	633.781,9	670.109,0
Electricity And Water	18.050,2	18.921,0	20.131,4
Building	150.022,4	159.993,4	171.996,6
Trade, Hotel And Restaurant	400.474,9	437.199,7	472.646,2
Transportation And Communication	217.980,4	241.298,0	265.378,4
Finance And Insurance	221.024,2	236.146,6	253.022,7
Offices	217.882,2	232.537,7	244.719,8
Gross Domestic Bruto	2.314.458,8	2.464.676,5	2.618.139,2

Source : Gross Domestic Bruto

TABLE 3: RESULTS ANALYSIS LOCATION QUOTIENT (LQ)

SECTOR	2010	2011	2012
Agriculture	1,5	1,8	1,8
Mining Ang Quarrying	0,2	0,2	0,1
Processing Industry	0,9	0,8	0,8
Electricity And Water	1	0,9	0,9
Building	1,2	1,1	1,1
Trade, Hotel And Restaurant	1,1	1,1	1,08
Transport, Communication	1,1	1,02	1,02
Finance And Insurance	0,8	0,8	0,9
Services	1,1	1,1	1,1

Source: Processed Data

1. LQ agricultural sector in 2010 was 1.5, in 2011 was 1.8 and in 2012 was 1.8 so LQ for agriculture> 1 means that the agricultural sector is a sector basis or leading sectors.

2. LQ construction sector in 2010 was 1.2, in 2011 was 1.1 and in 2012 was 1.1 for the building sector so that LQ> 1 means that the building sector is a sector basis or leading sectors.

3. LQ trade, hotel and restaurant in 2010 was 1.1, in 2011 was 1.1 and in 2012 was 1.08 so LQ trade, hotel and restaurant> 1 means that the trade, hotel and restaurant is a sector basis or leading sectors.

4. LQ transport and communications sector in 2010 was 1.1, in 2011 was 1.02 and in 2012 was 1.02 so the transport and communications sector LQ> 1 means that the transport and communications sector is a sector basis or leading sectors.

5. LQ services sector in 2010 was 1.1, in 2011 was 1.1 and in 2012 was 1.1 so LQ for the services sector> 1

means that the services sector is a sector basis or leading sectors.

6. LQ mining, manufacturing and finance and insurance sectors as well as the electricity and water sector from the year 2010, 2011 and 2012 is <1 means that the third sector is not a sector or sector basis unseeded.

Based on the calculation Location Quotient (LQ) for three years, namely in 2010, 2011 and 2012, the agricultural sector is the most dominant sector in contributing to the Gross Regional Domestic Product (GDP) of the Province of North Sumatera, followed by the construction sector, trade, hotel and restaurant , transport and communication and services.

To maintain the agricultural sector become dominant sector throughout the year, the role of government is necessary examine the obstacles and work program in order to establish the agricultural sector throughout the year include:

1. Agricultural intensification is to empower the existing land in various ways so that the land never be empty in production.

2. Empowerment of farmers in agricultural development by involving farmers with agricultural development in each region.

3. Availability of capital farmers to manage agricultural land.

4. Availability of agricultural extension workers facilitated by local governments that provide knowledge to farmers.

5. vast agricultural markets so that agricultural produce can be sold into the market.

6. Increased resources through training and education of farmers conducted by the local government.

7. Maintaining price stability where the role of government is expected to keep prices on agricultural products, especially after the post-harvest.

8. Provision of agricultural infrastructure needed by farmers such as: tractors, fertilizers, pesticides.

9. Empowerment existing unused land throughout the year so that the land can produce.

10. Good irrigation channels that drain water needs over farmland.

The industrial sector is not the leading sectors for the Province of North Sumatera because the calculation result Quotent Location is at 0.9 so that the industrial sector is not a sector basis in North Sumatera Province

In the building sector, transport and communication, trade, hotel and restaurant and services is also a priority sector in the Gross Domestic Product (GDP) of the Province of North Sumatera is expected to be maintained even be enhanced contribution to regional income.

CONCLUSION

1. The agricultural sector is the dominant sector or sectors base in North Sumatera Province where results Location Quetient (LQ) is 1.5.

SUGGESTION

1. North Sumatera Provincial Government must be able to provide facilities to farmers and companies in developing the agricultural sector so as to contribute to economic development throughout the year.

2. Sector non bases remain a concern for the government of North Sumatera Province with a variety of policies that can be done by the government of North Sumatra province so that in the future will make a major contribution to economic development.

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