

Analysis of Determination of Leading Sector and Regional Economic Potential for Establishment Planning Of Aceh Selatan Jaya Regency

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Abstract – This study aims to analyze the determination of the leading sectors, economic structures and economic potential for establishment planning of Aceh Selatan Jaya Regency as an information and consideration in regional development planning. The analysis tools that used for this research are Location Quotient (LQ), Shift-share and descriptive quantitative analysis. The rate of growth and structure in the planning area of the Aceh Selatan Jaya Regency during the period 2010-2015 dominantly influenced by the size of the primary sector. The results of sector-by-sector analysis show that the sectors that are the leading sectors with criteria of the basic and competitive sectors are the agriculture, forestry and fishing sector and wholesale and retail trade, repair of motor vehicles and motorcycles sector.

Keywords – *Leading Sector; Economic Structure and Economic Potential.*

I. INTRODUCTION

Enactment of regional autonomy based on In Act No. 23 of 2014 about Regional Government and In Act no. 33 of 2004 about Concerning Financial Balance between Central and Regional Government has granted the authority of local government administration which is wider, more real and responsible for economic development areas that will be assessed will be more quickly realized if the region has the authority to manage the potential of its own region. One of the way it can be happen by expansion of administrative territory.

Formation opinion of new autonomous region should be responded carefully and concern to whether the area has economic potential that can be developed so that the area can be considered self-sufficient economy. The idea of forming the district of Aceh Selatan Jaya with the capital Bakongan, among others due to historical reasons Kewedanaan Bakongan where from 21 areas of kewedanaan in the province of Aceh only Kewedanaan Bakongan which until today has not been upgraded to the district, the uneven development and distance to the district capital. The motivation for the establishment of this region include: accelerating economic development, especially the procurement of infrastructure, namely the streets in the sub-

district and the improvement of other social service facilities.

If Aceh Selatan Jaya will expanded from the origin district that is Aceh Selatan district, the new autonomous region should be able to self-help to increase its revenues by analyzing, exploring and using local potentials to achieve optimal development outcomes.

The analysis of the determination of the leading sectors and the economic potential in the planning area of the Aceh Selatan Jaya regency is indispensable as the basis for future development planning for this region, especially in the implementation of regional autonomy. Based on this it is necessary to conduct research to find out what are the basic sectors or sectors that have comparative competitiveness and specialization for the determination of the leading sectors and economic potentials that will be the driving force of economic activity in the region.

II. LITERATURE REVIEW

The main objective of regional economic development according to Rudatin (2003) is to create the number and types of job opportunities for local communities, so the success of regional economic development depends on the

development policies based on the regional specificities, using the potential of human resources, institutions, physically locally for development initiatives in the region concerned

The economic potential of a region is the economic capability that exists in the area that is feasible and feasible to develop so that it will continue to grow into a source of livelihood of local people and can even help the economy of the region as a whole to develop itself and sustainably (Soeparmoko, 2002).

One of the important macroeconomic indicators to analyze the economic condition in an area in a given period is the Gross Domestic Regional Product (GDRP). According to the Central Bureau of Statistics (2016), GDRP is the amount of value added generated by all production units within a particular region or is the sum of the value of the final goods and services produced by all economic units.

The basis economic activity theory is a theory that divides the production activities or types of work that exist in a region into a basic job and service work or non-base sector. Activity bases are activities that are exogenous means not bound to the internal conditions of the region's economy and at the same time serves to encourage the growth of other types of work while the non-base sector is an activity to meet the needs of the community in the area itself. Therefore, this theory depends on the general condition of the region's economy (Tarigan, 2015).

Growth and shift of economic sectors in the regions can be analyzed by using *shift-share* analysis. Sirojuzilam and Mahalli (2010) stated that economic growth in the region is closely related to the three components, namely components due to national growth, industrial mix interaction components and the regional-share to the national sectors.

The technical requirements for the formation of regencies / municipalities stated in Article 6 paragraph (1) of Government Regulation No. 78 of 2007 which includes economic capacity, regional potential, socio-cultural, socio-political, population, area, defense, security, financial capacity, the level of community welfare and the range of governance control. In accordance with the direction of paragraph (2) in the same regulation, all of these factors are essentially assessed based on the results of regional studies to be established, disseminated or combined.

III. RESEARCH METHODS

A. The scope of research

The scope of this study covers GDRP (Gross Domestic Regional Product) for establishment planning area of Aceh Selatan Jaya Regency consisting of eleven sub-districts, that are: Pasie Raja, Kluet Utara, Kluet Selatan, Kluet Tengah, Kluet Timur, Bakongan, Bakongan Timur, Kota Bahagia, Trumon, Trumon Tengah and Trumon Timur with the variables studied are the total production generated from each sector calculated in millions of rupiah, which include:

1) Agriculture, Forestry and Fishing; 2) Mining and Quarrying; 3) Manufacturing; 4) Electricity and Gas; 5) Water Supply, Sewerage, Waste Management and Remediation Activities; 6) Construction; 7) Wholesale and Retail Trade, Repair of Motor Vehicle and Motorcycles; 8) Transportation and Storage; 9) Accommodation and Food Service Activities; 10) Information and Communication; 11) Financial and Insurance Activities; 12) Real Estate Activities; 13) Business Activities; 14) Public Administration and Defence; Compulsory Social Security; 15) Education; 16) Human Health and Social Work Activities; and 17) Other Services Activities Activities.

B. Types and Data Sources

Secondary data used in this research with time series data type from 2010-2015. The data were obtained from several sources: 1) each sector data of Aceh Province GDRP from 2010 to 2015 with constant and current prices in 2010; 2) GDRP data of Aceh Selatan Regency and GDRP data of each sub-district in Aceh Selatan Regency for each sector from 2010 to 2015 with constant and current prices in 2010; and 3) Aceh Selatan In Figures 2015 published by Aceh Selatan Central Bureau of Statistics in 2015.

C. Data analysis method

Data analysis method that used in this research are *Location Quotient* (LQ) analysis which is used to determine base sector and non base and *Shift-share* analysis which is used to analyze and know the shift and role of sector in regional economy of Aceh Selatan Jaya regency establishment plan. These two methods are combined to analyze the leading sectors as well as the economic potentials in the area of the plan for the establishment of Aceh Selatan Jaya Regency.

D. Operational Definition of Variables

The operational definitions of the variables that used in this study are: 1) the leading sector is a sector that has a relatively large share compared to other sectors to the regional economy calculated through indicators of Gross Domestic Regional Product (GDRP); 2) economic activity in the regional economy there are economic activities that are classified into 2 parts, those are: base / pre-eminent and non-base activities; 3) GDRP is an indicator to know the economic condition of a region, which can be seen based on current price or at constant prices. GDRP is intended as the amount of value added generated by all economic sectors that exist within a region within a certain period of time usually one year; and 4) economic sector is the business field contained in GDRP, covering 17 sectors of business field.

IV. RESULTS AND DISCUSSION

A. Economic Basis Analysis

The calculation results of *Location Quotient* (LQ) of Establishment Planning Aceh Selatan Jaya Regency from

the period of 2010-2015 summarized in Table 1 to identification both basic and non-base sectors.

Table 1 LQ Average Value of Establishment Planning Aceh Selatan Jaya Regency Area Towards Aceh Selatan Regency and Aceh Province from 2010 to 2015.

No.	Sector	LQ Average Value Compared Towards to	
		Aceh Selatan Regency	Aceh Province
1.	Agriculture, Forestry and Fishing	1,65	1,63
2.	Mining and Quarrying	0,59	0,27
3.	Manufacturing	0,90	0,43
4.	Electricity and Gas	0,88	0,68
5.	Water Supply, Sewerage, Waste Management and Remediation Activities	0,78	0,57
6.	Construction	0,86	1,51
7.	Wholesale and Retail Trade, Repair of Motor Vehicle and Motorcycles	1,22	1,17
8.	Transportation and Storage	0,58	0,43
9.	Accommodation and Food Service Activities	0,71	0,33
	Information and Communication	0,03	0,05
10.	Financial and Insurance Activities	0,60	0,82
11.	Real Estate Activities	0,35	0,37
12.	Business Activities	0,44	0,51
13.	Public Administration and Defence; Compulsory Social Security	0,89	1,53
14.	Education	0,53	0,74
15.	Human Health and Social Work Activities	0,54	0,40
16.	Other Services Activities	0,56	0,71
17.			

Source : data processed

Table 1 shows that the sectors that are based are agriculture, forestry and fishing sector and wholesale and retail trade, repair of motor vehicle and motorcycles sector. However, these sectors experienced a shift when compared toward Aceh Province. The sectors that were not originally base, shifted into basic sectors such as the construction sector and public administration and defence; compulsory social security sector. The shift indicates that each sector has a different contribution to the regional economy compared to it and also depends on the orientation of the area, for export or to meet the needs of its own region.

The first sectors that are based on establishment planning Aceh Selatan Jaya Regency area is agriculture, forestry and fishing sector. The contribution of this sector to it region is quite large to the total production of Aceh Selatan Regency and Aceh Province. This indicates that the sector is a base sector with good economic strength and an effect on the economic growth on establishment planning Aceh Selatan Jaya regency area. This condition is caused by the contribution of the agriculture, forestry and fishing sector of all sub-districts on establishment planning Aceh Selatan Jaya Regency area to Aceh Selatan Regency GDRP

that average 57 percent per year and experiencing an average growth of 4.12 percent per year.

The second sector which is based on establishment planning Aceh Selatan Jaya Regency area is the sector of wholesale and retail, car repair and motorcycle. The average of GDRP both provincial and regional levels, this sector is able to meet the needs of the province of Aceh and the region of Aceh Selatan. Other than that two other sectors those are the construction sector also public administration and defence; compulsory social security sector that shift into the base sector when compared with Aceh Province.

The construction sector also public administration and defence; compulsory social security sector must be a base sector when compared to Aceh Province, it means that the sector besides being able to meet the needs of the people in each sub-district located on establishment planning Aceh Selatan Jaya Regency Area is also able to export to other region in Aceh Province. Such a large contribution is the result of the implementation of the government's duty in serving the community.

However, the role of the construction sector also public administration and defence; compulsory social security

sector is mandatory along with thirteen other sectors on establishment planning Aceh Selatan Jaya Regency area, those are: mining and quarrying sector; manufacturing sector; electricity and gas sector; water supply; sewerage, waste management and remediation activities sector; transportation and storage sector, accommodation and food service activities sector, information and communication sector, financial and insurance activities sector, real estate activities sector, business activities sector, education sector, human health and social work activities sector also other services activities sector has not being leading sectors in Aceh Selatan Regency. This shows that the role of these sectors in all sub-districts located on establishment planning Aceh Selatan Jaya Regency Area is always less competitive with the other seven sub-districts in Aceh Selatan Regency or in other words has not been able to meet the needs of the region itself.

The calculation results of the *Location Quotient* (LQ) index indicates that sectors those are the economic base

sector on establishment planning Aceh Selatan Jaya Regency Area are the agriculture, forestry and fishing sector, construction sector, wholesale and retail, car repair and motorcycle sector also public administration and defence; compulsory social security sector.

Although the base sector that become a potential sector to be developed and can spur the economic growth on establishment planning Aceh Selatan Jaya Regency area, but the role of non-base sector can not be ignored. Due to the existence of the base sector will help the development of non-base sector into a new potential sector.

B. Shifting and Role of Regional Economic Sector

The calculation results of GDRP *Shift-share* analysis of all sub-districts on establishment planning Aceh Selatan Jaya Regency area period 2010 to 2015 towards to Aceh Province are listed in Table 2.

Table 2 Results of Shift-share calculation on Establishment Planning Aceh Selatan Jaya Regency Area Towards to Aceh Province Period 2010 to 2015

No.	Sector	Provincial Share (PS)	Proportional Shift (P)	Differential Shift (D)	Total (ΔY)
1.	Agriculture, Forestry and Fishing	46.705,88	45.813,60	-6.152,95	86.366,53
2.	Mining and Quarrying	4.263,80	-19.958,79	13.352,91	-2.342,09
3.	Manufacturing	3.676,39	-13.251,57	15.909,93	6.334,76
4.	Electricity and Gas	85,71	184,09	28,34	298,15
5.	Water Supply, Sewerage, Waste Management and Remediation Activities	16,27	34,80	-5,26	45,1
6.	Construction	12.871,75	22.651,61	34.497,32	70.020,68
7.	Wholesale and Retail Trade, Repair of Motor Vehicle and Motorcycles	18.037,98	27.938,04	6.810,97	52.786,98
8.	Transportation and Storage	3.275,95	3.618,12	6.876,36	13.770,43
9.	Accommodation and Food Service Activities	332,40	859,60	304,29	1.496,29
10.	Information and Communication	170,82	276,06	448,69	895,56
11.	Financial and Insurance Activities	1.193,70	1.266,88	2.244,76	4.705,34
12.	Real Estate Activities	1.217,18	2.346,44	2.437,47	6.001,09
13.	Business Activities	305,81	455,33	209,83	970,98
14.	Public Administration and Defence; Compulsory Social Security	11.660,79	16.170,62	13.447,83	41.279,24
15.	Education	1.570,96	1.743,49	1.353,24	4.667,70
16.	Human Health and Social Work Activities	1.012,12	2.707,18	-835,59	2.883,71
17.	Other Services Activities	854,20	1.384,75	936,34	3.175,29
Amount		107.251,71	94.240,24	91.864,49	293.356,44

Source : data processed

Based on Table 2, the growth of establishment planning Aceh Selatan Jaya Regency area proportional component towards to Aceh Province during the period of 2010 to 2015 is almost entirely positive and only two sectors with negative value, those are mining and quarrying sector and manufacturing sector.

There are fourteen economic sectors of establishment planning Aceh Selatan Jaya Regency area during the period 2010 to 2015 which *Differential Shift* is positive, except for three sectors, those are agriculture, forestry and fishing sector, water supply sector, waste management, waste and recycling sector also human health and social work activities sector so that the three sectors are slow growth.

Furthermore, the result of calculation of *Shift-share* GDRP analysis of entire sub-district on establishment planning Aceh Selatan Jaya Regency area period 2010 to 2015 to Aceh Selatan Regency as origin region is shown on Table 3. There are eleven sectors whose *Proportional Shift* (*P*) component is positive, except for six sectors have negative *P* value, those are agriculture, forestry and fishing sector; mining and quarrying sector; manufacturing sector; water supply, sewerage, waste management and remediation activities sector; public administration and defence; compulsory social security sector; and also other services activities sector.

Table 3 Shift-share Result Calculation of Establishment Planning Aceh Selatan Jaya Regency Area Towards to Aceh Selatan Regency Period 2010 to 2015

No	Sector	Regency Share (PS)	Proportional Shift (P)	Differential Shift (D)	Total (ΔY)
1.	Agriculture, Forestry and Fishing Mining and Quarrying	112.523,72	-31.911,61	5.754,42	86.366,53
2.	Manufacturing	10.272,33	-8.459,65	-4.154,77	-2.342,09
3.	Electricity and Gas	8.857,15	-2.387,68	-134,71	6.334,76
4.	Water Supply, Sewerage, Waste	206,50	65,78	25,86	298,15
5.	Management and Remediation Activities Construction	39,20	-4,61	11,22	45,81
6.	Wholesale and Retail Trade, Repair of Motor Vehicle and Motorcycles	31.010,58	5.040,91	33.969,19	70.020,68
7.	Transportation and Storage	43.457,05	11.295,48	-1.965,56	52.786,98
8.	Accommodation and Food Service Activities	7.892,40	1.793,36	4.084,67	13.770,43
9.	Information and Communication Financial and Insurance Activities	800,81	35,45	660,02	1.496,29
10.	Real Estate Activities Business Activities	411,53	143,87	340,16	895,56
11.	Public Administration and Defence; Compulsory Social Security	2.875,85	574,21	1.255,28	4.705,34
12.	Education	2.932,43	259,17	2.809,49	6.001,09
13.	Human Health and Social Work Activities	736,77	-75,21	309,42	970,98
14.	Other Services Activities	28.093,16	6.187,39	6.998,70	41.279,24
15.		3.784,76	1.039,74	-156,81	4.667,70
16.		2.438,41	527,08	-81,77	2.883,71
17.		2.057,93	-99,27	1.216,62	3.175,29
Ammount		258.390,59	-15.975,58	50.941,43	293.356,44

Source: data processed

The economic value of *Differential Shift* of establishment planning Aceh Selatan Jaya Regency area during the period of 2010 to 2015 shows those are twelve economic sectors growing faster than the same economic sectors at Aceh Selatan Regency level, except for five sectors those are: mining and quarrying sector; manufacturing sector; wholesale and retail trade, repair of

motor vehicle and motor cycles sector; education sector; also human health and social work activities sector.

The result of *Shift-share* analysis shows that there are seventeen sectors of GDRP is almost entirely as a competitive economic sector of establishment planning Aceh Selatan Jaya Regency area, with the exception of one sector that is human health and social work activities sector.

C. The Leading Sectors Areas of Plan for Establishment of South Aceh Regency Jaya

The results of the analysis indicate that the leading sectors of establishment planning Aceh Selatan Jaya Regency area during the period of 2010 to 2015 study obtained through the combination of *LQ* and *Shift-share* methods are agriculture, forestry and fishing sector also wholesale and retail trade, repair of motor vehicle and motorcycles sector. Both sectors also have several subsectors that are worth developing so that their contribution to total production of agricultural, forestry and fisheries that can increase and overall will increasing the GDRP of establishment planning Aceh Selatan Jaya Regency area.

1. Agricultural, Forestry and Fishing Sector

The agriculture, forestry and fishing sector have an enormous role to GDRP of establishment planning Aceh Selatan Jaya Regency area that indicated by the average contribution of agriculture sector which reached 42.80 percent per year and ranks first in its contribution to GDRP of establishment planning Aceh Selatan Jaya Regency area.

Based on the analysis of *LQ* and *Shift-share* analysis, it can be concluded that the agriculture, forestry and fishing sector can be classified as the leading sector of establishment planning Aceh Selatan Jaya Regency area because this sector is classified as advanced and fast growing sector also as base sector and growth faster than the origin region.

The contribution of agriculture, forestry and fishing sector of establishment planning Aceh Selatan Jaya Regency area is inseparable from the condition of agriculture area as cultivated land for farming in it area, where almost 74 percent of total rice field area in Aceh Selatan Regency reaches 14,208 hectares located at establishment planning Aceh Selatan Jaya Regency. The total agricultural area in Aceh Selatan is 19,281 hectares. Sub-districts that have a prominent agricultural area are Kluet Utara, Trumon Tengah, Pasie Raja, Kluet Timur and Kluet Selatan.

The agricultural, forestry and fisheries sector, especially the food crops sub-sector, based on the condition of 2015 are dominated by corn crops with the amount of production reaching 53,911 Ton on the planting area of 8,594 Ha. Corn crops is a superior commodity of establishment planning Aceh Selatan Jaya Regency area which is located in east of Aceh Selatan Regency. It contrasts to western area of Aceh Selatan Regency which is more dominated by rice plant. However, the production of rice crops in this area is also quite potential with the amount of production reaches 45,915 Ton in the planting area of 8,099 Ha, so that the productivity reaches 4.93 Ton/ Ha slightly lower than the productivity of rice plant of Aceh Selatan Regency as a whole that is 5.1 Ton/ Ha.

Similarly, other food crops also have the potential to continue to be developed such as soybean plant whose production amounts to 1,048 tons with planting area of 1,257 hectares and also cassava with a production amount of 658 tons with an area of 89 Ha.

Production of oil palm plantations is a major plantation commodity of establishment planning Aceh Selatan Jaya Regency area which has increased the area of land from year to year; with production amount 52,910 tons in planting area of 8,314 Ha. Followed by other plantation crops such as coconut, nutmeg, betel nut, rubber, cocoa and coffee.

The types of livestock businesses in establishment planning Aceh Selatan Jaya Regency area are cows, buffalo, goats, sheep and poultry. Livestock companies are generally a livestock business community, so that the scale of its business is also relatively small. Most of the management of livestock business by the community is still in the form of grazing with the support of the availability of land that is still very wide.

Fishery sub-sector in 2015 produces 5,401.14 Ton sea fishery production and 735 Ton of cultivation. The geographical location of establishment planning Aceh Selatan Jaya Regency area, where most of the southern part is directly adjacent to the Indian Ocean, provides a potential area for fisheries development, both for fishing and cultivation.

Marine fishery catching activities in establishment planning Aceh Selatan Jaya Regency area are still intended for local consumption and generally still revolve around coastal and coastal areas. Several sub-districts in this area are the center of sea fishery activities; those are Bakongan, Bakongan Timur and Pasie Raja Sub-district.

As a community economic base, development in agriculture, forestry and fishing in rural areas can also better ensure equity of income, as most establishment planning Aceh Selatan Jaya Regency area communities live in rural areas and rely on this sector.

2. Wholesale and Retail Trade, Repair of Motor Vehicle and Motorcycles Sector

Wholesale and retail trade, repair of motor vehicle and motorcycles sector occupied the second position in the leading sectors distribution of establishment planning Aceh Selatan Jaya Regency area after agriculture, forestry and fishing sector.

Through the analysis of *LQ* and *Shift-share* analysis, it can be concluded that wholesale and retail trade, repair of motor vehicle and motorcycles sector of establishment planning Aceh Selatan Jaya Regency area can be classified as a leading sector because this sector is a base sector, belonging to advanced and fast-growing sector and growth faster than province.

In the trade sector there are a number of businesses managed by the community in this area, including in Aceh Selatan Regency as a whole. There are at least 470 Small Micro Business, 730 Small Business, 98 Medium Enterprises, and 128 UMUs spread across eleven districts within of establishment planning Aceh Selatan Jaya Regency area. In percentage, its existence has been very prominent. Overall, the contribution of Kecamatan Pasie Raja and Kluet Utara is very dominant on this sector.

The existence of economic institutions of establishment planning Aceh Selatan Jaya Regency area is also very instrumental in encouraging business activities of the community in this sector. In the future, the existence of these institutions must continue to be strengthened in order to be more optimal in exploiting the potential of the local economy that exists.

V. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusion

The leading sectors with criteria basic and competitive sectors period from 2010 to 2015 in the economy of establishment planning Aceh Selatan Jaya Regency area those are: agriculture, forestry and fishery sector also wholesale and retail trade, repair of motor vehicle and motorcycles sector.

B. Suggestion

Local governments in efforts to increase the GDRP should prioritize the development of leading sectors by not ignoring other sectors in the planning and implementation of development. Agricultural, forestry and fishing sector also wholesale and retail trade, repair of motor vehicle and motorcycles sector have the largest economic contribution of establishment planning Aceh Selatan Jaya Regency area needs to get priority development, thus providing a high impact for the increase of people's income and employment.

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