

ANALYSIS SECTOR POTENTIAL AND CONTRIBUTION OF AGRICULTURE IN INCREASING GROSS REGIONAL DOMESTIC PRODUCT (GRDP) OF BANYUMAS REGENCY

Rahmat Hidayatullah¹⁾, Watemin^{1)*}, Yusuf Enril Fathurrohman^{1,2)}

¹Department of Agribusiness, Faculty of Agriculture and Fisheries, Universitas Muhammadiyah Purwokerto, Purwokerto, Indonesia

²Doctoral School of Management and Business, Faculty of Economics and Business, University of Debrecen, Hungary (yusuf.enril@mailbox.unideb.hu)

*Email : watemyn@ump.ac.id

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ABSTRACT

Purpose: This study aimed to analyze the potential and contribution of the agricultural sector to the Gross Regional Domestic Product (GRDP) of the Banyumas Regency. **Methodology:** This study employed documentation techniques to acquire secondary data from various official sources, utilizing secondary data analysis techniques. **Results:** The agricultural sector was evaluated using Location Quotient (LQ) and Dynamic Location Quotient (DLQ) analyses, while the potential of leading commodities was visualized using a geographic information system (GIS). **Findings:** Overlay analysis, which is combined with LQ, DLQ, Shift Share, and Klassen Typology identified the agricultural sector in Banyumas Regency in 2019–2023 as a non-base sector (LQ 0.90, DLQ 0.28). Shift Share analysis shows stagnant results (-203.89), while the Klassen Typology categorizes it as relatively underdeveloped (Quadrant IV), verifying the status of agriculture in Banyumas district as a non-leading sector. However, several subdistricts showed promising potential in leading commodities such as rice, corn, and coconut. **Novelty:** DLQ analysis indicated the future growth potential of the agricultural sector, while Klassen typology and Shift Share analysis provided an overview of the structure and dynamics of the regional economy. **Originality:** The results of this study are expected to serve as a reference for the local government in formulating more focused and sustainable development policies, especially in improving the competitiveness of the agricultural sector in Banyumas Regency. **Conclusion:** It is recommended that the Banyumas Regency government optimize leading commodities, improve rural infrastructure, expand market access, and encourage technology and innovation to maximize the potential of this sector. **Type of Paper:** Research article.

Keywords: Agricultural Sector Potential, Leading Commodities, Agricultural Sector Competitiveness

INTRODUCTION

Agriculture is the most critical sector for humankind for basic daily needs. Agriculture is an activity that utilizes the availability of natural resources to manage and produce agricultural products. In addition, the existence of agriculture is one of the drivers for the development and progress of other sectors because agriculture is a provider of raw materials in agro-industry (Dumasari, 2020).

In addition to providing food and raw materials, the agricultural sector is viewed from

a base economic perspective, which posits that the factors determining economic development in a region are primarily directly related to demand from other regions. This theory is a tool to distinguish between a base sector activity and a non-base sector (R. Jumiyan, 2018). The activities carried out in the primary industry will determine the results of the sector's growth and encourage regional economic development. Research conducted by (Dewi et al., 2022) states that the agricultural sector plays a role as a provider of raw materials for industry, a producer of foreign exchange, employment for the community, and a provider of raw materials in several regions of the agricultural sector being a primary sector that has potential and as a driver in regional economic growth.

The development of GRDP each year can be seen as an indicator of regional economic development. GRDP growth can benefit development planning. Economic development at the regional and central levels has several sectors, including the agricultural sector. The agricultural sector significantly contributes to economic development (Isbah, 2016).

Central Java Province is a province that has a harvest area of 1.68 million hectares or 16.09% of the total harvest area in Indonesia in 2023, with a productivity level of 55.24 ku/ha and a total production of 9.06 million tons (National BPS, 2024). The agricultural sector in the Central Java region, with producers of food crops, horticulture, plantations, livestock, agricultural and hunting services, forestry, and fisheries, has a percentage contribution to Central Java's GRDP of 11.92% (BPS Central Java, 2024). Based on this data, the agricultural sector in the Central Java region has the potential to be an adequate agricultural producer because it helps increase Central Java's GRDP.

Central Java Province has 35 administrative regions, 29 of which are regencies and six cities. One of the areas contributing the highest GRDP in Central Java Province is Banyumas Regency, which contributed 45.396 trillion rupiah to Central Java's ADHK GRDP in 2023. The agricultural sector of Banyumas Regency contributed 4,822.42 billion rupiah to the GRDP in 2023 (BPS Banyumas, 2024).

Agriculture is a vital sector in the economy and food security. It comprises several subsectors, such as food crops, horticulture, plantations, livestock, and fisheries. In Banyumas Regency, the food crop subsector is vital in providing food and driving the economy. In contrast, other subsectors, such as livestock and plantations, also contribute significantly, for example, by producing beef, broiler chicken, and coconuts, which have high economic value.

The productivity of agricultural commodities in each sub-district varies, making it

essential to develop the potential of commodities in each subsector according to the capabilities of each region. The development of leading subsectors must be supported by proper planning so that economic actors in the agricultural sector can access the production process and market their results effectively. This will ensure that the advantages of the sub-district can be utilized as well as possible and will increase competitiveness in a subsector (Sjafrizal, 2021).

Using geographic information system (GIS) technology in the agricultural sector, spatial data information on soil, climate, land, infrastructure, and various agricultural variables can be processed. It can then produce information visually so that commands and other parties can utilize it to develop their decisions and policies better (Anjelina et al., 2024). Previous research using Location Quotient (LQ) and Dynamic Location Quotient (DLQ) tools in Banyumas mainly focused on certain commodity groups and limited time periods. This study extends these approaches by integrating GIS visualization to plot and analyze agricultural potential at the sub-district level, allowing for more comprehensive understanding of spatial dynamics. The combination of LQ, DLQ, and GIS provides actionable insights that enable stakeholders and collaborators to formulate policies that optimize the distinctive strengths of each sub-district in Banyumas Regency.

With the above background, it is necessary to research to (1) visualize the potential of the primary agricultural commodities in each sub-district in Banyumas Regency, (2) identify the competitiveness of the agricultural sector in Banyumas Regency, (3) identify the potential of the agricultural sector in the future in Banyumas Regency, (4) identify the development structure of the agricultural sector in Banyumas Regency, (5) identify the potential of the agricultural sector in Banyumas Regency.

METHODOLOGY

1. Research Design

This research method used secondary data analysis techniques, a series of activities that process and interpret existing data. Data can come from various sources, including censuses, surveys, or documents used to gain new insights that should have been discussed in the initial analysis, and the process is intended to produce useful additional information from previously collected data (Effendi & Tukiran, 2012). Then, the existing data may be the result of a survey but has yet to be further squeezed and analyzed, and the utilization of existing data makes it unnecessary for researchers to be involved in field research (Singarimbun, 2020). This research method is considered appropriate for determining the

contribution of gross regional domestic product and the potential of agricultural commodities in each sub-district in the Banyumas Regency. This research utilizes secondary data from 2019 to 2023 to ensure a latest and comprehensive analysis on the agricultural sector in Banyumas Regency. The chosen time frame provides more opportunities to evaluate the current trends and dynamics in the contribution and growth potential of this sector.

2. *Technique of Data Collection*

The data collection technique used in this research was documentation, namely collecting techniques by analyzing written documents, images, and works and then analyzing them to obtain systematic, integrated, and complete study results (Nilamsari, 2014). In other words, documentation is a method of tracing data in the past. The secondary data for this study were sourced primarily from the Central Bureau of Statistics (Badan Pusat Statistik) at the regional levels. Specifically, data on GRDP by sector agricultural production, and population data by sub-district were obtained from BPS Banyumas and BPS Central Java. Additional agricultural production data were collected from BPS Banyumas. All data used in this research cover the period from 2019 to 2023. Spatial data, facilitated by the Geospatial Information Agency (Badan Informasi Geospasial), were utilized to support GIS-based visualization.

3. *Technique of Data Analysis*

To determine the potential of commodities in each sub-district in Banyumas Regency.

Location Quotient analysis was used to compare sectors' ability in a region with that of the region above. The data used was the total production and population of commodities and the total population in each sub-district in Banyumas Regency using the formula (Warpani, 2019) as follows:

$$LQ = \frac{Si/S}{Ni/N}$$

Description:

LQ : Location Quotient

Si : Number of commodity type I at the Sub-district level.

S : Total population at the Sub-district level.

Ni : Number of commodity type i at District level.

N : Total population at the District level.

The results would be classified into 3 criteria in the Location Quotient (LQ) analysis, which according to (Warpani, 2019).

LQ>1 : Base sector, which means that commodity *i* in the region has the potential to export because it is sufficient for the needs of its area.

LQ=1 : Non-base, which means that commodity *I* in the region has no advantage because the production is only enough to meet the needs of the area itself.

LQ<1 : Non-base, which means that commodity *I* in the region cannot even meet the needs of its region, so it needs to get supplies or imports from the other areas.

To Create Spatial Maps

Making a spatial map to find out each potential in the Banyumas Regency area based on the results of calculations using LQ analysis in each sub-district in Banyumas Regency can use the geographic information system (GIS) analysis method Geographic information system in this study used ArcGis 10.2 software application using a base map of Banyumas Regency which would be continued with an analysis that was described as a map that explained the potential of the primary commodities of each sub-district. Geographic Information System (GIS) process spatial data into a map (Hamdani, 2021). GIS consists of spatial data based on georeference and attribute data which contains information about spatial objects (Fernando et al., 2018). In the agricultural sector, GIS can be used to create the potential map and create the development plans for the agricultural sectors (Mubarak, 2023). (Mubarak, 2023).

Base Sector Analysis

In this study, Location Quotient (LQ) analysis was used by juxtaposing the agricultural sector GRDP and total GRDP of the lower region, in this case, Banyumas Regency, with the agricultural sector GRDP and total GRDP at the upper level, in this case, Central Java Province. The formula used was as follows (Warpani, 2019).

$$LQ = \frac{Si/S}{Ni/N}$$

To determine the role of the agricultural sector in the future

In Banyumas Regency, Dynamic Location Quotient (DLQ) analysis should be used. Dynamic Location Quotient describes the economic growth rate in the sector under study and the economy at large in a certain period. Instead, the results of the Dynamic Location

Quotient analysis illustrate how the potential of an industry to become an economic base sector in the future (Priyadi, 2021). The formula of DLQ is:

$$DLQ = \frac{(1 + g_{ij})/(1 + g_j)}{(1 + g_{ip})/(1 + g_p)}$$

Description:

- DLQ : Dynamic Location Quotient
 G_{ij} : Average growth rate of GRDP in agriculture sector in Banyumas Regency
 g_j : Average GRDP growth in Banyumas Regency
 g_{ip} : Average GDRP growth in the agricultural sector in Central Java
 g : Average growth of total GRDP in the Province
 t : Number of years of analysis

With Criteria:

DLQ>1 : The agricultural sector is prospective.

LQ<1 : The agriculture sector is not prospective.

Contribution of the agricultural sector to the GRDP of Banyumas Regency

Contribution is to give an opinion and role in an economic unit to the total formation of Gross Regional Domestic Product (GRDP) (Saihani & Heldayani, 2020). In this study, GRDP data at constant prices and formulas were used:

$$Kontribusi = \frac{Nilai PDRB sektor - i}{Total PDRB} \times 100\%$$

Shift Share

Shift Share analysis compares regional economic structure changes with the national economy. In this case, it aimed to determine a region's financial performance by comparing it with the scope of the area above it (Aida & Alvaro, 2021).

Klassen typology

Klassen typology is an analytical tool used in analyzing by grouping economic sectors in an area that will later be known as the sector whose growth rate is mainstay, potential, developing, and underdeveloped (Sari & Bakar, 2022). This analysis was used to determine how the pattern is made and the economic structure in a region. In Klassen typology, economic growth and GRDP are used (Ramdani, 2022). There are four different sector groups, and the grouping in Klassen Typology Analysis (Sjafrizal, 2012) can be seen in Table 1.

Table 1. Classification of GRDP sectors in Klassen Typology Analysis

Growth	Sector Contribution	
	$s_{ki} > S_k$	$s_{ki} < S_k$
$s_i > S$	Quadrant I Advanced and fast-growing sectors	Quadrant III Potential sectors that can still grow
$s_i < S$	Quadrant II Advanced but depressed sector	Quadrant IV Relatively lagging sectors

Description:

S : Average growth value of sector i in Central Java Province.

S_i : Average growth value of sector i in Banyumas Regency.

S_k : Average contribution of sector i in Central Java Province.

S_{ki} : Average contribution of sector i in Banyumas Regency.

Overlay

Overlay analysis combines several results in a study to determine the potential of several sectors (Tri Basuki & Gayatri, 2009). The overlay analysis is a combination of the results of three calculation analyses, there are location quotient (LQ) analysis, shift share analysis, and Klassen typology (Huda, 2021). Therefore, overlay analysis can assess the agricultural sector's potential using a combination of analytical tools.

FINDINGS AND DISCUSSION**Visualization of the Potential of Agricultural Subsectors in Each Subdistrict of Banyumas Regency**

Visualization depiction of spatial maps of potential commodities for each sub-district of Banyumas Regency used the ArcGis 10.8 application. The map image was created and generated using a scale of 1:350,000 in the WGS 1984 UTM Zone 49S coordinate system with Kilometers. The map shows the potential distribution of several primary commodities in Banyumas Regency.

There are many types of commodities in the agricultural subsector in Banyumas Regency, so research is necessary to determine the potential of several main commodities at the subdistrict level. The primary commodities can be seen through the high amount of production and their relative dominance over other commodities. This is because these commodities have high economic value.

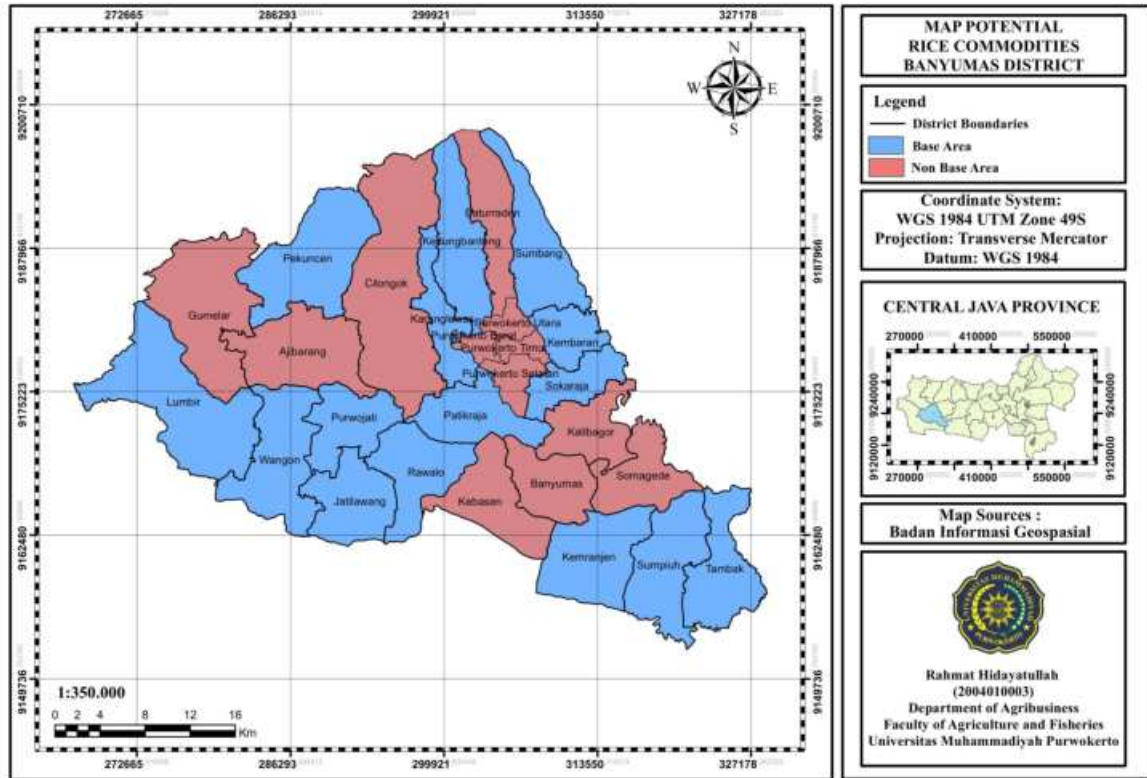


Figure 1. Potential map of paddy rice commodity in Banyumas Regency

Based on the results of the calculations produced can be seen that the LQ value in Figure 2 can be seen that the area is the basis of paddy rice commodities visualized using blue color gradations are Lumir District, Wangon District, Jatilawang District, Rawalo District, Kemranjen District, Sumpiuh District, Tambak District, Patikraja District, Purwojati District, Pekuncen District, Karangas District, Kedungbanteng District, Sumbang District, Kembaran District, and Sokaraja District.

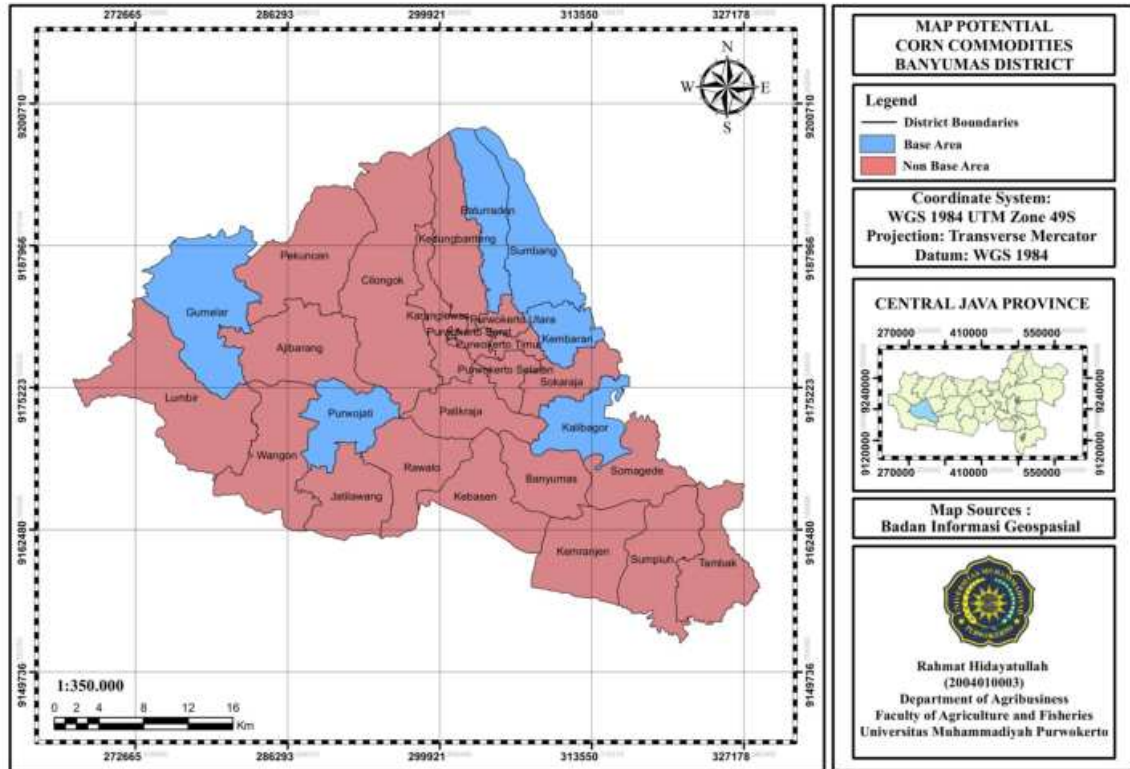


Figure 2. Map of potential corn commodities in Banyumas Regency

Based on the results of the LQ calculation of the Maize commodity in Banyumas Regency, Figure 3 visualizes that the base areas are the sub-districts Kecamatan Kalibagor, Kecamatan Purwojati, Kecamatan Gumelar, Kecamatan Batunraden, Kecamatan Sumbang, Kecamatan Kembaran, and Kecamatan Sokaraja.

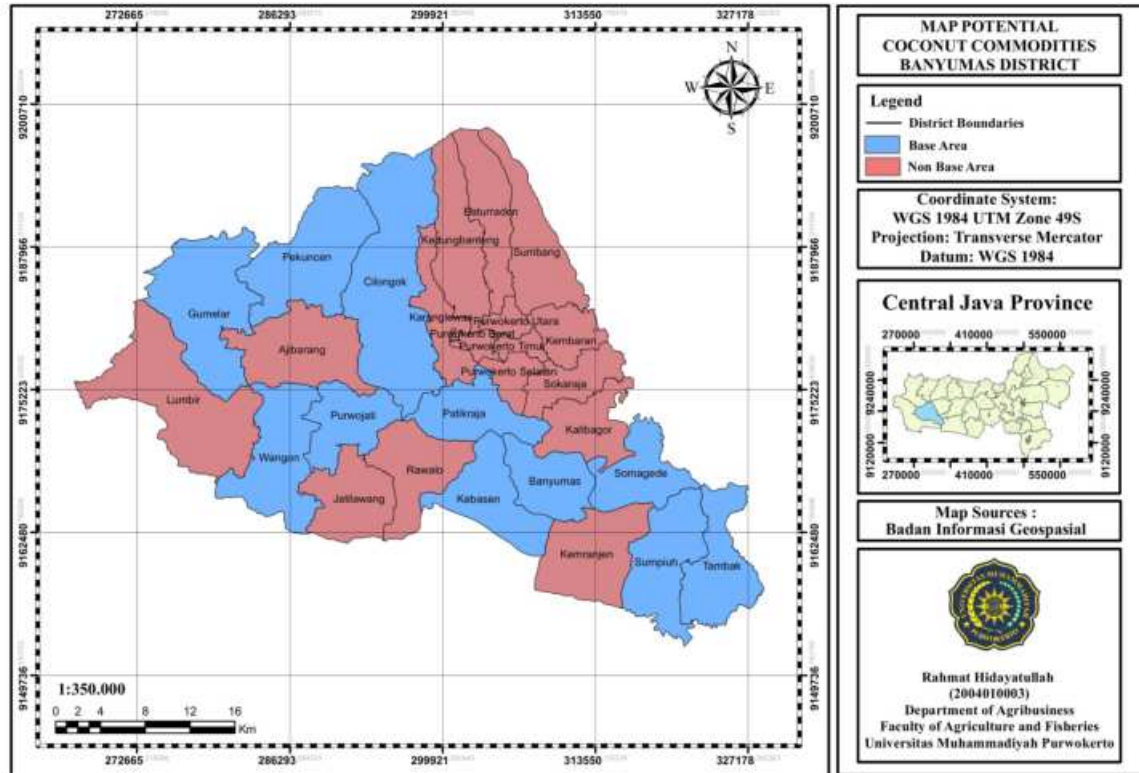


Figure 3. Map of potential Coconut commodities in Banyumas Regency

For the coconut commodity, the Purwojati sub-district has the highest LQ value of 2.90, followed by the Somagede sub-district with 2.48 and the Tambak sub-district with 2.67. These results can be processed into products with economic value, such as oil, coconut milk, and coconut sugar. As we know, the coconut sugar industry is quite significant in Banyumas Regency. It would be good if the sub-districts included in the base area became production centers to become providers or suppliers of the coconut commodity industry in the Banyumas Regency.

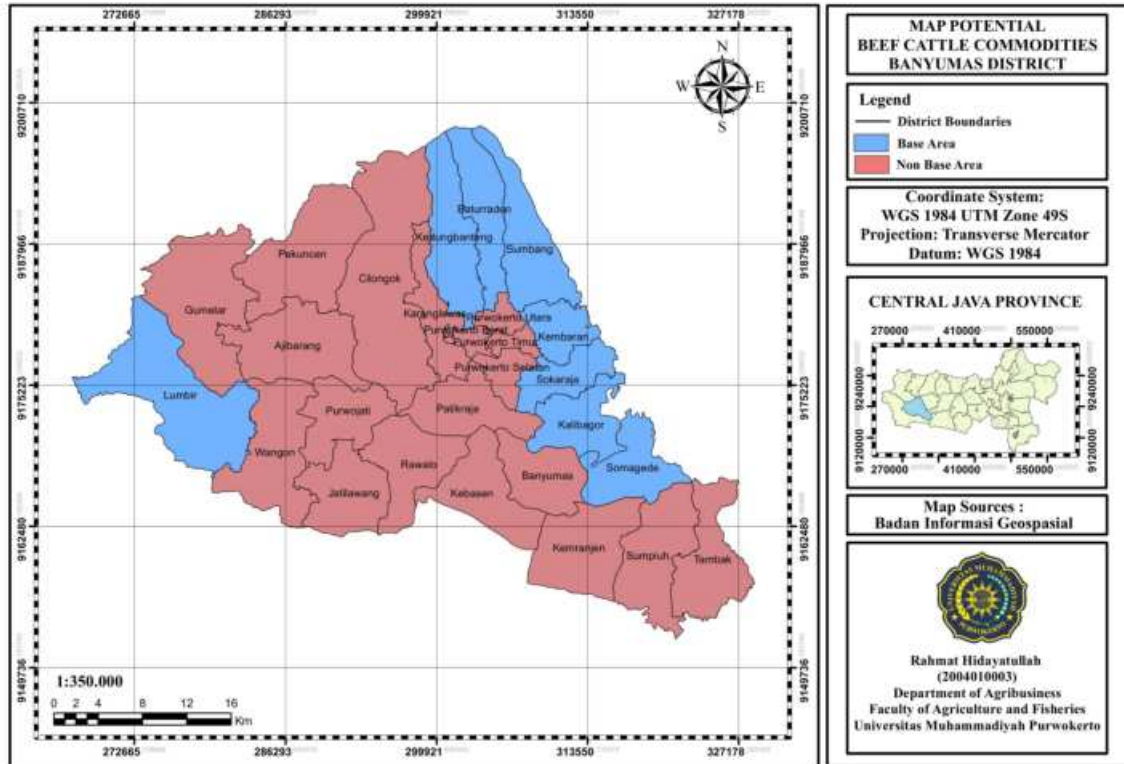


Figure 4. Map of potential beef cattle commodities in Banyumas Regency

Kalibagor sub-district has the highest LQ value for beef cattle with an LQ value of 4.52, followed by the Sumbang sub-district with 3.43 and Kembaran sub-district with 2.95. The high LQ value of beef cattle in these sub-districts indicates that these sub-districts focus on livestock development to meet local beef demand. The Banyumas Regency Government is trying to increase the beef cattle population in Banyumas Regency by targeting Sumbang Sub-district as the largest cattle farming center in Banyumas Regency by 2029 due to its potential natural resources such as feed, water, and favorable climate.

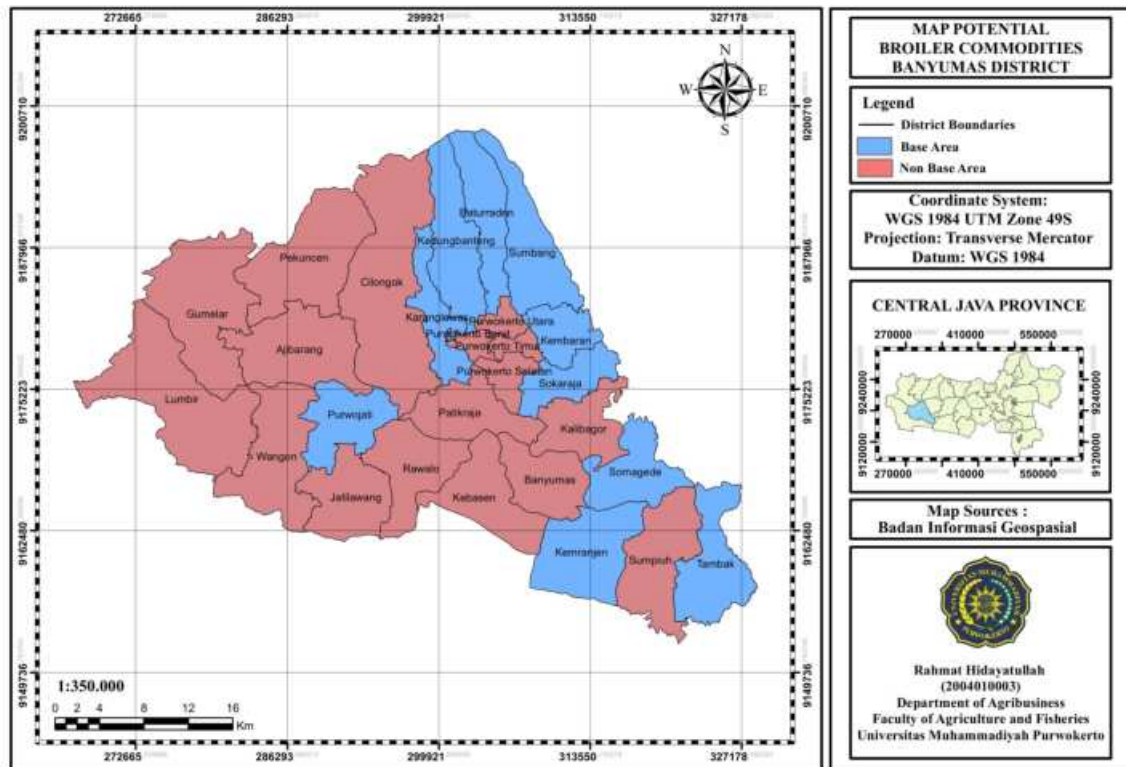


Figure 5. Map of potential broiler commodities in Banyumas Regency

Somagede sub-district has the highest broiler LQ value, 3.80, followed by the Baturraden sub-district, 2.80, and the Karanglegwas sub-district, 2.26. The high broiler production indicates that this sub-district is the mainstay for fulfilling the demand for chicken meat in the Banyumas Regency. Somagede Sub-district is the center of broiler production in Banyumas Regency. It has implemented good farm management, meeting the increasing market demand.

Areas with blue gradations are included in the base areas of each commodity, such as paddy rice, corn, coconut, beef cattle, and broiler. Improvements can be made to infrastructure, such as access to transportation, so that agricultural and livestock products can be easily distributed, reducing transportation costs and creating production efficiency. Improving marketing networks helps farmers and breeders reach a more comprehensive market coverage so that the opportunity for commodity distribution is better. Adopting technology in the hope that the quality of agricultural production will be better and the level of livestock population can be increased in line with the expected quality. This way, the base area for each commodity can improve the economy of Banyumas Regency.

Areas that have red gradations are areas that are included in non-base commodity areas. It is essential to develop from the basics to have a strong foundation—implementing programs to increase the capability of non-base area commodities. Training and empowerment are needed to create another agricultural potential that aligns with the region's characteristics. These efforts aim to increase the overall economic value of Banyumas Regency. Increasing the capability and competitiveness of non-basic commodities will positively impact the income of farmers and the community in general so that the balance of regional economic development can develop sustainably.

Potential of the Agriculture Sector in Banyumas Regency

Table 2. LQ Value of Agriculture and Other Sectors in Banyumas Regency 2019-2023.

GRDP Sector	Average	Description
Agriculture, Forestry and Fisheries	0.90	Non-Base

Source: Secondary Data processed, Year 2024

Based on the results of the calculation of GRDP using Location Quotient (LQ) analysis, it can be seen that the agriculture, forestry, and fisheries sector of Banyumas Regency in the 2019-2023 period is a non-base sector characterized by an average LQ value of 0.90. The agricultural LQ value fluctuates every year; where in the 2019-2023 period, the highest LQ value was in 2019 with a value of 0.92 feet,1 to 0.90 in 2020 and stagnated in the following year, then fell back to 0.88 in 2022, and rose again in 2023 by 0.89. The rise and fall of the LQ value of the agricultural sector in Banyumas Regency is also influenced by the contribution of the agricultural sector itself, but growth in other sectors also affects the agricultural LQ value.

The agricultural sector of Banyumas Regency is included in the non-base sector because the resulting LQ value is less than 1, which shows that the contribution of the agricultural sector to the GRDP of Banyumas Regency is smaller than the contribution of the same sector to the GRDP of Central Java Province. This is because other sectors, such as trade, manufacturing, and services, have a more significant contribution to the GDRP of the Banyumas Regency, thus reducing the dominance of the agricultural sector and shifting the focus of the economy from the agricultural sector to more prospective sectors. Furthermore, the food security challenges in Banyumas Regency, such as the lack of availability of agricultural production facilities and infrastructure, the small scale of farming, climate

change, and the slow pace of agricultural regeneration, are the main causes of this sector not being the economic base sector in Banyumas Regency.

Then, refer to the contribution of the agricultural sector in Banyumas Regency. In the 2019-2023 period, the contribution of the agricultural industry of Banyumas Regency decreased from 2019 to 2023. The contribution of Banyumas Regency's agricultural sector in the 2019-2023 period can be seen in Table 3.

Table 3. Contribution of Agriculture Sector in Banyumas Regency in 2019-2023 (%)

Year	Percentage
2019	11.38
2020	11.75
2021	11.40
2022	10.99
2023	10.62
Average	11.23

Source: Secondary Data processed, Year 2024

It can be seen that agriculture has contributed to GRDP since 2019 in Banyumas Regency. The agricultural sector is considered because it contributes more than 10% per year to the GRDP value of the Banyumas Regency. In 2019, the agricultural sector contributed 11.38%; in 2020, it increased to 11.75%. In 2021, the agricultural sector's contribution decreased to 11.40% of the total GRDP of the Banyumas Regency. In the following years, the percentage contribution of the agricultural sector continued to decline, as in 2022, the farm sector's contribution to GRDP fell to 10.99% and 10.62% in 2023.

Although the percentage contribution continues to decline, the agricultural sector does not necessarily experience an absolute decline. The number of GRDP evidences this at constant prices in the agricultural sector of Banyumas Regency in Table 6, which consistently increased yearly during 2019-2023. The GRDP of the agrarian sector of Banyumas Regency in 2019 contributed 4,528.29 million and increased in the following year. In 2020, the agricultural sector of Banyumas Regency contributed 4,596.45 million rupiahs, and in 2021, the agricultural sector contributed 4,639.55 million rupiahs. Then, in 2022, the agricultural sector experienced a consistent increase in the amount of GRDP of 4,734.98 million rupiahs, and its peak in 2023 amounted to 4,822.42 million rupiahs; in 2023, the agricultural sector experienced the highest figure during the 2019-2023 period.

The Future of the Agricultural Sector

Table 4. DLQ Value and Change in the Role of Economic Sectors in Banyumas Regency 2019-2023

GRDP Sector	LQ	DLQ	Description
Agriculture, Forestry and Fisheries	0.90	0.28	Fixed Non-Base

Source: Secondary Data processed, Year 2024

Based on the DLQ analysis in Table 4, it can be seen that the agricultural sector has a DLQ value of less than one, which is 0.28. In other words, the agricultural sector cannot be used as a primary sector in the future, and its role will only change because it remains in the non-base sector. Several things encourage this to happen, such as the contribution of the agricultural sector of Banyumas Regency for the 2019-2023 period, which only amounted to 11.23%, which is relatively low when compared to the wholesale and retail trade sector; car and motorcycle repair at 16.58% and the processing industry sector at 23.18%, which contributed the most significant contribution. The growth component of the agriculture, forestry, and fisheries sector in Banyumas Regency had a regional contribution (PRij) of 11.20%. Still, there was a decrease in the proportional growth component (Ppij) of -4.50% and the regional share growth component (PPWij) of 0.20%. Therefore, although the agricultural sector contributed significantly to the growth of Banyumas Regency, it experienced a decline in growth compared to other sectors. This sector experienced a decrease in growth compared to other sectors, which could be caused by the government focusing more on developing other sectors considered to have higher growth prospects, such as the mining and manufacturing sectors.

Competitiveness of the Agriculture Sector in Banyumas Regency

Table 5. Shift Share Analysis Result of Agriculture Sector in Banyumas Regency 2019-2023

(PRij)	(Ppij)	(PPWij)	(PBij)
507.15	-203.89	-9.13	-213.02

Source: Secondary Data processed, Year 2024

In the calculation of the Proportional Shift component (Ppij), it is known that the agricultural sector in Banyumas Regency has a percentage value of -203.89, which means that the agricultural sector in Banyumas Regency has a slower rate than the growth of the agricultural sector in the upper region, in this case, Central Java Province. Many factors cause

this, such as the demand for final products and government policies, taxes, and subsidies. In the calculation of the Differential Shift component (PPWij), the agricultural sector in Banyumas Regency has a percentage value of -9.13, which indicates that the growth of the agricultural sector in Banyumas Regency is relatively uncompetitive compared to the agricultural sector at the Central Java Province level. Several factors, such as district-level economic policies and market access, can influence the agricultural sector's competitiveness. In the Pbij component, the agricultural sector of Banyumas Regency shows an output value of -213.02, which explains that the agricultural industry of Banyumas Regency is classified as having non-progressive or slow growth.

This analysis showed that the agricultural sector of Banyumas Regency has potential, but it also needs some help. Based on the Government Agency Performance Report of the Agriculture and Food Security Agency of Banyumas Regency, several points must be highlighted: strengthening food reserves, availability of facilities and infrastructure, strategic challenges, climate change, and agricultural disasters.

Structure of Agriculture Sector Development in Banyumas Regency

Table 6. Klassen Typology Analysis of Agriculture Sector of Banyumas Regency 2019-2023

S	SK	si	ski	Description
1.57	12.52	1.33	11.23	Quadrant IV

Source: Secondary Data processed, Year 2024

The agricultural sector of Banyumas Regency is in quadrant IV along with the corporate services sector, where the agricultural sector is a relatively underdeveloped sector with an average percentage of the contribution of the agricultural sector of Banyumas Regency produced of 11.23%; this is smaller than that of Central Java Province which has an average percentage of 12.52%, then in the average growth rate of the agricultural sector of Banyumas Regency of 1.33% which is also smaller than that of the sector obtained in Central Java Province with an average growth percentage of 1.57%.

Referring to the results of the 2023 agricultural census, the agricultural sector of Banyumas Regency is experiencing a decline in the number of farmers due to the lack of regeneration of farmers from young people. The younger generation is less interested in entering the agricultural sector, so older people dominate farmers. This is exacerbated by the lack of adoption of technology among older farmers, who are accustomed to using old

technology or methods. In the 2023 Banyumas Regency agricultural census, it is known that millennial farmers who use technology in the age range of 19-39 years are 12,998 farmers (BPS Banyumas, 2023). The Banyumas Regency Government, through the Agriculture and Food Security Office, is collaborating with Islamic boarding schools and educational institutions by forming the Millennial Farmer Movement to encourage the interest of the younger generation to enter agriculture. This is useful to accelerate the regeneration of farmers in Banyumas Regency.

Based on the results of the overlay analysis, it can be seen that the agricultural sector has a negative coefficient (LQ 0,90 and DLQ 0,28, Ppij -203.89 and PPWij -9.13, Klassen Typology in quadrant IV) from the three analytical tools used, which explains that the agricultural sector is not a leading sector in Banyumas Regency in the 2019-2023 period. The average result of the LQ value of the agricultural sector in Banyumas Regency in the 2019-2023 period is a negative value of 0.90, and the DLQ value is 0.28, both below 1, so the combined LQ and DLQ analysis is negative (-). Then, for the shift-share analysis, because Ppij -203.89 and PPWij -9.13 are both negative, they have a sign (-). As for the Klassen Typology, because the agricultural sector is in quadrant IV, it has a sign (-). That way, the overlay analysis of the agricultural sector shows the results of the three negatives, so it can be said that the agricultural sector is not a leading sector.

CONCLUSION

Based on the Location Quotient (LQ) analysis for 2019-2023, several agricultural commodities in the Banyumas Regency showed significant potential. Paddy rice is the base in 16 sub-districts, with the highest potential in Kecamatan Tambak, Jatilawang, and Rawalo. Although only a few sub-districts are the base, corn commodity has high potential in the Sumbang, Kembaran, and Kalibagor sub-districts. Coconut commodity is also a base in many subdistricts, with Purwojati, Somagede, and Banyumas as high-potential areas. In addition, beef cattle and broiler commodities show good development potential in several sub-districts. However, overall, the agriculture, forestry, and fisheries sector in Banyumas Regency was not included as a basis sector, with an average LQ value of <1. Dynamic Location Quotient (DLQ) analysis also showed that this sector cannot be a benchmark in the future basis sector. From the results of the Shift Share calculation, the agricultural industry experienced a decline in economic performance of -213.02 billion rupiahs during the 2019-2023 period, which indicates slow sector growth and the structure of the development of the agricultural sector in Banyumas Regency during 2019-2023 is classified as underdeveloped, with an average

contribution of 11.23%, lower than the Central Java Province of 12.52%. The growth of the agricultural sector in Banyumas Regency is less than the provincial average, with a growth rate of 1.33% compared to 1.57% in Central Java

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