

## Analysis of the Role of the Agricultural Sector in the Economy in Batanghari District, Jambi Province, 2019 & 2021

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Article history: received June 09, 2024; revised July 28, 2024; accepted August 29, 2024

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### Abstract

Economic growth is a macro indicator to see real economic performance in a region. The rate of economic growth can be calculated based on changes in GRDP at constant prices for the year in question compared to the previous year. Economic growth can be seen as an increase in the number of goods and services produced by all business fields of economic activity in a region during a year. This research aims to determine the leading agricultural sector in Batang Hari district, Jambi Province in the period 2019 and 2021. This research uses quantitative research methods with Location Quotient (LQ) analysis which is used to determine leading and non-leading sectors using Statistical Location Quotient (SLQ) and Dynamic Location Quotient (DLQ) to analyze calculations of ADHK GRDP in Batang Hari Regency.

**Keywords:** Agricultural Sector, SLQ, DLQ.

### INTRODUCTION

Economic development is understood as a rapid change in economic structure from an agricultural economy to a modern industrial economy and all services. Good economic development influences the growth rate of this economic sector. The process of economic growth is influenced by several factors, namely economic factors which depend on natural resources, human resources, capital, organization, technology, division of labor and all production, while non-economic factors which depend on social factors, human factors, political factors and administrative

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Jambi is one of the Indonesian provinces which is located on the east coast in the central part of Sumatra Island. Geographically, Jambi Province is located at 0o45'-2o45' South Latitude and 101o10'-104o55' East Longitude in the central part of Sumatra Island, to the north it borders Riau Province, to the East it borders the South China Sea, Riau Islands Province, to the South it borders South Sumatra Province and To the west it borders West Sumatra Province. Jambi Province has 9 districts and 2 municipalities including Batang Hari Regency, Merangin Regency, Sarolangun Regency, Tebo Regency, Bungo Regency, Muara Jambi Regency, East Tanjung Jabung Regency, West Tanjung Jabung Regency, Kerinci Regency, Sungai Full City and Jambi City. The position of Jambi Province is quite strategic because it directly faces the economic growth area, namely IMS-GT (Indonesia, Malaysia, Singapore Growth Triangle).

Batang Hari Regency is geographically located in the central part of Jambi Province with an area of 5,804.83 Km<sup>2</sup> and is one of the eleven regencies/cities in Jambi Province and was formed based on the Central Government Commissioner's Regulation in Bukit Tinggi Number 81/Kom/U, dated 30 October 1948 with the current government center in Muara Bulian City, 64 KM from Jambi City. Geographically located at 1°23' South Latitude to 2°23' South Latitude and between 102°29' East Longitude to 103°28' East Longitude, the climate is tropical and located at an altitude of 101-500 meters above the surface. sea and including lowland areas, As one of the districts in Jambi Province, Batanghari Regency is a district that is less developed than

other districts. If we look at economic growth during 2008 ± 2012, it experienced fluctuations every year. In 2008 it was 6.24%, in 2011 it rose again to 7.90% and in 2012 it fell again to 7.11%.

Batanghari Regency's economic growth from the supply side is estimated to still be driven by the growth of the dominant economic sectors from the primary sector, namely agriculture and from the secondary sector, namely the processing industry, while the tertiary sector comes from the trade sector, as well as hotels and restaurants. Based on 2010 constant prices, the GRDP value of Batang Hari Regency in 2018 increased. This increase was influenced by increased production in all business fields which were free from the influence of inflation. The GRDP value of Batang Hari Regency, based on constant prices in 2010, reached 11.16 trillion rupiah. This figure increased from 10.63 trillion rupiah in 2017. This shows that during 2018 there was economic growth of 4.96 percent, higher than the previous year's economic growth which reached 4.81 percent.

The impact of the Covid-19 outbreak on the world economy, provincial national and especially Batang Hari Regency is also very devastating. The direction of regional economic policy is prepared based on external and internal studies. To ensure the sustainability of the direction of development, the economic policy direction of Batang Hari Regency for 2016 - 2021 must be in line with national and provincial economic policies and pay attention to the impact of the Covid-19 outbreak. The direction of economic development is prioritizing sectors that make a large contribution to GRDP, as well as sectors that have good future prospects and overcoming the impact of the Covid-19 outbreak, both economic and social impacts. There are various basic problems that require special attention in future development, including the impact of the Covid-19 outbreak, the level of income of the population and the quality of human resources which is still low, the regional government bureaucracy which has not been able to follow the rules of good governance, the management of natural resources which has not been optimal and is lacking. heed the principles of sustainable development; product added value is still low (primary product); low availability and quality of infrastructure, and still high levels of dependence on regional development financing.

Agriculture is the primary sector for human life, because all humans really need food to continue their lives and some of them need work in the agricultural sector. As an agricultural country, the number of people involved in agribusiness farming activities is very large, so attention to the welfare of farmers is considered very strategic. The form of Indonesian government underwent modifications when the reform era passed, namely from centralization or what is often called regional autonomy. In the Long Term National Development Plan, improving the welfare of farmers has been and will be a National Development Priority in the future. Increasing community welfare through a people's economy is characterized by achieving the Farmer's Exchange Rate (NTP). Farmer Exchange Rate (NTP) is a comparison of the price index received by farmers to the price index paid by farmers. NTP is an indicator to see the level of ability or purchasing power of farmers in rural areas. The higher the NTP, the relatively stronger the level of ability or purchasing power of farmers.

Location Quotient (LQ) analysis is used to determine leading and non-leading sectors. Location Quotient (SLQ) statistics is an index used to measure whether a sector is a leading sector (basic sector) or not for a region. This approach requires data starting from Gross Regional Domestic Product (GRDP) either starting from the district or provincial level. Dynamic Location Quotient (DLQ) is a change from SLQ, helping to account for the rapid growth of economic sectors over time.

## RESEARCH METHODS

This research took place in Batang Hari Regency, Jambi Province, considering that this province has a superior economic sector in the agricultural sector. Most of the residents of Batang Hari district earn their living as farmers, including palm oil and rubber farmers. Therefore, the agricultural sector is important in this province.

This research was taken during the study between 2019 & 2021. The data taken was secondary data originating from BPS Jambi Province and BPS Batang Hari Regency (Central Statistics Agency), namely Gross Regional Domestic Product (GRDP) on the basis of Constant prices (ADHK).

This research uses a type of quantitative research, namely in the form of numbers which will be processed with statistical calculations to measure the leading economic sectors and the growth of each sector. This research uses Location Quotient (LQ) analysis which is used to determine the leading and non-leading sectors in the economy of Jambi Province. In this way, determining the type of superior commodity in an area is carried out using the Location Quotient (LQ) analysis technique which consists of SLQ (Statistics)

calculations. Location Quotient) and DLQ (Dynamic Location Quotient) . Dynamic Location Quotient is a modification from SLQ, by accommodating the rate factor growth of gross value added from a sector economy over time.

## RESULT AND DISCUSSION

Batang Hari Regency is geographically located between 1°15'- 2°2' south latitude and between 102°30' -104°30' east longitude. In terms of province, Batanghari Regency is located in the central region with hilly areas. The Batang Hari Regency area has a tropical climate with air temperatures between 20-30 with an average amount of rain per year ranging from 2,264-2,976 mm with humidity between 62.66-84.55 percent and sunlight between 89.3-133.9 percent.

The area of Batang Hari Regency is 5,804 square kilometers, which is the fourth largest regency after Merangin Regency, Sarolangun Regency and Tebo Regency. Among the sub-districts that have the largest area is Bajubang District, which covers an area of 1,203.51 square kilometers and the sub-district that has the smallest area is Maro Sebo Ilir District, which covers an area of 129.06 square kilometers. Batang Hari Regency has the following territorial boundaries:

- North: West Tanjung Jabung Regency and Tebo Regency
- South: Musi Banyuasin Regency
- West: Sarolangun Regency
- East: Muaro Jambi Regency

**Table 1. Results of SLQ Analysis for Batang Hari Regency for 2019 and 2021**

BUSINESS FIELD	ECONOMIC STRUCTURE				STATIC LOCATION QUOTIENT BATANG DISTRICT DAY	
	JAMBI PROV		BATANG DAY DISTRICT		2019	2021
	2019	2021	2019	2021		
Agriculture, Forestry and Fisheries	39160.08	41234.85	4535.54	4732.55	0.12	0.114770637
Mining and excavation	35709.32	35692.22	1861.42	2156.84	0.05	0.06
Processing industry	15495.29	15711.11	1334.23	1311.00	0.09	0.08
Procurement of Electricity and Gas	77.58	86.89	6.02	6.45	0.08	0.07
Water Supply, Waste Management, Waste and Recycling	198.74	213.08	9.77	10.04	0.05	0.05
Construction	11043.41	12033.11	793.23	816.74	0.07	0.07
Wholesale and Retail Trade; Car and Motorcycle Repair	14724.55	15044.58	919.81	853.52	0.06	0.06
Transportation and Warehousing	4891.84	4412.59	177.64	182.19	0.04	0.04
Provision of accommodation and food and drink	1700.44	1661.08	47.66	46.12	0.03	0.03
Information and Communication	5624.30	6335.00	349.86	391.52	0.06	0.06
Financial Services and Insurance	3259.90	3674.27	193.32	218.43	0.06	0.06
Real Estate	2212.37	2281.92	139.50	141.07	0.06	0.06
Company Services	1564.91	1540.30	8.61	8.37	0.01	0.01
Government Administration, Defense and Mandatory Social Security	5148.49	5093.76	466.56	453.95	0.09	0.09
Education Services	4971.05	5183.53	556.12	573.30	0.11	0.11
Health Services and Social Activities	1781.23	2180.07	167.07	196.49	0.09	0.09
Other Services	1547.59	1503.33	130.76	122.38	0.08	0.08

Based on the table above, the results of the SLQ analysis calculation of the 17 economic sectors in Batang Hari

Regency in 2019 and 2021, it is known that the average SLQ is that two of the fifteen sectors are the base sectors for development in the economy of Batang Hari Regency: the Processing Industry Sector and the Agriculture, Forestry and Fisheries. The average SLQ value  $> 1$  for these two sectors at the Batang Hari Regency level is greater than the same sector in the economy at the Jambi Province level.

**Table 2. Batang Hari Regency DLQ Analysis Results for 2019 and 2021**

BUSINESS FIELD	Average Growth				DLQ	
	Batang Hari Regency		Jambi Province			
	2019	2021	2019	2021	2019	2021
Agriculture, Forestry and Fisheries	0.39	0.39	0.26	0.27	1.48	1.45
Mining and excavation	0.16	0.18	0.24	0.23	0.66	0.76
Processing industry	0.11	0.11	0.10	0.10	1.10	1.05
Procurement of Electricity and Gas	0.00	0.00	0.00	0.00	1.14	1.07
Water Supply, Waste Management, Waste and Recycling	0.00	0.00	0.00	0.00	0.69	0.65
Construction	0.07	0.07	0.07	0.08	0.92	0.86
Wholesale and Retail Trade; Car and Motorcycle Repair	0.08	0.07	0.10	0.10	0.80	0.72
Transportation and Warehousing	0.02	0.01	0.03	0.03	0.47	0.52
Provision of accommodation and food and drink	0.00	0.00	0.01	0.01	0.36	0.36
Information and Communication	0.03	0.03	0.04	0.04	0.80	0.78
Financial Services and Insurance	0.02	0.02	0.02	0.02	0.76	0.75
Real Estate	0.01	0.01	0.01	0.01	0.81	0.78
Company Services	0.00	0.00	0.01	0.01	0.08	0.08
Government Administration, Defense and Mandatory Social Security	0.04	0.04	0.03	0.03	1.16	1.12
Education Services	0.05	0.05	0.03	0.03	1.43	1.39

The results of the DLQ calculation for Batang Hari Regency in the table above show that the Mining and Quarrying sector is; Management Industry amounting to; Construction; Financial and Insurance Services amounting to; and Health services and Social Activities of those with  $DLQ > 1$ , meaning that the potential development of these economic sectors in Batang Hari Regency is faster than the same sectors in Jambi Province. This shows that these sectors can be expected to become basic sectors in the future for Batang Hari Regency.

**Table 3. Sector Classification Based on SLQ and DLQ seen from the GRDP value of Batang Hari Regency According to Business Fields in 2019 and 2021**

CRITERIA	DLQi > 1	DLQi < 1
SLQi > 1	<b>Superior</b>	<b>Develop</b>
	A, Agriculture, Forestry and Fisheries J, Information and Communication O, Government Administration, Defense and Mandatory Social Security P, Education Services	D, Procurement of Electricity and Gas F, Construction G, Wholesale and Retail Trade; Car and Motorcycle Repair H, Transportation and Warehousing L, Real Estate Q, Health Services and Social Activities
SLQi < 1	<b>Potential</b>	<b>Left behind</b>
	C, Processing Industry I, Provision of Accommodation and Food and Drink K, Financial Services and Insurance M,N Corporate Services R,S,T,U Other Services	B, Mining and Quarrying E, Water Supply, Waste Management, Waste and Recycling

**Table 4.**

CRITERIA	DLQi > 1	DLQi < 1
SLQi > 1	<b>Superior</b>	<b>Develop</b>
	A, Agriculture, Forestry and Fisheries D, Procurement of Electricity and Gas J, Information and Communication L, Real Estate O, Government Administration, Defense and Mandatory Social Security P, Education Services	F, Construction G, Wholesale and Retail Trade; Car and Motorcycle Repair H, Transportation and Warehousing Q, Health Services and Social Activities
SLQi < 1	<b>Potential</b>	<b>Left behind</b>
	C, Processing Industry I, Provision of Accommodation and Food and Drink K, Financial Services and Insurance M,N Corporate Services R,S,T,U Other Services	B, Mining and Quarrying E, Water Supply, Waste Management, Waste and Recycling

It can be seen in the table above, explaining the combined identification of SLQ and DLQ that in Batang Hari Regency there are four leading sectors: the agricultural, forestry and fisheries sectors, the information and communications sector, the Government Administration, Defense and Mandatory Social Security sectors, and the education services sector. For potential sectors in Batang Hari Regency, there are five sectors: the

processing industry sector, the Accommodation and Food and Drink Provision sector, the Financial Services and Insurance sector, the Corporate Services sector, and other service sectors. Meanwhile, there are only two sectors left behind, namely the Mining and Quarrying sector and the Water Supply, Waste, Waste and Recycling Management sector. Meanwhile, the other six sectors are included in the developing sector.

The results of the LQ calculation show two sectors which are based in Batang Hari Regency. The sector that has the largest average LQ value ( $LQ > 1$ ) is the Processing Industry and Agriculture, Forestry and Fisheries sectors.

Based on the results of SLQ analysis calculations of the 17 economic sectors in Batang Hari Regency in 2019 and 2021, it is known that the average SLQ is that six of the fifteen sectors are the basic sectors for development in the economy of Batang Hari Regency: the Processing Industry Sector and the Agriculture, Forestry sector and Fisheries. The average value of  $SLQ > 1$  for these two sectors at the Batang Hari Regency level is greater than the same sector in the economy at the Jambi Province level. In this way, these sectors are able to meet the needs of their region and are able to export to other regions. Meanwhile, the other 15 sectors are non-basic sectors in the economy of Batang Hari Regency with an average SLQ value  $< 1$ , meaning that the level of specialization of these economic sectors in Batang Hari Regency is smaller than the same sector in the economy at the Jambi Province level so that they can only meet the needs of the region and have not been able to export its production outside the region. Sectors with an average SLQ value  $< 1$ : Mining and Quarrying sector; Procurement of Electricity and Gas; Water Supply, Waste Management, Waste and Recycling; Construction; Wholesale and Retail Trade, Car and Motorcycle Repair; Transportation and Warehousing; Provision of Accommodation and Food and Drink; Information and Communication; Financial and Insurance Services; Real Estate; Corporate Services; Government Administration, Defense and Mandatory Social Security; Education Services; Health Services and Social Activities; and Other Services.

The results of the DLQ calculation for Batang Hari Regency show that the Mining and Quarrying sector is 0.24; Processing Industry of 0.10; Construction 0.07; Financial Services and Insurance at 0.02; and Health Services and Social Activities of 0.01 which has a  $DLQ > 1$ , meaning that the potential development of these economic sectors in Batang Hari Regency is faster than the same sector in Jambi Province. This shows that these sectors can be expected to become basic sectors in the future for South Labuhanbatu Regency. Meanwhile, the sectors with an average DLQ value  $< 1$  are the Agriculture, Forestry and Fisheries sectors; Procurement of Electricity and Gas; Water Supply, Waste Management, Waste and Recycling; Wholesale and Retail Trade, Car and Bicycle and Motorbike Repair; Transportation and Warehousing; Provision of Accommodation and Food and Drink; Information and Communication; Real Estate; Corporate Services; Government Administration, Defense and Mandatory Social Security; Education Services; and Other Services, meaning that the potential for development of this sector in South Labuhanbatu Regency is lower than the same sector in North Sumatra Province which is a non-based sector.

The combination of the Static Location Quotient (SLQ) and Dynamic Location Quotient (DLQ) values, the combination of SLQ and DLQ, shows that in Batang Hari Regency there are four leading sectors: the agricultural, forestry and fisheries sectors, the information and communication sector, the Government Administration, Defense and Security sectors. Compulsory Social, and educational services sectors. For potential sectors in Batang Hari Regency, there are five sectors: the processing industry sector, the Accommodation and Food and Drink Provision sector, the Financial Services and Insurance sector, the Corporate Services sector, and other service sectors. Meanwhile, there are only two sectors left behind, namely the Mining and Quarrying sector and the Water Supply, Waste, Waste and Recycling Management sector. Meanwhile, the other six sectors are included in the developing sector.

## CONCLUSION

Based on the results of the research conducted, the following conclusions can be drawn:

1. The results of the SLQ analysis show that in 2019 and 2021, of the 17 economic sectors studied in Batang Hari Regency, there are 2 economic sectors that have an average SLQ value of more than one ( $SLQ > 1$ ), namely the first is the Processing Industry sector and the Agricultural sector, Forestry, and Fisheries. The other 15 sectors have an average SLQ value of less than one ( $SLQ < 1$ ). This means that almost all economic activities or sectors in Batang Hari Regency are non-based sectors or sectors that have not been able to meet the economic needs of Batang Hari Regency.

2. The results of the DLQ analysis show that there are 5 economic sectors that have a DLQ value of more than one ( $DLQ > 1$ ), namely the Mining and Quarrying sector; Processing industry; Construction; Financial and Insurance Services; and Health Services and Social Activities, meaning that the five economic sectors in Batang Hari Regency have the potential for more advanced development compared to the same sectors in North Sumatra Province. And 12 other sectors have a DLQ value of less than one ( $DLQ < 1$ ).

If you look at the classification results based on a combination of SLQ and DLQ, the Manufacturing Industry Sector is included in the leading economic sector and it can be said that the processing industry sector is an economic sector in Batang Hari Regency that will remain superior (base) which supports economic growth in the future, where the sector These have SLQ and DLQ values greater than one.

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