# **Analysis of Economic Potential of Lebak Indonesia Regency Based on Leading Sector**

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#### **Abstract**

Lebak Regency has the largest area in Banten Province, Indonesia with an area of 3426.56 km or 35.46% of the total area of Banten province. With this landscape, Lebak has development potential which is indicated by the existence of national strategic projects such as the construction of the Serang-Panimbang toll road, the construction of the Karian dam which is the third largest in Indonesia and the development of the new city of Maja. The realization of investment in Lebak Regency for 2 consecutive years in 2019 and 2020 has always been above the target. This is inseparable from the strong commitment of the Lebak Regency Government to improve a conducive investment climate. An analysis of the economic potential is needed to determine the comparative advantage of the location so that the promotion strategy to bring in investment can run effectively. From the results of the comparison of the Gross Regional Domestic Product (GRDP) of Lebak Regency with the Provincial Gross Regional Domestic Product, it was found that the Location Quotient (LQ) value was relatively stable and consistent in 2020 (LQ value> 1), namely the agriculture, forestry and fisheries sub-sectors (3, 30), mining and quarrying sub-sector (6.64), provision of accommodation and food and drink (1.47), government administration, defense and compulsory social security (2.00), educational services (1.38), and other services (1.15).

## Keywords

economic potential; leading sector; location quotient



## I. Introduction

Lebak Regency has an area of 3,426.56 km<sup>2</sup>. The area of Lebak Regency is approximately 35.46% of the total area of Banten Province which is divided into 28 subdistricts. With such a wide landscape, Lebak has a lot of potential and becomes an investment destination. This is evidenced by the existence of national strategic development projects in Lebak Regency. The construction of the 83 km Serang-Panimbangan toll road that passes through the Cileles and Ciklur sub-districts can boost investment growth in general in the southern part of Lebak and in particular the western part of Lebak. The construction of the 3rd largest reservoir in Indonesia, Karian is planned to have a capacity of 314.7M<sup>3</sup> which is expected to irrigate an area of 21454 Ha, provide raw water supply of 9.10 M<sup>3</sup>/second, and generate electricity of 0.65 MW. Karian Dam can control the Ciberang River flood of 60.80 million cubic meters. Apart from controlling floods, Karian Dam is also planned to provide raw water sources in nine cities/districts in Banten and Jakarta. Lebak is also included in the development of a new city in the 2020-2022 RPJMN along with 3 other priorities, namely Tanjung Selor, Sofifi, and Sorong with an indication of funding of IDR 134.6 trillion which is expected to provide project benefits to increase the Sustainable Cities Index. Kota Baru Maja is projected to be one of the

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buffers in the western part of Metropolitan Jakarta. The position of Kota Baru Maja in the context of a wider area is quite strategic because it is located in 2 provinces whose territory includes 3 regencies, namely; Banten Province (Lebak Regency and Tangerang Regency) and West Java Province (Bogor Regency).



Figure 1. New Maja City Development

In addition, there is a list of projects that are still under consideration but still considered strategic, namely the reactivation of the Rangkasbitung-Labuan and Saketi-Malimping-Bayah trains. Rangkasbitung-Labuan which is a non-active national railway line along 56.6 Km. This cross was built in 1908 and closed since 1984 because it could not compete with other modes of mass transportation. Meanwhile, the 89 km Saketi-Bayah line has 20 bridges, each end with a stone structure. From Malingping to Bayah, the path crosses the shores of the Indian Ocean with the pounding waves are quite large. There are three major stations on this line, namely Saketi, Malingping, and Bayah. Beyond that, there are 10 small stations or bus stops, namely in Cimanggu, Kaduhauk, Jasulang, Pasung, Kerta, Gintung, Cistepan, Sukahujan, Cihara, Panyawungan, Mount Mandur.



**Figure 2.** Map of the Reactivation Plan for the Rangkasbitung - Labuan and Saketi - Bayah Railway

By sector, Lebak's position is very strategic as an investment destination. This can be seen from the distance of Lebak Regency which is still affordable to a number of big cities in Indonesia. The following diagram shows the approximate distance from Rangkasbitung City to several cities.



Figure 3. Distance from Lebak Regency to Surrounding Cities (Km)

The development of investment in Lebak Regency in 2019-2020 also experienced an increase of 98.9% in domestic investment while foreign direct investment decreased by 39.5%. Table 1 Recapitulation of Investment Realization Progress in Lebak Regency, 2029-2020.

**Table 1.** Investment realization in Lebak Regency

No	Investment Type	Year 2019	Year 2020
1	PMDN	11.692.700.000	2.295.834.200.000
2	PMA	2.185.450.500.000	945.832.630.000
3	PMDN (Non Facility/SIUP/OSS)		
	Total	2.197.143.200.000	3.241.666.830.000

Source: Lebak Regency Investment Office, 2021

Based on this situation, it is necessary to analyze the economic potential to find out the comparative advantage of the location so that the promotion strategy to bring in investment can run effectively. From the results of the comparison of the Gross Regional Domestic Product (GRDP) of Lebak Regency with the Gross Regional Domestic Product of Banten Province in 2016 and 2020 based on 2010 constant prices, the Location Quotient

(LQ) value is obtained. LQ analysis is needed for a region to identify potential sectors and priority sectors as guidelines for formulation, planning and development to increase economic growth. This is in accordance with research conducted by Ayubi, AA (2014), Ahmad Rizan (2017), Saputro DRP, et al (2017), Tumengkang, Steva (2018), Maspaitella, Marcus R, et al (2021), Alhowaish AK (2015). ) and Mo, Soo Won (2020).

The economic condition of the population is a condition that describes human life that has economic score (Shah et al, 2020). Economic growth is still an important goal in a country's economy, especially for developing countries like Indonesia (Magdalena and Suhatman, 2020).

Location Quotient (LQ) is a method to calculate the relative comparison of the value added contribution of a sector in an area (district/city) to the value added contribution of the sector concerned on a provincial or national scale. Economic Base Analysis (LQ) aims to determine whether a sector has been able to meet the needs of the region itself (subsistence), less or more/surplus. This surplus sector is a sector that is said to be the base sector and has export potential. LQ analysis is done by comparing sectors in a region to a wider scope. In other words, LQ can calculate the comparison between the sector output share in the district and the sector output share in the province:

$$LQ_{i} = \frac{X_{i}^{r} / X^{r}}{X_{i}^{n} / X^{n}}$$

Where:

X = Output (PDRB);

r = Regional;

n = province

The criteria for classifying LQ are: 1. LQ = 1, meaning that the domestic product owned by the area has been consumed by the area. Residents of an area can fulfill their need for an item with their own economic activities (the relative role of the economic activity concerned in the region is the same as the relative role of similar economic activities in the national economy). 2. LQ > 1, means that the sector in the area is a basic sector capable of exporting the results of economic activities to other regions. 3. LQ < 1, means that the sector in the area is not a base sector and tends to import from other regions.

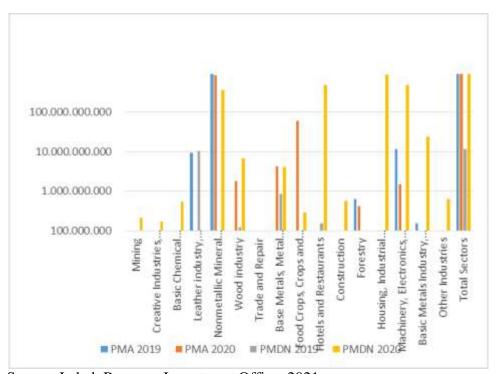
## II. Research Method

This type of research is quantitative research using secondary data. Secondary data collection is intended to obtain documented data and information in the form of books, reports and statistics, which are owned by the Central Bureau of Statistics of Lebak Regency, the Investment Office, and other relevant agencies. The secondary data used include the 2016-2020 Gross Regional Domestic Product, investment realization. In addition to data collection, interviews or discussions were also conducted with the Investment Office related to the realization of investments that have been made as well as the direction of investment development as well as spatial and regional planning. The data obtained was then analyzed using the Location Quotient (LQ) method in order to obtain the leading sector that became the strength of Lebak Regency.

## III. Results and Discussion

The development of Lebak Regency as seen from the sector in the period 2019-2020, there was an increase in FDI investment in the wood industry, basic metal industry, metal machinery and electronics as well as food crops, plantations and livestock. Meanwhile, the decline occurred in the leather industry, leather goods and shoes, non-metal mineral industry, Machinery, Electronics, Medical Instruments, Equipment, Basic Metal, Metal, Non-Machinery and equipment industries.

The development of investment from domestic investment, there was an increase in the mining sector, rubber industry, rubber and plastic goods, basic chemical industry, chemical and pharmaceutical goods, non-metallic mineral industry, wood industry, basic metal industry, metal goods, machinery and electronics, food crops, Plantations and livestock, hotels and restaurants, construction, housing, industrial estates and offices, basic metal industry, metal goods, non-machinery and equipment and other industries, while the sector that experienced a decline was the leather, leather goods and shoes industry.



Source: Lebak Regency Investment Office, 2021

Figure 3. Recapitulation of Investment Realization Developments by Sector in Lebak Regency, 2019-2020

The agricultural and trade sectors are still the largest contributors in contributing to gross domestic product in Lebak Regency, which is 7.62 trillion rupiah (26.34 percent) while the trade sector contributes 3.75 trillion rupiah (12.98 percent), for the agricultural sector when compared to the figure. the previous year decreased by 1.05 points, this condition is different from what happened in the trade sector which experienced a slight increase of 0.24 points compared to the previous year, this could be due to the proliferation of mini markets in the form of Alfamart, Indomaret and the like that stole the public's attention to shop so that many small stalls were closed because they were abandoned. Moreover, the existence of the mini market had entered remote areas in the sub-districts.

Nominally, the GRDP level of Lebak Regency in 2019 increased to Rp. 28.92 trillion rupiah or an increase of Rp. 2.24 trillion rupiah. The nominal increase in GRDP in 2019 was the cause of the increase in the GRDP per capita of the Lebak population to Rp. 22.20 million rupiah, or an increase of 1.61 million rupiah. In real terms, the Lebak Regency economy experienced a slight decline in growth, this can be seen from the 2019 economic growth rate of 5.77 percent or a decrease of 0.03 points compared to 2018.

**Table 2.** GRDP and GRDP Per Capita of Lebak Regency 2017-2019

Description	2017	2018*	2019**
ADHB GRDP (trillion Rp)	24,48	26,68	28,92
ADHB GRDP Per Capita (Million Rp)	19,04	20,59	22,2
Economic growth (%)	5,76	5,8	5,77

<sup>\*</sup> Temporary figures

Source: Lebak Regency in 2021 Figures, BPS

The contribution of GRDP in 2020 at current prices, agriculture, forestry and fisheries business fields contributed 27.03%, an increase from 2018 of 1.11 points. Other business fields that contribute enough to the GRDP of Lebak Regency are wholesale and retail trade, car and bicycle repairs by 12.38%, although there was a 1.38 point decrease from 2018 but the business field made a large enough contribution, this may be due to the increase in volume. trade in goods and services, the increasing number of accommodation companies, the existence of a double track train facility from Rangkasbitung station to Jakarta also automatically increases train users. In addition, along with the development of information technology, it also affects the output of the communication and information category, in addition to other service activities and of course the increase in the value of the government budget, whether sourced from the APBD or APBN, also contributes greatly to economic growth in the tertiary category. Meanwhile, those experiencing the highest acceleration were in the Construction category which was the result of housing development in Maja and Rangkasbitung sub-districts as well as the construction of a cement factory in Bayah sub-district.

**Table 3.** Distribution of Percentage of Gross Regional Domestic Product on the basis of Current Prices by Business Field of Lebak Regency 2016-2020

N0.	Business field	2016	2017	2018	2019	2020
A	Agriculture, Forestry and					
A	Fisheries	28,05	27,69	27,15	25,92	27,03
В	Mining and excavation	7,20	6,79	6,41	6,11	5,96
С	Processing industry	9,13	9,11	8,74	8,72	8,90
D	Electricity and Gas Supply	0,10	0,11	0,11	0,10	0,10
	Water Supply, Waste					
Е	Management, Waste and					
	Recycling	0,05	0,05	0,05	0,05	0,06
F	Construction	7,06	7,39	7,96	8,47	8,19
	Wholesale and Retail					
G	Trade, Car and Bicycle					
	Repair	12,55	12,52	12,84	13,00	12,38

<sup>\*\*</sup> Numbers are very temporary

N0.	Business field	2016	2017	2018	2019	2020
Н	Transportation and					
11	Warehousing	6,13	6,09	6,11	6,26	6,06
	Provision of					
I	Accommodation and					
	Drinks	4,90	4,91	4,92	4,98	4,67
J	Information and					
J	Communication	0,54	0,55	0,54	0,54	0,57
K	Financial Services and					
IX	Insurance	1,74	1,74	1,76	1,73	1,77
L	Real Estate	6,20	6,48	6,66	6,84	6,91
M,N	Company Services	0,31	0,32	0,31	0,32	0,31
O	Government Administration, Defense					
	and Mandatory Social					
	Security	5,87	5,84	5,75	5,86	5,98
P	Education Services	6,38	6,51	6,77	7,08	7,13
0	Health Services and Social					
Q	Activities	1,11	1,15	1,21	1,27	1,35
R,S,T,U	Other Services	2,67	2,73	2,71	2,74	2,62
		100	100	100	100	100

Source: Lebak Regency in 2021 Figures, BPS

The conduciveness of the business climate in the regions can also be seen from the development of GRDP at current prices. Based on the value of GRDP in 2020 of Rp. 29,076,693.66 (in million) and the highest value in the agriculture, forestry and fisheries sector was Rp.7,858,322.96 (in million). For more details regarding sector contribution values, see Table 4 below.

**Table 4.** Gross Regional Domestic Product at Current Prices by Business Field in Lebak Regency 2016-2020

N0.	Business field	2016	2017	2018	2019	2020
	Agriculture,					
A	Forestry and					
	Fisheries	6.306.408,37	6.781.138,68	7.222.796,81	7.454.696,75	7.858.322,96
В	Mining and					
Ъ	excavation	1.619.789,60	1.663.652,43	1.706.432,50	1.758.135,50	1.734.116,51
С	Processing					
	industry	2.053.271,54	2.230.772,76	2.324.393,66	2.507.148,12	2.588.470,56
D	Electricity and					
D	Gas Supply	22.547,37	26.407,82	28.042,34	29.466,79	29.606,65
	Water Supply,					
	Waste					
E	Management,					
	Waste and					
	Recycling	11.833,06	12.629,88	14.385,89	15.207,32	16.157,95
F	Construction	1.587.431,34	1.809.043,01	2.116.342,79	2.435.889,05	2.381.858,70
	Wholesale and					
G	Retail Trade,					
G	Car and Bicycle					
	Repair	2.821.923,47	3.066.069,01	3.416.597,14	3.737.067,71	3.599.154,39

NO.	Business field	2016	2017	2018	2019	2020
	Transportation					
Н	and	4.050.044.40	1 101 22 5 10	4 524 200 04	4 500 220 22	1 5 4 1 5 5 1 1
	Warehousing	1.378.861,43	1.491.336,49	1.624.308,84	1.799.239,23	1.761.455,11
_	Provision of					
I	Accommodatio n and Drinks	1.101.287,66	1.203.018,28	1.309.559,30	1.432.549,44	1.359.334,43
	Information and	1.101.207,00	1.203.010,20	1.307.337,30	1.432.347,44	1.337.334,43
J	Communication	121.262,93	135.200,24	143.748,66	154.609,03	166.510,88
	Financial	,	,	,	,	,
K	Services and					
	Insurance	390.862,36	427.038,16	468.656,62	497.491,09	514.506,25
L	Real Estate	1.394.083,82	1.587.831,41	1.770.899,56	1.967.872,29	2.010.607,69
M,N	Company					
171,17	Services	69.952,04	77.252,23	83.567,95	93.241,84	90.736,63
	Government					
	Administration,					
О	Defense and					
	Mandatory	4 240 504 52	4 400 000 00	4.500.554.66	4 <0.5 40.5 0.5	4 7 40 020 04
	Social Security	1.319.594,72	1.429.879,83	1.529.771,66	1.685.407,25	1.740.020,04
P	Education	1 422 200 46	1 502 717 05	1 001 266 00	2.025.620.40	2.072.647.00
	Services	1.433.309,46	1.593.717,05	1.801.366,00	2.035.639,48	2.072.647,00
	Health Services and Social					
Q	activities	249.524,00	281.643,64	320.849,23	365.542,10	391.650,56
R,S,T,U		600.339,51	668.914,39	721.024,35	787.678,42	761.537,32
		22.482.282,68	24.485.545,31	26.602.743,30	28.756.881,41	29.076.693,63
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Source: Lebak Regency in 2021 Figures, BPS

Macroeconomic analysis was conducted to determine the comparative advantage of the location. The data used is the amount of GRDP for Lebak Regency and GRDP for Banten Province for 2016 and 2020 – constant prices in 2010.

**Table 5.** LQ Value of Lebak Regency's GRDP Sector against Banten Province 2016 and 2020

N0.	Business field	2016	2020
A	Agriculture, Forestry and Fisheries	3,70	3,30
В	Mining and excavation	7,25	6,64
C	Processing industry	0,22	0,22
D	Electricity and Gas Supply	0,03	0,05
Е	Water Supply, Waste Management, Waste and Recycling	0,54	0,48
F	Construction	0,55	0,54
G	Wholesale and Retail Trade, Car and Bicycle Repair	0,82	0,71
Н	Transportation and Warehousing	0,45	0,71
I	Provision of Accommodation and Drinks	1,64	1,47
J	Information and Communication	0,12	0,11
K	Financial Services and Insurance	0,45	0,41
L	Real Estate	0,68	0,61

N0.	Business field	2016	2020
M,N	Company Services	0,24	0,20
О	Government Administration, Defense and Mandatory Social Security	2,28	2,00
P	Education Services	1,56	1,38
Q	Health Services and Social Activities	0,76	0,70
R,S,T,U	Other Services	1,35	1,15

Source: Lebak Regency in 2021 Figures, BPS and Baten in 2021 Figures, BPS

LQ analysis of 2016 and 2020 data compared to Banten Province shows a relatively stable and consistent LQ value, as shown in table 4.1 Several sub-sectors that have a comparative advantage (indicated by LQ values > 1), are (see table 4.1):

- a. The agricultural sub-sector, in this case food crops and plantations and fisheries, which are widely available in Lebak Regency
- b. Mining and quarrying sub-sector, particularly C . excavation
- c. The accommodation and food and drink sub-sector is part of supporting tourism in the south of Lebak Regency and in Rangkasbitung City.
- d. The government administration, defense and mandatory social security sub-sectors are related to the activities of the Lebak Regency government
- e. Education services sub-sector, this sub-sector has begun to be activated to increase the HDI of Lebak Regency
- f. Other service subsectors

## **IV. Conclusion**

Of all the sub-sectors mentioned above, the mining and quarrying sub-sector (LQ=7.25 and 6.64), the agriculture (plantation) sub-sector (LQ=3.70 and 3.30), and the government administration sub-sector (LQ=2, 20 and 2.00) are the sub-sectors that have the highest comparative advantage scores. Excavation sub-sector, which is crushed stone and sand, is the prima donna on the south coast.

The high LQ value above indicates the potential for Lebak Regency to develop its future potential based on local resources such as tourism related to the utilization of the agricultural, plantation, fishery sectors while the industrial sector relies on industries that manage natural resources in Lebak Regency.

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