

# The Analysis of Regional Economic Structure in Regional Development of Gunungsitoli City

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## **ABSTRACT**

*This research aimed to analyze the economic structure of Gunungsitoli City as an information and consideration in economic development planning. This research uses secondary data in the form of time series of the Gross Domestic Product (GDP) of Gunungsitoli City and Sumatera Utara Province in 2013-2017. The GDP value of Gunungsitoli City increased to 431.709,96 million rupiahs. This shift was influenced by the provincial share component of 538.471,80 million rupiahs, proportional shift component of 69.689,71 million rupiahs, and differential shift of 37.072,13 million rupiahs. Based on the calculation of the combined Klassen Typology, Loqation Quotient, Growth Ratio Model and Overlay analysis showed that the leading sector of Gunungsitoly City were watter supply sewerage waste management remediation activities sector, construction sector, wholesale and retail trade; repair of motor vehicles and motorcycles sector, and transportation and storage sector.*

*Keywords: Regional economic structure, sector contribution, sector growth, leading sector, and regional development.*

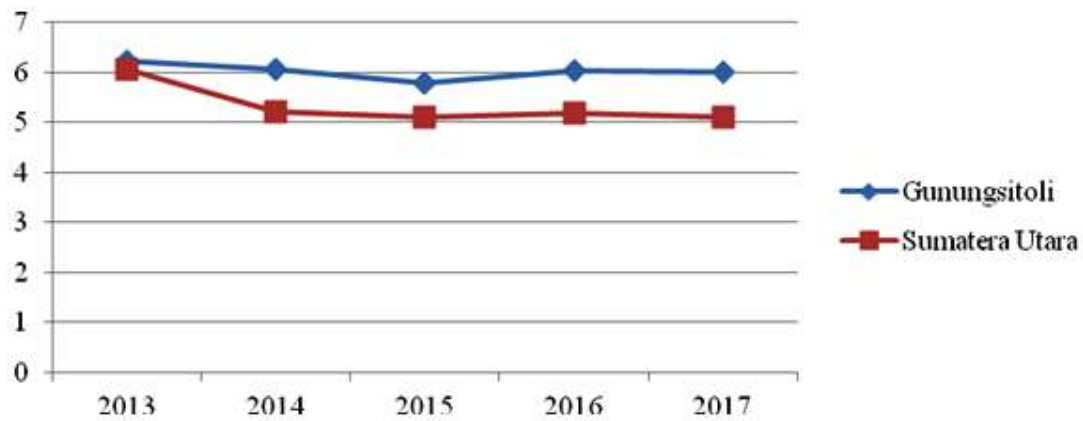
Gunungsitoli City is one of the autonomous regions in the Nias Islands. The Nias Islands region has great potential and natural wealth, but the condition of the Nias region has been left behind so far and development is very minimum. The first division in the Nias region was carried out in 2003, South Nias Regency, which was the division of Nias Regency. Then in 2008, Nias Regency was divided into three regencies and one city, Nias Regency, North Nias Regency, West Nias Regency, and Gunungsitoli City. However, the Nias Islands are still far behind compared to other regions in North Sumatra, both in terms of infrastructure, education, human resources (HR) and other development sectors.

Based on BPS data, the economic growth of Gunungsitoli City in 2013 was 6.22 percent, in 2014 it decreased to 6.07 percent, in 2015 it declined again to 5.79 percent; in 2016 it increased to 6.03 percent, and in 2017 decreased again to 6.01 percent. Economic growth in Gunungsitoli City when compared to North Sumatra Province is much higher. Economic growth in North Sumatra Province in 2013 was 6.07 percent, in 2014 it dropped to 5.23 percent, in 2015 it fell again to 5.10 percent, in 2016 it

## **Introduction**

increased to 5.18 percent, and in 2017

back down to 5.12 percent.



Source: Central Bureau of Statistics of Gunungsitoli City

**Figure 1 Trend of Economic Growth Rate at 2010 Constant Prices Based on Gunungsitoli City and North Sumatra Province 2013 - 2017 (%)**

One indicator used to measure the economic condition of a region is Gross Domestic Product (GDP) for the national

level and Gross Regional Domestic Product (GRDP) for the provincial level and regency / city. Based on the role of each sector in the formation of a regional GDP, it can be seen the direction of the economic structure of the region.

**Table 1 GRDP of Gunungsitoli City at Constant Prices According to the Business Field in 2013-2017 (Million Rupiah)**

Sector	2013	2014	2015	2016	2017
Agriculture, Forestry and Fisheries	368117,93	386228,51	405386,29	427373,62	450465,26
Mining and excavation	68708,70	71939,66	74947,94	78197,81	81788,59
Processing Industry	4773,88	4958,60	5140,98	5354,00	5552,89
Procurement of Electricity and Gas	2636,27	2771,77	2995,34	3219,19	3454,11
Water Supply, Waste Management and Recycling	2815,36	2928,29	3041,73	3159,95	3285,76
Construction	488982,32	522748,84	559331,71	597536,76	637648,4
Large and Retail Trade; Car and Motorcycle Repair	654840,84	695008,27	735933,94	785116,76	838920,06
Transportation and	194599,97	208082,75	221628,19	236328,67	251580,86

Warehousing					
Provision of Accommodation, Food and Beverage	85884,58	91387,13	96370,82	101809,52	107695,79
Information and Communication	54247,06	57283,90	59789,32	63048,92	66586,23
Services, Finance and Insurance	79410,96	83689,36	87838,68	92499,70	96036,84
Real Estate	119650,03	126602,06	131905,03	138394,01	145162,22
Company Services	7010,43	7377,13	7741,27	8135,15	8559,08
Government Administration, Defense and Mandatory Social Security	119690,57	127541,46	136040,29	141703,18	147601,8
Education Services	140359,80	148580,10	156433,82	164836,05	173739,57
Health Services and Social Activities	17530,50	18393,11	19153,04	20063,31	21046,84
Other services	8459,68	8846,88	9185,32	9581,74	10000,26
<b>GRDP</b>	<b>2417718,86</b>	<b>2564367,81</b>	<b>2712863,72</b>	<b>2876339,54</b>	<b>3049124,56</b>

Source: Central Bureau of Statistics of Gunungsitoli City

### Statement of the problem

1. What are the changes and shifts in the economic structure of the Gunungsitoli City?
2. What are the leading sectors in the economy of the Gunungsitoli City?

### Literature Review

Development is a multi-dimensional process involving reorganization and reorientation of all existing social and economic systems (Michael P. Todaro, 1995). To measure economic growth, the value of GDP used is GDP based on constant prices. Because, by using constant prices, the effect of price changes has been removed, so that even if the numbers that appear are the money value of the total output of goods and services, the change in GDP values shows the change in the quantity of goods and services produced during the observation period (Prathama Rahardja, 2008).

Lincoln Arsyad (2013) defines regional economic development as a process where local governments and their communities manage existing resources and make partnerships between local governments and the private sector to create new jobs and stimulate the development of economic activities in the region. In ideal conditions, regional development planning should begin after the regional spatial plan has been arranged, because regional spatial planning is the foundation but also at the same time the target of regional development planning (Tarigan, 2005).

Developing and building an area cannot be done on its own based on the authority of a region but must cover various regions

around (hinterland) because this method will create optimization of benefits for the potential (economy) of regions and regions and will create strong competitiveness (economy) for the region (Miraza, 2010).

Changes in the structure (structural transformation) of the economy of a region are changes from the traditional economic system to the modern economic system. This means that there is also a change in the economic structure of the agricultural sector to the industrial sector and then from the industrial sector to the services sector (Sirojuzilam and Mahalli, 2010). In the development process efforts are made that aim to change the structure of the economy for the better (Kuncoro, 2004).

This economic base theory was put forward by Richardson (1973) which states that the main determinant of economic growth in a region is directly related to demand for goods and services from outside the region (Arsyad, 2013).

Chenery and Syrquin (1975) states that development can be seen as a multidimensional transition process that reflects the relationship between various processes of change within a country.

### **Material and Method**

This research was conducted in Gunungsitoli City. This research is about the structure of the regional economy obtained from the Gross Regional Domestic Product (GRDP) of Gunungsitoli City in 2013-2017. The research method is carried out through library materials in the form of books, scientific writings, journals, articles, and research reports that have to do with research (Library Research). The data collection technique is carried out by

direct recording of time series data from 2013-2017 from books and publications issued by the Central Bureau of Statistics, as well as journals and literature relating to this research.

To answer the problem, several methods of data analysis are used, as follows:

1. Classification Typology Analysis is used to obtain the economic sector growth classification of Gunungsitoli City.
2. Location Quotient (LQ) analysis is used to determine the base and non-base sectors in the regional economy of Gunungsitoli City.
3. Shift Share Analysis is used to analyze and determine the shift and role of the economy in Gunungsitoli City.
4. Analysis of the Growth Ratio Model (MRP) as an analytical tool in determining the leading sectors in Gunungsitoli City which emphasizes both external and internal growth criteria.
5. Typology Overlay analysis as an analytical tool in determining the leading sectors in Gunungsitoli City.

The definitions and limitations of operational variables are as follows:

1. Gross Regional Domestic Product (GRDP) is the gross added value of all economic sectors in rupiah units in Gunungsitoli City in 2013-2017.
2. Economic growth is the percentage change in the GRDP of Gunungsitoli City on the basis of constant prices in units of percent in 2013-2017.
3. Sektor ekonomi adalah lapangan usaha yang terdapat dalam PDRB Kota Gunungsitoli tahun 2013-2017, yang mencakup 17 (tujuh

belas) sektor utama menurut Badan Pusat Statistik (BPS).

4. The base sector is the economic sector of the City of Gunungsitoli in 2013-2017 which is able to export its products to other regions.
5. The shift in the economic sector is a change in contributions between the determinants of the Gunungsitoli City GRDP in 2013-

2017 which are classified into 17 (seventeen) main sectors.

6. The competitive sector is the economic sector that determines the Gunungsitoli City GRDP in 2013-2017 which is the base sector and has growth above the reference area average.

## Result

**Table 2 Provincial Growth Rate and Contribution of GRDP North Sumatra and the City of Gunungsitoli in 2013-2017**

No	Sector	North Sumatera		Gunungsitoli	
		s	sk	si	sik
1	Agriculture, Forestry and Fisheries	4,92	24,92	5,29	14,97
2	Mining and excavation	9,54	1,32	4,50	2,76
3	Processing Industry	3,82	19,64	3,94	0,19
4	Procurement of Electricity and Gas	4,23	0,14	6,65	0,11
5	Water Supply, Waste Management and Recycling	6,11	0,10	4,29	0,11
6	Construction	6,47	12,31	6,89	20,58
7	Large and Retail Trade; Car and Motorcycle Repair	5,50	17,44	6,22	27,22
8	Transportation and Warehousing	6,42	4,60	6,49	8,16
9	Provision of Accommodation, Food and Beverage	7,02	2,24	6,15	3,55
10	Information and Communication	7,69	2,52	5,56	2,21
11	Services, Finance and Insurance	4,79	3,12	5,40	3,23
12	Real Estate	6,55	4,12	5,17	4,86
13	Company Services	6,54	0,87	5,46	0,29
14	Government Administration, Defense and Mandatory Social Security	4,32	3,26	5,20	4,94
15	Education Services	5,91	2,01	6,29	5,76
16	Health Services and Social Activities	7,95	0,92	4,76	0,71
17	Other services	7,05	24,92	4,35	0,34

Source: Data processed by the author

Where:

si = Average growth rate in the Gunungsitoli City sector

s = Average growth rate in the regional sector of North Sumatra Province

sik = The average contribution of the sector of Gunungsitoli City

sk = The average contribution of the regional sector of North Sumatra Province

Table 2 above shows that sectors that have the largest average contribution to the GRDP of Gunungsitoli City are the large and retail trade sectors, then the

construction sector, and the agriculture, forestry, and fisheries sectors. Whereas in North Sumatra Province the sectors that have the highest average contribution are

agriculture, forestry and fisheries, then other service sectors, and the

manufacturing sector.

**Table 3 Classification of the GRDP Sector in Gunungsitoli City According to the Klassen Typology of 2013-2017**

<p><b>Quadrant I</b> <b>Developed Sector</b> si &gt; s dan sik &gt; sk</p> <ul style="list-style-type: none"> <li>▪ Construction sector</li> <li>▪ Large and Retail Trade; Car and Motorcycle Repair sector</li> <li>▪ Transportation and Warehousing sector</li> <li>▪ Services, Finance and Insurance</li> <li>▪ Government Administration, Defense and Mandatory Social Security</li> <li>▪ Education Service</li> </ul>	<p><b>Quadrant II</b> <b>Stagnan Sector</b> si &lt; s dan sik &gt; sk</p> <ul style="list-style-type: none"> <li>▪ Mining and excavation sector</li> <li>▪ Water Supply, Waste Management and Recycling sector</li> <li>▪ Provision of Accommodation, Food and Beverage sector</li> <li>▪ Real Estate sector</li> </ul>
<p><b>Quadrant III</b> <b>Developing Sector</b> si &gt; s dan sik &lt; sk</p> <ul style="list-style-type: none"> <li>▪ Agriculture, Forestry and Fisheries sector</li> <li>▪ Processing Industry</li> <li>▪ Sektor pengadaan listrik dan gas</li> </ul>	<p><b>Quadrant IV</b> <b>Underdeveloped Sector</b> si &lt; s dan sik &lt; sk</p> <ul style="list-style-type: none"> <li>▪ Sektor informasi dan komunikasi</li> <li>▪ Sektor jasa perusahaan</li> <li>▪ Sektor jasa kesehatan dan kegiatan sosial</li> <li>▪ Sektor jasa lainnya</li> </ul>

Source: Data processed by the author

Where:

si = Average growth rate in the Gunungsitoli City sector

s = Average growth rate in the regional sector of North Sumatra Province

sik = The average contribution of the sector of Gunungsitoli City

sk = The average contribution of the regional sector of North Sumatra Province

From the results of the Klassen Typology analysis of the GRDP of Gunungsitoli City in 2013-2017, it shows that there are six sectors that occupy the fast and growing sectors (quadrant I) of the construction sector, the large and retail trade sectors;

car and motorcycle repair, transportation and warehousing sector, financial and insurance services sector, government administration sector, mandatory social security and defense, and education services sector.

**Table 4 Results of Calculation of Location Quotient (LQ) Gunungsitoli City 2013-2017**

Sector	Year					Mean	Description
	2013	2014	2015	2016	2017		
Agriculture, Forestry and Fisheries	0,61	0,61	0,60	0,60	0,59	0,60	Non basis
Mining and excavation	2,17	2,15	2,09	2,05	2,03	2,10	Basis
Processing Industry	0,01	0,01	0,01	0,01	0,01	0,01	Non basis
Procurement of Electricity and Gas	0,82	0,78	0,82	0,83	0,82	0,81	Non basis



Water Supply, Waste Management and Recycling	1,24	1,21	1,17	1,14	1,10	1,17	<b>Basis</b>
Construction	1,68	1,66	1,67	1,68	1,67	1,67	<b>Basis</b>
Large and Retail Trade; Car and Motorcycle Repair	1,56	1,54	1,56	1,57	1,57	1,56	<b>Basis</b>
Transportation and Warehousing	1,78	1,78	1,78	1,78	1,75	1,78	<b>Basis</b>
Provision of Accommodation, Food and Beverage	1,63	1,62	1,59	1,56	1,53	1,59	<b>Basis</b>
Information and Communication	0,93	0,91	0,88	0,85	0,82	0,88	<b>Non basis</b>
Services, Finance and Insurance	1,03	1,05	1,02	1,03	1,05	1,04	<b>Basis</b>
Real Estate	1,23	1,21	1,18	1,16	1,12	1,18	<b>Basis</b>
Company Services	0,34	0,33	0,33	0,32	0,31	0,33	<b>Non basis</b>
Government Administration, Defense and Mandatory Social Security	1,53	1,51	1,51	1,51	1,53	1,52	<b>Basis</b>
Education Services	2,90	2,87	2,85	2,85	2,83	2,86	<b>Basis</b>
Health Services and Social Activities	0,81	0,79	0,76	0,74	0,72	0,77	<b>Non basis</b>
Other services	0,73	0,71	0,68	0,67	0,64	0,69	<b>Non basis</b>

Source: Data processed by the author

The city of Gunungsitoli calculates Location Question (LQ) on average resulting in ten basic sectors, mining and excavation sector, water supply sector, waste management, waste and recycling, construction sector, large and retail trade sector; car and motorcycle repairs, transportation and warehousing sectors, provision of accommodation, food and beverage, the service sector, finance and insurance, the real estate sector, the government administration, defense and social sectors, and the education services

sector. The education service sector has the highest base value, which are 2.86. While the services, finance, and basic insurance sectors are 1.04 as the lowest value. The seven other sectors have a value of <1 so that it is a non-base sector including agriculture, forestry and fisheries, manufacturing industry, electricity and gas procurement sector, information and communication sector, corporate services sector, health services sector and social activities, and other services sector.

**Table 5 Results of Calculation of Shift-share Value Gunungsitoli City 2013-2017**

<b>Sector</b>	<b>Provincial Share (PS)</b>	<b>Proportional Shift (P)</b>	<b>Differential Shift (D)</b>	<b>Total</b>
Agriculture, Forestry and Fisheries	81986,84	-3106,28	3466,77	81626,35
Mining and excavation	15302,73	-579,78	-3069,52	18952,03
Processing Industry	1063,23	58,83	61,07	943,33
Procurement of Electricity and Gas	587,15	-190,68	95,09	682,74
Water Supply, Waste	627,03	144,81	-297,60	779,82

Management and Recycling				
Construction	108905,63	24483,22	16309,53	68112,87
Large and Retail Trade; Car and Motorcycle Repair	145845,46	31405,27	28345,88	86094,32
Transportation and Warehousing	43341,10	2938,40	4370,67	36032,04
Provision of Accommodation, Food and Beverage	19128,12	4090,83	-4147,16	19184,45
Information and Communication	12081,85	4314,17	-6309,47	14077,14
Services, Finance and Insurance	17686,33	9612,96	4677,43	3395,93
Real Estate	26648,33	-8645,37	-8471,22	43764,92
Company Services	1561,36	429,77	-461,69	1593,27
Government Administration, Defense and Mandatory Social Security	26657,36	7665,58	4578,06	14413,72
Education Services	31260,79	-3898,24	1123,71	34035,31
Health Services and Social Activities	3904,37	124,31	-2132,70	5912,77
Other services	1884,13	841,92	-1066,74	2108,95
<b>Total</b>	<b>538471,80</b>	<b>69689,71</b>	<b>37072,13</b>	<b>431709,96</b>

Source: Data processed by the author

Based on Table 5, it can be seen that the value of the sectoral GRDP of Gunungsitoli City has shifted and changed. The GRDP value of Gunungsitoli City grew by IDR 431,709.96 million. This shift is influenced by the national share component of IDR 538,471.80 million, the proportional shift component of IDR

69,689.71 million and the differential shift component of IDR 37,072.13 million. Sectoral contributions are often associated with changes in the concentration of regional economic activities. The economy is believed to move from the agricultural sector to the industrial sector and then the service sector.

**Table 6 Contributions of the Gunungsitoli City GRDP Sector 2013-2017 (%)**

No	Sector	Year				
		2013	2014	2015	2016	2017
<b>Primary</b>						
1	Agriculture, Forestry and Fisheries	15,23	15,06	14,94	14,86	14,77
2	Mining and excavation	2,84	2,81	2,76	2,72	2,68
<b>Total</b>		<b>18,07</b>	<b>17,87</b>	<b>17,7</b>	<b>17,58</b>	<b>17,45</b>
<b>Secondary</b>						
3	Processing Industry	0,20	0,19	0,19	0,19	0,18
4	Procurement of Electricity and Gas	0,11	0,11	0,11	0,11	0,11
5	Water Supply, Waste and Recycling Management	0,12	0,11	0,11	0,11	0,11
6	Construction	20,22	20,39	20,62	20,77	20,91
7	Large and Retail Trade; Car and Motorcycle Repair	27,09	27,10	27,13	27,30	27,51
8	Transportation and Warehousing	8,05	8,11	8,17	8,22	8,25



<b>Total</b>		<b>55,79</b>	<b>56,01</b>	<b>56,33</b>	<b>56,7</b>	<b>57,07</b>
<b>Tertiary</b>						
9	Provision of Accommodation, Food and Beverage	3,55	3,56	3,55	3,54	3,53
10	Information and Communication	2,24	2,23	2,20	2,19	2,18
11	Services, Finance and Insurance	3,28	3,26	3,24	3,22	3,15
12	Real Estate	4,95	4,94	4,86	4,81	4,76
13	Company Services	0,29	0,29	0,29	0,28	0,28
14	Government Administration, Defense and Mandatory Social Security	4,95	4,97	5,01	4,93	4,84
15	Education Services	5,81	5,79	5,77	5,73	5,70
16	Health Services and Social Activities	0,73	0,72	0,71	0,70	0,69
17	Other services	0,35	0,34	0,34	0,33	0,33
<b>Total</b>		<b>26,15</b>	<b>26,1</b>	<b>25,97</b>	<b>25,73</b>	<b>25,46</b>

Source: Data processed by the author

Table 6 shows that the primary sector experienced a decline in contribution from 18.07 percent in 2013 to 17.45 percent in 2017. The secondary sector experienced an increase in

contribution from 55.79 percent in 2013 to 57.07 percent in 2017. The tertiary sector decreased its contribution from 26.15 percent in 2013 to 25.46 percent in 2017.

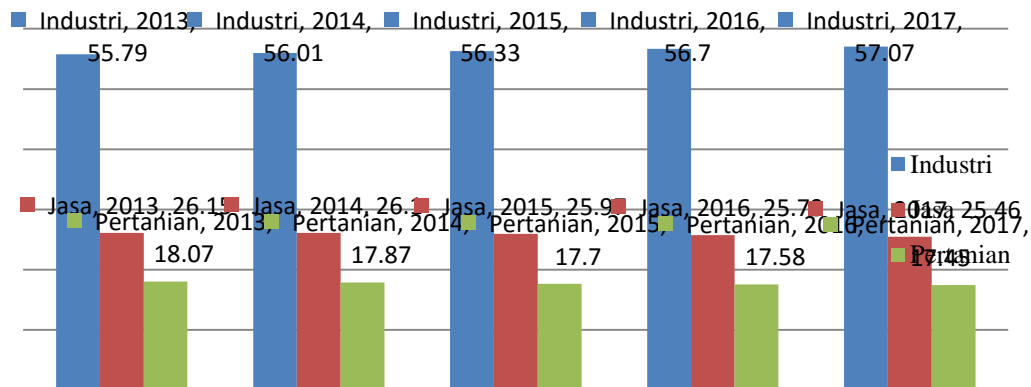
**Table 7 Planning for the Economic Sector of Gunungsitoli City in 2017**

<b>Sub-district</b>	<b>Sector</b>			<b>Pattern</b>
	<b>Industry (I)</b>	<b>Service (S)</b>	<b>Agriculture (A)</b>	
2013	55,79	26,15	18,07	I-S-A
2014	56,01	26,1	17,87	I-S-A
2015	56,33	25,97	17,7	I-S-A
2016	56,7	25,73	17,58	I-S-A
2017	57,07	25,46	17,45	I-S-A
<b>Mean</b>	<b>56,38</b>	<b>25,89</b>	<b>17,73</b>	<b>I-S-A</b>

To see the pattern of shifting economic structure in Gunungsitoli City in 2013-2017, the sectors are grouped into three parts, Agriculture (P), Industry (I) and Services (J) which can be seen in table 7. The table shows that Gunungsitoli City has not changed economy in the last five years such as Industry (I) - Services (J) - Agriculture (P). The sector of large and

retail trade, car and motorcycle repair is the dominant sector in the GRDP structure of Gunungsitoli City which is followed by construction and agriculture, forestry and fisheries sectors. Based on the contribution of sectoral GDP, the city of Gunungsitoli has moved from the agricultural sector to the industrial sector.

**Figure 2 The Pattern of the Economic Role of Gunungsitoli City in 2013-2017**



**Table 8 Results of Calculation of the Gunungsitoli City Material Resource Planning (MRP) for 2013-2017**

No	Sector	RPr		RPs	
		Real	Nominal	Rill	Nominal
1	Agriculture, Forestry and Fisheries	0,96	-	0,86	-
2	Mining and excavation	1,06	+	0,73	-
3	Processing Industry	0,68	-	0,62	-
4	Procurement of Electricity and Gas	1,23	+	1,19	+
5	Water Supply, Waste and Recycling Management	1,22	+	0,64	+
6	Construction	1,22	+	1,16	+
7	Large and Retail Trade; Car and Motorcycle Repair	1,07	+	1,08	+
8	Transportation and Warehousing	1,21	+	1,12	+
9	Provision of Accommodation, Food and Beverage	1,36	+	0,97	-
10	Information and Communication	0,96	-	0,87	-
11	Services, Finance and Insurance	0,68	-	0,80	-
12	Real Estate	1,28	+	0,82	-
13	Company Services	1,29	+	0,85	-
14	Government Administration, Defense and Mandatory Social Security	0,88	-	0,89	-
15	Education Services	1,03	+	0,91	-
16	Health Services and Social Activities	1,45	+	0,77	-

Source: Data processed by the author

The results of the calculation of the Gunungsitoli City MRP for the period 2013-2017 show the electricity and gas procurement sector, the water, waste and recycling procurement sector, the construction sector, the large and retail

trade sectors; car and motorcycle repairs, and the transportation and warehousing sector has RPr (+) and RPs (+) values which means the sector has prominent growth in Gunungsitoli City and in North Sumatra Province. The mining and

excavation sector, accommodation, food and beverage sector, the real estate sector, the corporate services sector, the education service sector, the social services sector and other service sectors have RPr (+) and RPs (-) values, meaning in Sumatra Province North growth is more prominent than in Gunungsitoli City. While the agriculture, forestry and fisheries sector,

the manufacturing industry sector, the information and communication sector, the financial and insurance services sector, and the government administration, defense and social security sectors must have RPr (-) and RPs (-) values, meaning sector-growth the sector is not prominent in Gunungsitoli City and at the North Sumatra Province.

**Table 9 Results of Sector Overlay Analysis  
Economy of the City of Gunungsitoli in 2013-2017**

Sector	RPs	Mark	LQ	Mark	Category
Agriculture, Forestry and Fisheries	0,86	-	0,60	-	IV
Mining and excavation	0,73	-	2,10	+	III
Processing Industry	0,62	-	0,01	-	IV
Procurement of Electricity and Gas	1,19	+	0,81	-	II
Water Supply, Waste Management and Recycling	0,64	+	1,17	+	I
Construction	1,16	+	1,67	+	I
Large and Retail Trade; Car and Motorcycle Repair	1,08	+	1,56	+	I
Transportation and Warehousing	1,12	+	1,78	+	I
Provision of Accommodation, Food and Beverage	0,97	-	1,59	+	III
Information and Communication	0,87	-	0,88	-	IV
Services, Finance and Insurance	0,80	-	1,04	+	III
Real Estate	0,82	-	1,18	+	III
Company Services	0,85	-	0,33	-	IV
Government Administration, Defense and Mandatory Social Security	0,89	-	1,52	+	III
Education Services	0,91	-	2,86	+	III
Health Services and Social Activities	0,77	-	0,77	-	IV
Other services	0,70	-	0,69	-	IV

Source: Data processed by the author

Where:

- Category I = Leading sector
- Category II = Potential sector
- Category III = Declining sector
- Category IV = Lagging sector

From the results of the overlay analysis of Gunungsitoli City during the period 2013-2017, the sectors of water supply, waste management, waste and recycling, the construction sector, the large and retail

trade sectors; car and motorcycle repairs, the transportation and warehousing sector have RPs (+) and LQ (+) values are the leading sectors. The electricity and gas procurement sector has values of RPs (+)

and LQ (-) which are potential sectors that are developing and need attention, especially their contribution to the formation of GRDP in Gunungsitoli City. While the mining and excavation sector, the provision accomodation and of food and beverage sector, the service, financial and insurance sectors, the real estate sector, the government administration, defense and social security sectors, and the

education suit sector have RPs (-) and LQ (+) values thus including potential sectors which tend to decline. While the agriculture, forestry and fisheries sector, manufacturing industry sector, information and communication sector, company services sector, health services and social activities sector, and other service sectors are lagging sectors.

**Discussion**

**Recapitulation of the Results of Development Per Sector Analysis in Gunungsitoli City**

**Table 10 Recapitulation of Results of Per Sector Analysis and Development Priorities Economic Sector in Gunungsitoli City 2013-2017**

No	Sector	Category	Priority
1	Agriculture, Forestry and Fisheries	Lagging	P-3
2	Mining and excavation	Potential	P-2
3	Processing Industry	Lagging	P-3
4	Procurement of Electricity and Gas	Potential	P-2
5	Water Supply, Waste Management and Recycling	Leading	P-1
6	Construction	Leading	p-1
7	Large and Retail Trade; Car and Motorcycle Repair	Leading	P-1
8	Transportation and Warehousing	Leading	P-1
9	Provision of Accommodation, Food and Beverage	Leading	P-2
10	Information and Communication	Lagging	P-3
11	Services, Finance and Insurance	Potential	P-2
12	Real Estate	Potential	P-2
13	Company Services	Lagging	P-3
14	Government Administration, Defense and Mandatory Social Security	Potential	P-2
15	Education Services	Potential	P-2
16	Health Services and Social Activities	Lagging	P-3
17	Other services	Lagging	P-3

Based on the recapitulation of the results of the analysis above, it can be concluded that in Gunungsitoli City there are 4 (four) leading sectors, 7 (seven) potential sectors, and 6 (six) lagging sectors. It should be noted that the selection of priority sectors of the economy is the most important thing in development and depends on regional policies. Therefore from the results of data

analysis and discussion per economic sector in Gunungsitoli City can be recommended as follows:

Analysis of determining the leading sectors is needed as a basis for formulating patterns of economic development policies in the future so that economic development can be directed to drive the

leading sectors and encourage the growth of other sectors (potential sectors and lagging sectors) generated by leading sectors in achieving community welfare. Because the leading sector is the driving force for other sectors, it needs special attention and focus from the local government in the form of maximum budget allocation to leading sector programs so that the allocation of regional expenditure budgets can be more targeted, effective and efficient.

In essence all sectors in the regional economy have important values for society but not all economic sectors have the ability to advance and develop both for the sector itself and for the development of other sectors. Based on table 10 above, it shows that sectors that can be prioritized in the Short Term Development Plan (1-5) in Gunungsitoli City are the water supply, waste, waste and recycling management, construction sector, large and retail trade sectors; car and motorcycle repairs, and the transportation and warehousing sector because these four sectors are leading sectors. This means that regional budget allocations for the four sectors must be prioritized and given a broad space to develop other sectors. Furthermore, the priorities of the Medium Term Development Plan (1-10) are developed together with potential sectors, including the electricity and gas procurement sector, the mining and excavation sector, the provision of accommodation, food and beverage sector, the service sector, finance and insurance, the real estate sector, the administration sector compulsory government, defense and social security, and the education service sector. This means that the budget allocation for this sector is the second priority because of its nature as a second sector. And lagging sectors (1-20) years, including agriculture, forestry and fisheries, manufacturing

industry, information and communication sector, corporate services sector, health services and social activities sector, and other service sectors are prioritized for the Long Term Development Plan. This means that the budget allocation for the lagging sector is adjusted to the conditions of regional financial capacity because it is the third priority.

### Conclusions

From the description of the results of the analysis and discussion, some conclusions can be drawn as follows:

1. Based on the average classification of the Klassen Typology sector, six developed sectors, the construction sector, the retail and wholesale trade sectors were produced; car and motorcycle repair, transportation and warehousing sector, financial and insurance services sector, government administration sector, mandatory social security and defense, and education services sector.
2. Based on a combination of Klassen Typology calculations, Location Quotient, Growth Ratio Model and Overlay analysis, the leading sectors in Gunungsitoli City are the water supply, waste and recycling management, construction sector, large and retail trade sectors; car and motorcycle repair, and the transportation and warehousing sector.

### Suggestions

Based on the results of the conclusions above, the author provides input as a suggestion to the relevant parties, especially policy makers in Gunungsitoli City, namely:

1. The development policy of Gunungsitoli City needs to be directed towards the development of leading sectors without

overriding the development of other sectors as supporters. The priority of leading sector development is expected to provide a multiplier effect on economic growth so that it can stimulate the economic development of Gunungsitoli City which in turn will add to the development / progress of other sectors that are supporting it.

2. Because in this study only using aspects of the economic sectors, it is necessary to have a comprehensive follow-up study to see further where the locations (sub-districts) are leading sectors and potential sectors in Gunungsitoli City.

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