Factors Affecting the Growth of the Agricultural Sector in Langkat Regency

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Abstract
Regional economic development has an important role in the success of development at the national level. The state of the national economy is structured by the state of the regional economy. Seeing the condition of Indonesia which has a large area and a relatively large number of provinces, the availability of infrastructure and physical capital has an important role in increasing economic growth. Production infrastructure can be provided by both the government and the private sector. The government as the main development agent has a big responsibility in providing infrastructure and adequate capital for both public and private interests. In addition, the availability of labor as a human resource in addition to nature, capital and technology also has an important role for the economy. The agricultural business in Langkat Regency in 2018 contributed to the formation of a total GRDP of 35.06 percent, a decrease from 2016 which was 35.61 percent. Meanwhile, the growth rate has slowed down from 5.33 percent in 2017 to 4.76 percent in 2018. Factors that affect growth in Langkat Regency are land area, capital accumulation, population and labor growth, technological advances, exports and agricultural budgets that affect the growth rate of the agricultural sector.

I. Introduction

Indonesia is a developing country with the agricultural sector as a source of livelihood for its population, thus most of the population depends on the agricultural sector. The fact is that most of the land use in Indonesia's territory is designated as agricultural land and nearly 50 percent of the total workforce still depends on the agricultural sector for their livelihoods. The agricultural sector has a very important role in the Indonesian economy, this is because the agricultural sector serves as the basis for economic development. This situation demands that government policies in the agricultural sector be adjusted to the conditions and developments that occur in the field in overcoming various problems concerning the welfare of the nation. (Tambunan in M. Yamin 2005).

Economic growth in a country or region is aimed at strengthening the national economy by expanding employment, increasing employment opportunities, increasing income, and reducing income disparities between communities and between regions. One of the efforts made by the government is development in the agricultural sector, which is a long-term effort to improve the economic structure and balance development between economic sectors. For developing countries such as Indonesia, the agricultural sector is the main sector and provides a large contribution to the Gross Domestic Product.
As a developing country, Indonesia which is an agricultural country with the majority of the population working in the agricultural sector, economic activity is more focused on the agricultural sector as the dominant sector. In terms of production factors, the availability of agricultural land as one of the production inputs is decreasing along with the development process of other sectors. This condition has an impact on land scarcity with an increase in land that is static. In addition to land availability, increasing population can also put pressure on land availability for the agricultural sector. This is due to increasing population pressure on agricultural land. The population continues to increase and the development activities carried out have seized the function of agricultural land to produce foodstuffs which are replaced by other uses such as settlements, offices, and so on.

Indonesia with an area of agricultural land which is still faced with a relatively large population growth which in turn results in the availability of agricultural land becoming smaller. If this condition continues, farmers will experience scarcity of land for farming which will affect their ability to produce food.

Within the framework of national economic development, regional economic development is a process of managing existing resources both natural and human resources to create new jobs and stimulate economic development in the region (Arsyad, 1999).

Regional economic development has an important role in the success of development at the national level. The state of the national economy is structured by the state of the regional economy. Seeing the condition of Indonesia which has a large area and a relatively large number of provinces, the availability of infrastructure and physical capital has an important role in increasing economic growth. Production infrastructure can be provided by both the government and the private sector. The government as the main development agent has a big responsibility in providing infrastructure and adequate capital for both public and private interests. In addition, the availability of labor as a human resource in addition to nature, capital and technology also has an important role for the economy.

In creating economic growth, it cannot be separated from the need for investment or investment, because investment is the main requirement in development which requires a growth rate. Realizing the importance of investment in economic development, the government is trying to increase spending and policies in order to encourage sectors to participate in strengthening the growth of the national economy. Investment or investment is the motor of an economy, the amount of investment that is realized in a country concerned, while the least investment will show the slow rate of economic growth (Rosyidi 1991: 10).

In addition, the existence of inflation needs to be emphasized in a developing country because of the imbalance between demand and supply of domestic goods, following the initiation of a large number of state investment programs, but with the emergence of important consumer goods into the country, foreign capital can help minimize inflationary pressure. Thus, foreign capital inflow is needed to accelerate economic development (ML Jhingan, 2002: 482).

This cannot be separated from the existence of natural and human resources which are very important in the implementation of economic development, this shows that economic development cannot be separated from capital which can be realized in the form of investment. This investment can support economic growth and expand the workforce obtained from the government, private sector and foreign loans. Therefore, the government must strive to create a conducive investment climate and adequate facilities.
II. Review of Literature

2.1 The Concept of Gross Domestic Product and Economic Growth

One of the indicators to measure the level of regional development is the Gross Domestic Product, in this case the increase in the production of goods and services in the Gross Domestic Product. The value stated in the Gross Domestic Product reflects the standard of living and level of economic development of the community.

In calculating the Gross Regional Domestic Product, a more realistic approach is needed. However, so far it still refers to the national calculation model, namely Gross Domestic Product, which in real terms is economic growth associated with an increase in output per capita Boediono (1985: 52). Here it is clear that there are sides that need to be considered, namely the total output side and the population side. Output per capita is the total output divided by the number of residents. So the process of increasing per capita output cannot and should not be analyzed by looking at what happened to the total output on the one hand and the population on the other. A complete economic theory should be able to explain what happened to the population.

From this definition, in the regional economy concept, the boundaries of the Gross Regional Domestic Product must be seen. It's just that it needs to be understood that the regional economy is in a more open position compared to the national economy.

2.2 Definition of Gross Domestic Product

According to the Central Bureau of Statistics, Gross Domestic Product is the total value added by all business units in a certain country, or is the total value of the final goods and services produced by all economic units. Gross Domestic Product at current prices illustrates the added value of goods and services calculated using the prevailing price each year, while Gross Domestic Product at constant prices shows the added value of these goods and services which are calculated using the prevailing price in a certain year as a basis.

Gross Domestic Product is usually one of the indicators commonly used to measure the level of prosperity of the population in an area within a certain period of time. GRDP is the value of all goods and services produced in an area usually within one year without distinguishing ownership of the factors of production. The value of the Gross Domestic Product can be calculated through three approaches, namely in terms of production, in terms of income, and in terms of expenditure.

Gross Domestic Product is the basis for measuring the added value that can be created due to the emergence of various economic activities in a region/relogon. The Gross Domestic Product data illustrates the ability of a region to manage its human resources. The main elements in the Gross Domestic Product are as follows:

a. Output

Output is the value of goods or services produced in a certain period, usually one year. There are 3 types of output, namely:
1) Main output, namely output which is the main goal of production.
2) Side output. That is not the main goal of production.
3) Bond output, which is the output that occurs together/cannot be avoided with the main output.

b. Intermediate Cost

Intermediate costs are non-perishable goods and services used/exhausted in the production process. Durable items are generally more than one year long and do not run out in the production process excluding intermediate costs.
c. Value-added
1) Gross added value
   The gross added value is the difference between output and intermediate costs. In other
   words, it is the production of the production process. This production consists of:
   a) factor income, which consists of:
      • Wages / salaries in return for employee services.
      • Usaha surplus (land rent, interest on capital, and profits).
   b) Net indirect taxes
      Net indirect tax is the difference between indirect taxes and subsidies.
      The formula used is as follows:
      \[ \text{Domestic Product} = \text{PV} - \text{ICV} \]

   Information:
   \( \text{PV} = \text{Production Value} \)
   \( \text{ICV} = \text{Intermediate Cost Value} \)

2) Net added value
   If depreciation is removed from the gross value added, a net added value will be
   obtained.

d. Gross Regional Domestic Product according to business field
   Sectoral Gross Regional Domestic Product is the sum of all gross added value from
   sectors/subsectors in a region. This business sector/field consists of:
   1) Agricultural sector
   2) The mining and quarrying sector,
   3) Pengolahan industry sector,
   4) The electricity, gas and clean water sector
   5) Building sector
   6) The trade sector
   7) Transportation and Transportation Sector
   8) Financial Institution Sector, leasing and company services,
   9) Services sector

   Gross Regional Domestic Product aggregates are presented in the form of percentage
   distribution, development index, chain index, and impact price index.

   a. Percentage Distribution
      The amount of each subsector/sector is obtained by dividing the value of the sub-
      sector/sector by the value of Gross Regional Domestic Product multiplied by 100 percent.
      This percentage reflects the magnitude of the role of each sub-sector in the regional
      economy, as well as shows the regional economy and shows the economy of the region.

   b. Development Index
      The development index is obtained by dividing the value of the sub-sector/sector in
      the regional economy and showing the regional economy.

   c. Chain Index
      The chain index is obtained by dividing the value of the sub-sector/sector of Gross
      Regional Domestic Product for the current year by the value of the sub-sector/sector/Gross
      Regional Domestic Product of the previous year, multiplied by 100 (Previous year = 100).
      Economic growth figures for the current year.

   d. Price Index
      Implicit The implicit price index is obtained by dividing Gross Regional Domestic
      Product at current prices by Gross Regional Domestic Product at constant prices multiplied
      by 100.
Gross Domestic Product based on current prices is used to see the shift in the economic structure while constant prices are used to see economic growth from year to year. This calculation uses three approaches, namely: the production approach, the income approach, the expenditure approach.

a. Production Approach

The production approach is the added value of goods and services produced by various production units and regions of a country within a certain period (one year). Which consists of nine sectors, namely: agriculture, mining and quarrying, processing industry, electricity, gas and clean water, building/construction, trade, hotels and restaurants, transportation and communications, finance, real estate and corporate services, services including services government.

b. Income approach

The income approach is the amount of remuneration received by factors participating in the production process in a country within a certain period (one year). Remuneration for services such as wages and salaries, land rent, interest on capital and finance.

c. Expenditure Approach

The expenditure approach is all components of final demand consisting of household consumption expenditures and private non-profit institutions, government consumption expenditures, gross domestic fixed capital blinding, inventory changes, and netto exports (netto exports are exports minus imports). Conceptually, the three approaches will produce the same figure. So, the amount of expenditure will be equal to the amount of income for the factors of production, the Gross Regional Domestic Product generated in this way is called Gross Regional Domestic Product based on market prices, because it includes net indirect tax.

2.3 Previous Research

Andini Eka (2017) discusses the factors that affect economic growth in the agricultural sector in underdeveloped areas of East Java province with panel regression. Generally, regional income inequality is caused by an imbalance in economic growth. The problem of regional income inequality also occurs in East Java, which is caused by the difference between the highest Gross Regional Domestic Product and the lowest Gross Regional Domestic Product which is so far away that it is suspected that there is a fairly high regional income inequality. The purpose of this study is to model regional income inequality with an approach to economic growth in disadvantaged areas so that the economic conditions of these areas do not worsen. Based on the model formed, it will be known the variables that have a significant effect on economic growth in underdeveloped areas of East Java using panel regression analysis. Based on the analysis, it was found that the Gross Regional Domestic Product of the agricultural sector, agricultural sector labor, rice field area and the highest production of food crops in East Java was Jember Regency, while the highest regional original income in East Java was Surabaya City, East Java's regional income inequality from 2008 to 2015 was high. Because the Williamson index value is more than 0.5, there are 22 districts that are classified as underdeveloped areas based on the classification typology class, the factors that affect economic growth in underdeveloped areas of East Java from 2008 to 2015 with an individual effect, namely agricultural sector labor, Regional original income, rice field area and food crop production with a model good of 98.38%

Aero Ananda (2012) discusses the analysis of the contribution of the agricultural sector to the formation of the Lampung Province Gross Regional Domestic Product (PDRB). The results of the discussion are based on the application of the economic growth
model in the 2001-2011 period with an average of 5.02 percent. The economic growth of Lampung Province since 2002 has increased and in 2003 the increase was 5.76 percent. And in 2009 it experienced a high growth, namely 6.45 percent. Therefore, economic growth can also be seen by the contribution of economic sectors to economic development in Lampung Province.

Of the nine economic sectors owned by Lampung Province, using LQ analysis, it is known that the agricultural sector is an economic base sector with an LQ value > 1. This proves that the agricultural sector is a sector that must be optimized without looking down on other economic sectors.

Nurlia (2011) discusses the contribution of the fisheries subsector to Gross Regional Domestic Product in Pinrang Regency, concluding that in general it can be said that the agricultural sector during the observation period, namely 2005-2009, always experienced an increase and dominated or made the biggest contribution when compared to other sectors. This increase is due to various factors including, the large number of people who have turned professions to become fishermen, especially to become farmers for ponds, the types of fleets used have also started to be sophisticated and modern, and the land used for cultivation for both fish and shrimp is increasingly widespread because the community sees it very profitable if they cultivate the land to become land for fish and shrimp cultivation, especially for use as ponds/ponds, so this proves that the agricultural sector in the Pinrang Regency area should be given more space to make it into a pond. he leading sector in supporting regional development in addition to other economic sectors which also need attention.

III. Research Methods

This study aims to determine the factors that affect the growth of the agricultural sector in Langkat Regency. So that the method used in this research is descriptive quantitative method. According to Sugiono (2013: 13), the quantitative method is a "scientific method because it meets scientific principles, namely concrete/empirical, objective, measurable, rational, and systematic". From the above understanding, it can be seen that descriptive quantitative method is a method used to answer problems about the current state or condition. The condition or condition referred to includes the study of phenomena as they exist in the field or to determine the contribution between variables in the phenomenon to be studied.

This research was conducted in Langkat district with the consideration that Langkat Regency has great potential in the development of the agricultural sector.

IV. Discussion

4.1 Growth of the Agricultural Sector in Langkat Regency

National development in developing countries in general is focused on economic development through economic growth efforts. Economic growth is closely related to an increase in the production of goods and services, which is measured, among others, through the Gross Domestic Product at the national level and the Gross Regional Domestic Product at the regional, provincial, regency and municipal levels. Development is a continuous process with the ultimate goal of improving people's welfare. The development strategy must emphasize the development of the production sector and infrastructure to spur economic growth and improve the quality of human resources. The success indicators
of a region's development can be seen by measuring the rate of change in the economic sectors of the region through the Gross Regional Domestic Income of each region.

Economic growth is the process of how an economy develops or changes from time to time. This development process occurs over a long period of time, where there may be a decline or increase in the economy, but in general it shows a tendency to increase the regional economy.

The development of regional economic development depends on the conditions and potential resources of each region. Regional development prioritizes building and strengthening sectors in the economic sector by developing, enhancing and optimally utilizing existing resources while still taking into account the synergy between economic sectors. According to Nurwani et al (2020) Social transformation means the restructuring of all aspects of life; from culture to social relations; from politics to economy; from the way we think to the way we live.

According to Prishardoyo (2008: 1) The journey of economic development has led to various changes, especially in the structure of the economy. Changes in economic structure are one of the characteristics that occur in economic growth in almost every developed country. Based on historical records, this sectoral growth rate includes a gradual shift in agricultural activities towards non-agricultural activities and more recently from the industrial sector to the service sector. National economic development cannot be separated from regional economic development. In essence, regional development is the implementation of national development in a certain area which is adjusted to the physical, socio-economic capacity of the region, and must comply with certain regulations. For the sake of the success of regional economic development, the government imposed regional autonomy.

According to Sukirno (2004: 423) Economic development is economic growth followed by changes in the structure and style of economic activity. However, development is not only shown by the achievements of economic growth achieved by a country, but more than that development has a broader perspective. The social dimension that is often neglected in the approach to economic growth has a strategic place in development. According to Badaruddin, et al (2020) As a village economic institution, the establishment of Village Owned Enterprise is not only for the accumulation of financial capital but also to pay attention to other solutions for capital generation, such as social capital. According to Sugiharto (2020) The essence of social and peer group become a major aspect of this model.

Gross domestic product in Indonesia according to the classification implemented by the Central Bureau of Statistics basically consists of nine sectors, namely the agricultural sector, mining and quarrying, industry, processing, electricity and drinking water, building and construction, trade, hotels and restaurants, transportation and communication, finance, leasing and corporate services, as well as services.

Langkat Regency is one of 33 Regencies / Cities in North Sumatra Province. As one of the autonomous regions that has the authority to organize government and development and provide services to the community, it has broad authority to manage, plan and optimally utilize economic potential, which can be enjoyed by all people in Langkat Regency.
It can be seen that Langkat Regency has a Gross Regional Domestic Product according to the business field based on the 2018 current price of Rp. 39,818,549.0 billion. The economic growth of Langkat Regency is strongly influenced by the Agriculture, Forestry and Fisheries sectors.

This business field includes the Agriculture, Forestry and Fisheries Business sub-sector which consists of food crops, horticultural crops, plantation crops, livestock and agricultural and hunting services, Forestry and logging sub-sector and fishery business sub-sector. This business field is still the mainstay of employment in Langkat. The results of the 2018 National Labor Force (Sakernas) survey showed that this business field was able to absorb 32 percent of the working force (Central Bureau of Statistics Langkat, 2019).

In 2018, the value of the Gross Regional Domestic Product based on the prevailing price of the Agriculture, Forestry and Fisheries business fields reached 15,490.18 billion rupiah. This business field contributed to the formation of a total Gross Regional Domestic Product of 35.06 percent, down from 2017 which was 35.61 percent. Meanwhile, the growth rate has slowed down from 5.33 percent in 2017 to 4.76 percent in 2018.

The plantation crop business sub-sector was the largest contributor to the agricultural business sector, which was recorded at 19.79 percent of the total added value of agriculture, followed by the livestock and food crop business sub-sector, namely 7.08 percent and 6.10 percent respectively.
Table 2. the Role of Business Sub-sectors on Gross Regional Domestic Product of Agricultural, Animal Husbandry, Hunting and Agricultural Services Business Fields, 2014-2018 (Percent)

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<td>(1) Agriculture, Livestock, Hunting and Agricultural Services</td>
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<tr>
<td>a. Crops</td>
<td>15.85</td>
<td>17.13</td>
<td>16.68</td>
<td>15.73</td>
<td>15.68</td>
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<td>b. Horticultural Plants</td>
<td>0.38</td>
<td>0.37</td>
<td>0.34</td>
<td>0.32</td>
<td>0.32</td>
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<td>c. Plantation crops</td>
<td>0.85</td>
<td>0.85</td>
<td>0.87</td>
<td>0.85</td>
<td>0.94</td>
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<td>d. Ranch</td>
<td>3.56</td>
<td>3.65</td>
<td>3.58</td>
<td>3.40</td>
<td>3.20</td>
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<td>e. Agriculture and Hunting Services</td>
<td>52.54</td>
<td>45.65</td>
<td>50.80</td>
<td>51.71</td>
<td>50.87</td>
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<tr>
<td>f. Ranch</td>
<td>16.51</td>
<td>17.60</td>
<td>17.36</td>
<td>17.41</td>
<td>16.16</td>
</tr>
<tr>
<td>g. Agriculture and Hunting Services</td>
<td>0.90</td>
<td>0.95</td>
<td>0.96</td>
<td>0.96</td>
<td>0.93</td>
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<td>2 Forestry and Logging</td>
<td>2.03</td>
<td>2.08</td>
<td>2.03</td>
<td>1.91</td>
<td>1.86</td>
</tr>
<tr>
<td>3 Agriculture, Forestry and Fisheries</td>
<td>100.00</td>
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*a Provisional Figures
**Very Provisional Figures

In 2018, the seasonal and annual plantation, livestock and fisheries business sub-sectors experienced acceleration, while other business sub-sectors experienced a slowdown. The annual plantation business sub-sector as the largest contributor to the formation of Gross Regional Domestic Product in the agricultural business sector grew by 4.20 in 2018. The highest growth rate was achieved by the seasonal plantation sub-sector at 8.46 percent, followed by livestock business at 7.96 percent. Meanwhile, the lowest growth occurred in agricultural and hunting services, namely negative 1.78 percent.

4.2 Factors affecting the Growth of the Agricultural Sector in Langkat Regency

a. Land area
   • Wetland crop areas, based on land suitability analysis, are planned to be located in almost all sub-district areas, both large and small, with a total area of ± 49,293 Ha.
   • The dry land crop area is planned to spread throughout the Langkat District both on a large and small scale with a total area of 36,348 Ha, with a center for the development of dry land agriculture covering Besitang District; Bahorok; Hinai; Tanjung Pura; Sei Bingei; Binjai; Done; Wampu; and Bake.
   • The area for annual crops / plantations is directed to cover all districts with a development area of ± 202,485 Ha.

b. Capital Accumulation
   Capital accumulation occurs when a portion of income is saved and reinvested with the aim of increasing output and future income. The procurement of new factories, machinery, equipment, and raw materials increases the physical capital stock of a country (that is, the total "net" real value of all physically productive capital goods) and it clearly allows for an increase in output over time the future. These direct productive investments must be complemented by various supporting investments called economic and social “infrastructure” investments. Apart from direct investment there are many indirect ways to invest funds in various types of resources. In addition, investment in human resource development can improve the quality of human capital, so that in the end it will have the
same positive impact on humans. All activities described above are forms of investment that lead to capital accumulation.

c. Population and Workforce Growth

Population growth and growth in the workforce (which occurs several years later after population growth) have traditionally been considered as one of the positive factors that spur economic growth. A larger number of workers means an increase in the number of productive workers, while a larger population growth means an increase in the size of the domestic market. However, we still question whether the rapid growth in the supply of labor force in developing countries (so many of them are experiencing excess labor) will actually have a positive, or even negative, impact on their economic development. In fact, this (positive or negative population growth for economic development efforts) entirely depends on the ability of the economic system concerned to absorb and productively utilize this additional labor. The ability itself is further influenced by the level of type of capital accumulation and the availability of inputs or supporting factors, such as managerial and administrative skills.

d. Technology advances

Technological progress for most economists is the most important source of economic growth. In its simplest sense, technological advances occur because of the discovery of new methods or improvements to old ways of handling traditional jobs such as planting corn, making clothes, or building houses. We recognize three classifications of technological progress, namely: neutral technological progress, labor-saving technological progress, and capital-saving technological progress.

e. Export

Exports are an important factor in stimulating a country's economic growth. Exports will increase the consumption capacity of a country, increase world output, as well as provide access to scarce resources and potential international markets for various export products without which poor countries will be unable to develop activities. And the life of the national economy. Exports can also assist all countries in carrying out their development efforts through the promotion and strengthening of economic sectors that contain comparative advantages, either in the form of an abundance of certain production factors, or the efficiency advantage of labor productivity. Exports can also help all countries take advantage of the economies of scale they have.

f. Agricultural Budget

In order to increase the priority of agricultural development in the regions, it requires support from development policy makers. This priority emphasis must be reflected in the amount of funds allocated according to planned needs, and also according to the needs of farmers. Relatively limited funding is a serious problem in development in the agricultural sector. Sectoral development priorities can be seen from the portion of regional budget allocations for each sector, the allocation of regional development funds including funds allocated for agricultural development that come from various sources.
V. Conclusion

The conclusions of the research that have been carried out are as follows:
1. The agricultural business in Langkat Regency in 2018 contributed to the formation of a total GRDP of 35.06 percent, a decrease from 2016 which was 35.61 percent. Meanwhile, the growth rate has slowed down from 5.33 percent in 2017 to 4.76 percent in 2018.
2. Factors that affect growth in Langkat Regency are land area, capital accumulation, population and labor growth, technological advances, exports and agricultural budgets that affect the growth rate of the agricultural sector.

References