

THE ROLE OF THE AGRICULTURAL SECTOR ON ECONOMIC GROWTH IN INDONESIA

**Gina Afriyanti, Ana Mariya, Charita Natalia, Sirat Nispuana
M.Farhan Wijaya, M. Yoga Phalepi**

Universitas Islam Negeri Raden Fatah Palembang, South Sumatra

E-mail: ginaafriyanti04@gmail.com

ABSTRACT

The purpose of this study is to determine the role of the agricultural sector on economic growth in Indonesia. The method used in this study uses literature studies, accredited articles and journals and other sources that are relevant to the discussion. The role of the agricultural sector has a very important role in developing the national economy including the regional economy, because the agricultural sector functions as a provider of food security, as an instrument of poverty alleviation, a provider of employment, and a source of community income.

Keywords: Agricultural Sector, Growth, Indonesia Economy

INTRODUCTION

Indonesia is an agrarian country, which means that the agricultural sector has an important role in the overall national economy. This can be shown from the number of residents or workers who live or work in the agricultural sector or from national products originating from the agricultural sector. Agriculture in a broad sense consists of five sectors, namely food crops, plantations, animal husbandry, fisheries and forestry. The five agricultural sectors if handled seriously will actually be able to make a large contribution to the future development of the Indonesian economy. One of the ways to handle it is by oriented to agricultural or agribusiness business (Soekartawi,1999)

The agricultural sector is a very strategic and important component of the national economy, because it produces a large part of the country's gross domestic product, provides a large proportion of export earnings and employs millions of people. The agricultural sector is also referred to as the backbone of the economy, therefore the state prioritizes agriculture and population food

security in social situations as important for human development (Bukhtiarova et al., 2019).

The agricultural sector provides food and raw materials for other economic sectors so as to encourage industrialization (Jaji & Bonga, 2017). Agriculture is the main livelihood for some people in developing countries, in addition to the poor in rural areas in low and middle income countries who directly or indirectly depend on agriculture for their livelihoods (Waddington et al., 2012). In developing countries the agricultural sector has a very important role in economic growth and development compared to the economies of developed countries which have more verified economies (Meyer, 2019). Agricultural growth in an area is influenced by competitive advantages, regional privileges, and agricultural potential by the area.

The existence of regional agricultural potential means nothing to agricultural growth in the area if there are no efforts to utilize and develop agricultural potential optimally. Therefore, the utilization and development of all agricultural potential that has high potential must be a top priority to be explored and developed in carrying out regional economic growth as a whole (Osly et al., 2020). Agriculture contributes to economic growth through five inter-sectoral linkages. The sectors are linked through the supply of surplus labor to firms in the industrial sector, the supply of food for domestic consumption, the provision of markets for industrial output, the domestic supply of savings for industrial investment, and the exchange of agricultural exports for finance the import of semi-finished goods and capital goods. Agriculture indirectly contributes to economic growth through providing better calorie nutritional intake for the poor, food availability, food price stability, and poverty alleviation (Awokuse & Xie, 2015).

Agriculture can reduce poverty and hunger in many developing countries. Contributions to poverty alleviation occur directly through the effects of agricultural growth on agricultural employment and profitability, but indirectly The direct effect is that increased agricultural output will encourage the creation of jobs in the non-agricultural sector in response to higher domestic demand. Therefore, food prices have a lower potential to increase the purchasing power of poor consumers. In developing countries they usually have a relatively high share in the employment structure and produce a high percentage of GDP compared to agriculture in developed

countries (Khalid et al 2018 in Smolińska, 2019). Even though in the world as a whole agriculture still occupies a high position, in developed countries the role of agriculture has greatly reduced in the economy.

The changes experienced by the agricultural sector allow for a rapid increase in production by replacing factors of production that are common in traditional agriculture such as land and labor being converted into capital and increasing the use of new technologies (Martin-Retortillo & Pinilla, 2015). This study aims to determine the development, growth, contribution and productivity of the agricultural sector in the economies of developed and developing countries Agriculture can be called an activity to utilize biological resources carried out by humans in order to produce food, industrial raw materials or energy sources, by managing the environment.

The agricultural sector is a sector that has an important and strategic role in the structure of the economy. In some countries, the agricultural sector absorbs a lot of labor, but poverty occurs most often in people who are in the agricultural sector. Poverty is the result of the interaction between technology, natural resources, human resources, and institutional policies. Agriculture is the basis of the economy in every country, especially in developing countries, although the agricultural sector in the economy is measured based on the proportion of added value in the form of gross domestic product which is decreasing from year to year. This does not mean that the value and role of the agricultural sector is not important.

The role of agriculture in the economy is considered as supporting needs only. Based on developed countries, economic development is likely to require rapid structural transformation of the economy which initially relied on agriculture now relies more on industry and services. So the current role of agriculture is providing a sufficient workforce and food based on low price rates for dynamic industrial development as an important sector in Todaro's economic development strategy, M.P. and Smith, S.C. (2006).

The role of the agricultural sector in the economy is very important because most people in developing countries depend on the agricultural sector. If serious planning occurs, it is better to pay attention to the welfare of the community by increasing the welfare of the community in the agricultural sector. The method that can be taken is by increasing the production of food crops and increasing the price on the productivity produced by farmers.

Purami, N. M. S., & Saskara, I. A. N. (2016) stated that the agricultural sector has an important meaning in economic development, for example such as forming national income, providing employment and contributions when earning foreign exchange. Where every implementation of economic development in which each sector is interrelated such as the agricultural sector, the industrial sector and the service sector.

RESEARCH METHOD

The research uses the library study method, this is done because literature sources are obtained by examining books, articles from accredited journals, research reports, and other sources relevant to the discussion with the aim of concluding the role of the agricultural sector in economic growth in indonesia.

RESULTS AND DISCUSSION

The development of the agricultural sector in Indonesia has experienced very rapid progress, both smallholder agriculture and those managed by companies. This is caused by adequate natural resources (SDA) and the large number of people (labor) working in the agricultural sector. The government is trying to achieve the goals of agricultural development in the agricultural sector so that farmers can increase their income through increased production. The steps taken by the government in improving welfare are advising the farming community to cultivate plants that have better economic value than those cultivated by previous farmers and conducting counseling to farmers so that they have good and efficient farming skills.

According to Tambunan in Amir (2011: 3), there are at least several factors that can be mentioned that the agricultural sector is important in the development process, namely the agricultural sector produces products that are needed as input for other sectors, especially the industrial sector, such as the textile industry, the food industry and the beverage industry, as an agrarian country, the agricultural sector is a very strong sector in the economy at the early stages of the development process.

The population in the agricultural (rural) sector forms a very large proportion. This has become a very large market for domestic products, both for production goods and for consumption goods, especially food products.

In line with this, guaranteed food security is a prerequisite for social and political stability, due to the transformation From the structure of the agricultural sector to the industrial sector, the agricultural sector is a sector that provides a large factor of production (especially labor) for the non-agricultural sector (industry) and Indonesia's agricultural sector is a natural resource that has a comparative advantage when compared to other nations.

An ideal development process is capable of producing agricultural products that have competitive advantages over other nations, both for export and import substitution purposes. Indonesia is an agriculture-based country and is a producer of food crops spread throughout Indonesia. The title as a national rice granary confirms Indonesia's position as a potential producer of food crops. In addition to agriculture, various other sub-sector commodities are produced by Indonesia. There are several Indonesian agricultural commodities which are superior commodities. These commodities are grouped into 5 sub-sectors which include the food crops sub-sector, plantation sub-sector, fishery sub-sector, livestock sub-sector and forestry sub-sector. The development of various leading commodities is expected to be able to create progress in the agricultural sector and support the Indonesian economy.

The potential sector or leading sector in regional economics is also called the base sector. The definition of a base (leading) sector basically has to be linked to a form of comparison, both on an international, national and regional scale. In relation to the international scope, a sector is said to be superior if the sector is able to compete with the same sector from other countries. Meanwhile, in the national scope, according to Wijaya (dalam Azhar, dkk, 2001, 2) a sector is said to be superior if the sector in a certain area is able to compete with the same sector produced by other regions in the domestic or national market. If the sector becomes the base (superior) sector, then the sector must be able to export its products to other regions or regions, conversely if the sector is a non-basic (non-leading) sector, then the sector must import these products from other regions.

So that it can be understood that a base sector (leading) is a sector that has a comparative advantage. Indonesia's agricultural sector is one of the economic sectors that still has an important role for the nation's economy, thus making Indonesia one of the countries that export agricultural commodities to various countries. Human resources are one of the dynamic

factors in long-term economic development along with science-technology, natural resources and production capacity. . A large number of workers can mean an increase in the number of productive workers. With the increase in labor productivity it is hoped that production will increase which means it will also increase PDB. In economic growth in a country, the agricultural sector's workforce provides a large share of the agricultural sector' GDP. Population is one factor in an area.

The increase in population from time to time can be both a driver and an obstacle to GDP . The large population will cause a large workforce. It will make an increase in the number of goods produced. But on the other hand, the large population will hamper economic development if the increase in population is not matched by growth in the workforce. Labor (manpower) is a population of working age (aged 15-64 years) or the total population in a country who can produce goods and services if there is a demand for their labor, and if they want to participate in these activities (Mulyadi, 2003).

Labor is one of the most decisive factors in the development process in a region. The greater the number of workers, especially if they are accompanied by adequate expertise, the more rapid the development of development in the region will be. The problem of growth is no longer fundamental but more important is thinking about how GDP can create jobs. In the economic development of developing countries like Indonesia, employment is a complex and more serious problem than the problem of changes in income distribution that are less favorable to low-income populations.

Picture 1. Development of Indonesia's GDP at the Right Price and Constant Price 2010, 2018-2021)



Source: Data Center and Agricultural Information System Secretariat General, Ministry of Agriculture

During 2018 to 2021 it seems to be happening increase in Indonesia's GDP followed by an increase in sector GDP agricultural. GDP of the broad agricultural sector (including forestry and fisheries) based on the 2018 current price of IDR 1,900.6 trillion to increase to IDR 2,253.8 trillion in 2021. Conditions this also happened in the narrow agricultural sector, namely in 2018 IDR 1,417.3 trillion to IDR 1,672.3 trillion in 2021. Meanwhile in the processing industry sector, namely in 2018 2,947.5 trillion to Rp. 3,266.9 trillion in 2021, as well as in other sectors in 2018 of IDR 10,764.0 trillion in 2021.the largest sector by 19.25% and ranking the second was occupied by the agricultural sector broadly reaching 13.28% with a narrow agricultural contribution of 9.85%.

Picture 2. Contribution of the Agricultural Sector (on Farm) to GDP
Indonesia, 2018-2021



Source: Data Center and Agricultural Information System Secretariat General, Ministry of Agriculture

The contribution of the broad agricultural sector to Indonesia's GDP during in 2018-2021 the average shows an increase in its donation, ie in 2018 contributed 12,81% then decreased to 12.71% in 2019, then again increased to 13.70% in 2020 and increase again to 13.28% in 2021, so that the GDP contribution of other sectors decreased while the agricultural sector's GDP contribution was narrow to GDP Indonesia from 2018 to 2021 fluctuated, namely each contributed 9.55% each in 2018, decreased to 9.40% in 2019, then increased to 10.20% in 2020 and back decrease in 2021 to 9.85%.

Indonesia is known as an agricultural country because its population works in the agricultural sector. Farmers are the main actors in the agricultural sector which play an important role in realizing food security. With the existence of farmers, household food needs to industrial raw materials can be

met properly. However, farmers often encounter various complicated problems so that these problems can cause huge losses for them.

So that every year the agricultural sector experiences setbacks that affect the development of economic growth caused by various factors as follows:

1. Agriculture is overlooked

The community thinks that agriculture only works with a hoe, so that it seems that agriculture is very dirty and looks poor. So the image of the agricultural sector is looked down upon by society, causing a setback in the economy.

2. Crisis regeneration of young farmers

So the low interest of young people to enter the agricultural sector. In fact, the younger generation is the next generation as well as the key to success in the agricultural sector. If it is not handled immediately, it will be difficult for this nation to achieve national food security. One of the programs that has started to be driven a lot is the modernization of the farm itself so that it looks better. Digital farming is an interesting thing to change the image of agriculture into an attractive business.

3. Commercial chains that harm farmers

Gap in profit sharing between farmers and distributors, farmers who suffer the most. The results obtained by farmers are not proportional to the risks experienced by farmers. Such conditions make work as a farmer seem unpromising. The profits are insignificant, not to mention the losses when the weather is not supportive or pest attacks. For this reason, a facility is needed that is able to cut the trade chain which is quite long for agricultural commodities. The hope is that farmers will be able to provide their products directly to consumers so that the profits earned by farmers will increase.

4. Land use change

Many things happen on the island of Java, dense population with a high level of need causes agricultural land to be converted into housing and multi-storey buildings. The meager productivity coupled with increasingly narrow land causes the farmer's economy to get squeezed even more. In addition to the problems above, of course there are many other problems that need to be resolved immediately. The solution to this problem must of course be supported by all elements of society involved, from farmers to the

government.

As previously explained about the factors that influence the development of economic growth in the agricultural sector, there are also various kind of problems in the agricultural sector in Indonesia, including the following;

1. Narrow Land Area

Technically the land must meet the physical requirements (topography) and have an adequate area to enable the application of technology accompanied by the use of land processing, cultivation and post-harvest handling machines. The small size of paddy fields and gardens and steep slopes do not allow optimal application of technology (Wiebe, 2003). Economies of scale are the area of land use in order to obtain (economical) revenue that exceeds the costs and needs of farmers in a reasonable manner. Small land does not allow farmers to obtain results that can meet their needs so that their farming cannot prosper.

2. Land Function Transfer

Good land for agriculture is fertile soil, relatively flat topography, favorable climate, and adequate infrastructure. Urban development, population growth and economic growth cause demand for land to increase rapidly. Non-agricultural sectors that require a lot of land are settlements, industry, trade, hotels and offices. All of these sectors can provide better returns to land values than agriculture. Therefore, the rate of conversion of agricultural land to these uses is increasing. As a result, agricultural (fertile) land decreases over time. The conversion to non-agriculture is 110,164 ha per year and the conversion to other agriculture is 77,556 ha per year. Likewise, the conversion of dry land from agriculture to non-agriculture is 9,152 ha per year (Sutomo, 2004).

3. Marketing

Most of the trade in agricultural products is in primary form with a long trading chain. Situations like this cause farmers to not get the product value contained in the commodity so that the distribution of margins is not fair and the added value is not optimal. In the long run, besides farmers not getting a reasonable income, it also reduces their interest in developing their farming business.

Many inhibiting factors include: production continuity, price fixing

mechanisms, long marketing channels, low bargaining position of farmers, high price fluctuations, lack of market information, product quality varies, and the quality of human resources (Syahza, 2003).

4. Diversity of Agricultural Products

Indonesia's agricultural products are so diverse that, in many cases, they do not meet the minimum scale of trade. Moreover, the low quality and sustainability are not guaranteed, causing these products to not be the main choice of consumers and it is difficult to expect them to become raw materials for the processing industry. From the perspective of the value chain, the relationship between the supply of raw materials and industrial production and marketing is very high, namely the continuity of supply determines the success of the industry (Shah, 2005).

5. Price Fluctuations

Production and price fluctuations mainly occur during the main harvest. Prices fall (drastically) when production is high so that large volumes are not a guarantee for farmers to obtain adequate income (Wohlgenant, 2001). Situations like this become a concern as well as the reluctance of farmers to concentrate on certain commodities. The direct result of price changes is that farmers have never enjoyed relatively large revenues and the reliability of these commodities is very low. This means that farmers often do not benefit from additional production.

6. Limited Infrastructure

One of the requirements of modern competitive agriculture is the availability of adequate infrastructure (irrigation, farm roads and warehouses). The adequacy of infrastructure is a guarantor for the productivity and total efficiency of farming. Indonesian agriculture has not been supported by adequate infrastructure, such as irrigation, farming roads, packaging and storage (cold chain) so that it operates at a low level of efficiency (Tambunan, 2006). As a result, the application of technology is not optimal. The system of technology transfer and dissemination of agricultural processing technology is still low.

7. Limited Agricultural Financing

Availability and adequacy of inputs in agricultural production is very important. All of these inputs are related to the farmer's ability to buy them. With a very small business scale, farmers do not have adequate access to

sufficient production inputs. Even though there are many agricultural financing programs, farmers' access to productive resources including capital and business services is still very limited. This causes farming to not run optimally (Pasaribu, et al, 2007). The result is that agriculture does not grow well and operates in a limited manner so it is not efficient.

8. Development Concentration

Agricultural development is centered on paddy (rice) and sugar cane (sugar) so that development funds are absorbed (or allocated) in excess. On the other hand, many commodities are has a value (functional and economic) equivalent to the commodity does not receive equal attention. Limited development funds should be allocated fairly for economically prospective commodities and contribute to food security.

9. Human Resources

Agricultural human resources is still very low. This causes or becomes an obstacle to efforts to improve the technical and economic aspects of farming through the application of agribusiness-based technology and management: Subsistence orientation is inherent and characteristic of agriculture.

10. Climate change

Climate change has had a significant impact on agricultural production (Jonesa and Thornton, 2003; Parry et al., 2004). In addition to having an irregular pattern, the rainy season also has an erratic intensity. Many crop failures are due to flooding (rainy season) or drought (dry season). Moreover, climate change causes decreased productivity, erosion, land damage and pest/disease attacks. As a result, cropping patterns, production and agricultural planning are carried out with a high degree of uncertainty. In the long term, global climate change will significantly affect rice production. Mathauda, et al., (2000) estimated that a 2°C increase in temperature would reduce rice productivity by 8.4 percent followed by a similar decrease in biomass production. Peng, et al. (2004) used more accurate research data and concluded that there was a 10 percent decrease in productivity for every 1°C increase in temperature. Many other studies (eg Parrya, et al., 1999; Parry, 2004; Yao, et al., 2007) found the same trend.

CONCLUSION

Based on the results of the research and discussion above, it can be concluded that Indonesia is known as an agricultural country because its people work in the agricultural sector. The agricultural sector is a strategic sector and plays an important role in the national economy and the survival of society, especially in contributing to PDB, providing employment and domestic food supply. Agriculture is the activity of utilizing biological resources by humans to produce food, industrial raw materials or energy sources, as well as to manage the environment. Farmers are the main actors in the agricultural sector which play an important role in realizing food security. With the existence of farmers, household food needs to industrial raw materials can be met properly.

BIBLIOGRAPHY

- Academic Conference, Barcelona (Pp. 240–255). *International Institute Of Social And Economic Sciences*.
- Agricultural Production, 1950 To 2005. *Agricultural History Review*, 63(1), 132–159.
- Arief Budiman, 2000, *Teori Ekonomi Pembangunan*, Jakarta, PT. Gramedia
- Awokuse, T. O., & Xie, R. (2015). *Does Agriculture Really Matter For Economic Growth In Developing Countries Canadian Journal Of Agricultural Economics*, 63(1), 77–99.
- Beitbridge, Zimbabwe. 2(6), 20–28.
- BPS. 2022. Produk domestik bruto Indonesia triwulanan 2018-2022.
- BPSA. 2022. Berita resmi statistik :ekonomi Indonesia triwulan 111-2022
- Bukhtiarova, A., Hayriyan, A., Chentsov, V., & Sokol, S. (2019). *Modeling The Impact Assessment Of Agricultural Sektor On Economic Development As A Basis For The Country's*
- Darma Rika & Susi, 2011. *Pengeluaran Pemerintah dan Pertumbuhan Ekonomi*
- <https://databank.worldbank.org/>
- Investment Potential. *Investment Management And Financial Innovations*, 16(3), 229–240.
- Jaji, H., & Bonga, W. G. (2017). *The Effect Of Increased Electricity Tariffs On Citrus Production In Jakarta*. Jakarta: badan pusat statistic. Ketujuh belas, alih bahasa Greta dkk. Jakarta : PT Media Global Edukasi.
- Low-And Middle-Income Countries: A Systematic Review. *Campbell Systematic Reviews*, 8(1), 1–48. <https://doi.org/10.1002/CL2.90>.

- Marganda & Sirojulizam. 2009. *Analisis Pengaruh Pengeluaran Pemerintah*
- Martín-Retortillo, M., & Pinilla, V. (2015). *Patterns And Causes Of The Growth Of European*
- Meyer, D. F. (2019). *An Assessment Of The Importance Of The Agricultural Sektor On Economic Growth And Development In South Africa. In Proceedings Of The 52nd International*
- Mulyadi, 2003 ” *Analisis Pengaruh Aglomerasi, Tenaga Kerja, Jumlah Penduduk, Dan Modal Terhadap Pertumbuhan Ekonomi Kabupaten Kendal*”.
- Osly, P. J., Araswati, F., Ririhena, R. E., & Putri, A. (2020). *Analysis Of Agricultural Growth Using LQ And Shiftshare Methods (Case Study: Manokwari Regency, Indonesia)*. *Jurnal Infrastruktur*, 6(1), 53–58.
- PROTOCOL: *Farmer Field Schools For Improving Farming Practices And Farmer Outcomes In Pustakan Utama*.
- Regional : *Studi Kasus Data Panel di Indonesia. Jurnal Ekonomi Pembangunan* Vol.12 No.1: 27-36.
- Soekartawi. 1999. *Agribisnis Teori dan Aplikasi*. PT. Raja Grafindo Persada. *Terhadap Pertumbuhan Ekonomi* , Jawa Barat.
- Waddington, H., Snilstveit, B., Hombrados, J. G., Vojtkova, M., Anderson, J., & White, H. (2012).