

Review District Toba Samosir as a Growth Center in Province North Sumatra

Mei Hutajulu

Department of Rural Development Planning
University of Sumatera Utara, Medan, North Sumatera, Indonesia



Abstract - One of the most important agenda of the current government is the regional development strategy aimed at developing leading sectors in strategic areas in each region. In conjunction with Presidential Regulation No. 3 of 2016 on the Acceleration of the Implementation of National Strategic Projects that there are 226 List of National Strategic Projects in Indonesia one of them for tourism is the acceleration of transportation, electricity and clean water infrastructure for the 10 National Strategic Tourism Area (KSPN) Toba, Pulau Seribu, Tanjung Lesung and 7 other areas located in several locations in North Sumatra Province. The amount of Gross Regional Domestic Product of Toba Samosir Regency in 2015 amounted to 5,181,286, 1 million rupiah experienced a growth of 4.24 percent compared to the previous year. It is ranked 4th out of 33 other districts / municipalities Human Development Index and poor people of Toba Samosir regency which decrease every year and occupy the fourth position at least in North Sumatera. This study aims to find out how the condition of the region of Toba Samosir and what is the leading sector owned. The type of research conducted is descriptive qualitative. Objects studied are Toba Samosir own with research method using Klassen Typology Analysis Method and Location Question Method. The results showed that Toba Samosir Regency is still not worth mentioning as a growth center in North Sumatera Province because if seen from its economic structure, GDP and Economic Growth Rate of Toba Samosir Regency is still smaller than GDP and growth rate of North Sumatera Province. Agricultural, forestry and fishery sectors are the leading sectors in Toba Samosir Regency with LQ value of 1.40.

Keywords- Center of growth; Leading sector; Klassen Typology; Location Question

I. INTRODUCTION

Growth is a key measure of the success of development, and the results of economic growth will also be enjoyed by the community to the bottom layer. Growth must go hand in hand and planned, striving for equal distribution of opportunities and the sharing of development outcomes more equitably. Thus, poor, lagging, under-developed and non-productive areas will be productive.

The central government currently gives consideration that the success of national development is determined by the success of development in the region due to the potential of resources and location in the region. One of the government's important agendas today is a regional development strategy aimed at developing leading sectors in strategic areas in each region and encouraging the acceleration of development of underdeveloped regions, border areas and small outer islands. Related to that, with

the issuance of Presidential Regulation No. 3 of 2016 on the Acceleration of the Implementation of National Strategic Projects that there are 226 (two hundred and twenty six) List of National Strategic Projects in Indonesia, one of them for tourism is the acceleration of transportation, electricity and water infrastructure net for 10 National Tourism Strategic Areas (KSPN)

Priorities of Lake Toba, Pulau Seribu, Tanjung Lesung and 7 other areas located at several provincial locations in Indonesia.

Toba Samosir Regency was in 2003 ' - 2040' North Latitude and 98056'-99040 'East Longitude, Toba Samosir Regency has an area of 202,180 Ha. Located on a plateau, with altitudes between 900 and 2,200 meters above sea level, with diverse topography and contours of land, ie flat, sloping, sloping and steep.

The quantity of GRDP and the availability of labor is the GRDP of Toba Samosir Regency based on the current price of 2015 of 5, 181,286, 1 million rupiah. Based on the 2010 constant price of PDRB Toba Samosir District in 2015 amounted to 4,355,221,01 million rupiah or experienced growth of 4.24 percent compared to the previous year.

The first rank of Human Development Index (HDI) is in Medan with HDI of 78.87 in 2015. While the last rank is obtained by West Nias Regency with HDI of 58.25 among 33 districts / cities in North Sumatra. Toba Samosir Regency is ranked 4th among 33 regencies / cities after Medan, Pematang Siantar and Binjai. The poor Toba Samosir population declines every year and occupies the fourth position at least in North Sumatera after Pakpak Barat, Sibolga and Samosir in 2014.

From the description above it can be formulated problems to be studied and observed in this research are:

- Is Toba Samosir Regency worthy to be one of the growth centers in North Sumatra Province?
- What are the leading commodities or sectors in Toba Samosir Regency?

II. LITERATURE REVIEW

Regional development can be observed by looking at its typology based on Klassen's analysis. The Klassen Typology analysis tool is used to find out the description of the pattern and structure of economic growth of each region. Klassen typology basically divides the region based on two main indicators of regional economic growth and per capita income of the region. By determining the average population growth as the vertical axis and the average per capita income as the horizontal axis, the observed area can be divided into four classifications:

- high growth and high income
- high income but low growth
- high growth but low income
- low growth and low income

Mathematically Klassen typology can be described as follows:

$$\text{Local per capita income growth rate} = \frac{Ui^1 - Ui^0}{Ui^0}$$

$$\text{The growth rate of national per capita income} = \frac{U^1 - U^0}{U^0}$$

$$Yi = \frac{Ui^1 - Ui^0}{Ui^0} - \frac{U^1 - U^0}{U^0}$$

$$Xi = \frac{Ui}{U}$$

Where:

Ui = regional per capita income

Uo = national per capita income

$Ui0$ = regional per capita income i in year $t0$

$Ui1$ = local per capita income i in year $t1$

$U0$ = national per capita income in year $t0$

$U1$ = national per capita income in year $t1$

If regional development is seen from comparing the rate of regional economic growth with the rate of economic growth at the national level then the regional development matrix can be explained in the following table:

According Sirojuzilam (2009) put forward several factors that can cause inter-regional imbalance as follows:

PDRB Percapita (y) Rate Growth PDRB (r)	PDRB Percapita (y)	
	$Y1 > y$	$Y1 < y$
$R1 > r$	Area fast forward and fast growing	The area is growing fast
$R1 < r$	The area is advanced but Depressed	Relative area left behind

- Transportation in Regional Development One of the main problems that must be considered in the planning of the region according to Miraza (2006) is the transportation problem. Kamaluddin (2003) argues that transport is an important element and serves as the lifeblood of life and economic, social, political, and population mobility that grows simultaneously and follows developments that occur in various fields and sectors.
- Education in Regional Development Education is one of the most decisive factors in improving the quality of human resources. This effort must be done in earnest and require encouragement from all parties so that the goal of

education can be reached maximally which will ultimately be useful in the process of national development. Qualified human resources as the final product of the educational process will be the driving force and implementer of sustainable development. Therefore, the mandate contained in the 1945 Constitution to provide good education for all citizens must be implemented and received serious attention from all parties, especially the government.

c. Population and Regional Development

If natural resources are endowment factors as a natural endowment, then regional inequality is also caused by Human Resources or cultural factors. Such experiences occur in the United States that indicate cultural differences between the northern and southern regions. The destruction of the relationship between man and nature leads to religion and artistic creativity. Areas with a stronger agrarian feel will lead to the formation of differences with communities in areas where industrial activity is more dominant (Higgins, 1995).

d. Government Expenditure and Regional Development

The government budget allocation for education and health is the most important part of budget policy (Rosen, 2004). This policy is linked to the role of the government as a provider of public goods. The impact of the externalities of the budget allocation policy for these two areas is certainly expected to have an effect on improving the level of education and health if the budget is used as expected.

e. Domestic Investment (PMDN) and Foreign Investment (PMA)

Tambunan (1996) provides stages in regional economic development that is:

- a. By first studying the characteristics of the area to be built, such as the number of species and the conditions of the existing natural resources and market conditions, social, macroeconomic (income level) and political structure.
- b. Determine the commodity or sector of excellence and other types of economic activities that need to be developed, both of which have existed since the old mapupun not yet existed.
- c. Determining the nature and mechanism of linkages between sectors existing in the area and studying the social institutions of society.

III. RESEARCH METHODS

This research is a descriptive qualitative research that will be limited to the scope of analysis directed to the

identification of areas and growth potential and the identification of needs in the region. The method of data analysis used is:

1. To know the description of the classification of each regency / city in North Sumatra Province used *klassen* typology as the basis of analysis.
2. Location Question Analysis to compare between Toba Samosir regency and North Sumatera Province, then the province holds the role of national territory, and the area is Toba Samosir Regency itself.

Geometric Analysis Methods to determine the projection of population in determining the amount of facilities and infrastructure in Toba Samosir Regency

IV. RESULTS AND DISCUSSION

A. State of Geography

Toba Samosir Regency was expanded from North Tapanuli Regency as regulated in Law Number 12 Year 1998 concerning the establishment of Toba Samosir District Level and Regency of Mandailing Natal Region II. The inauguration of the division was conducted on March 9, 1999. At the time of the establishment of Toba Samosir District consisted of 13 sub-districts and 4 sub-district representatives, 281 villages and 19 sub-districts and in 2002, 4 (four) sub-district representatives were designated as definitive sub-districts in accordance with Bylaw No. 7 In 2002, namely: Ajibata District, Pintu Pohan Meranti, Uluan and Ronggur Nihuta. In the same year, in 2002 Borbor District was also established based on Bylaw No. 8/2002.

In 2003 Toba Samosir regency was expanded into Toba Samosir and Samosir Regency based on Law Number 36 Year 2003. And after the expansion of Toba Samosir District consists of 10 districts. In 2005, Sigumpar sub-district was formed and was an expansion of Silaen District by Local Regulation No. 6/2005. In 2006, 3 new sub-districts of Tampahan sub-district, Nassau Subdistrict and Siantar Narumonda Sub-District were subdivided by Local Regulation No. 5 of 2006. In 2008 Bonatua Lunasi and Kecamatan Parmaksian is formed by local regulation No. 5 of 2008, so until now Toba Samosir Regency consists of 16 subdistricts consisting of 231 villages and 13 *kelurahan*.

Astronomically, Toba Samosir District was in 2003 '-2040' North Latitude and 98056'-99040 'East Longitude, Toba Samosir Regency has an area of 202,180 Ha. Based on its geographical position, Toba Samosir Regency is located between five districts, namely:

- a. Regency of Simalungun in the north,

- b. East border with Labuhan Batu and Asahan,
- c. Regency of North Tapanuli in the south and,
- d. Regency of Samosir in the west.

Toba Samosir Regency consists of 16 sub-districts, Balige Subdistrict, Tampahan Sub-District, Laguboti Sub-District, Habinsaran Sub-District, Borbor Sub-District, Nassau Sub-District, Silaen Sub-District, Sigumpar Sub-District, Porsea District, Pintu Pohan Meranti Sub-district Siantar Narumonda Sub-District Parmaksian Sub- , Uluan District, Ajibata Sub-district, and Bonatua Lunasi Sub-district

B. Topographic Condition

Toba Samosir Regency is located in the highlands, with altitudes between 900-2200 meters above sea level, with topography and contours of diverse land, ie flat, sloping, sloping and steep. The soil structure is unstable and is in the area of tectonic and volcanic earthquakes. Because it is located near the equator, Toba Samosir District is classified into tropical climates. As with other districts in Indonesia, Toba Samosir Regency has dry season and rainy season. The dry season usually occurs in January to July and the rainy season usually occurs in August to December, between the seasons there are transition seasons.

C. Demographic Condition

The population of Toba Samosir regency in 2015 is 179,704 people, with the number of households (RT) is 43.845 RT and the land area is 2,021.8 km², the population density of Toba Samosir regency 2015 is 88.97 inhabitants / km². Judging from the distribution and density of the population in Toba Samosir District, Balige District is the highest population of 38,088 people with a density of 418.32 people / km². The population distribution with the lowest population is in Tampahan district with a population of 4,458 people, with a population density of 182.33 inhabitants / km². While the district with the lowest density of Nassau district with the density 22.28 soul / km².

D. Condition of Toba Samosir District at present

Klassen Tipologi Analysis

The Klassen Tipologi analysis tool is used to find out the description of the pattern and structure of economic growth of each region. Klassen typology basically divides the region based on two main indicators of regional economic growth and per capita income of the region. By determining the average of economic growth as the vertical axis and the average per capita income as the horizontal axis of the regions in North Sumatera Province can be divided into 4 (four) classifications of high growth and high income, high

income but low growth, high growth but low income, low growth and low income.

By comparing the Economic Growth Rate by Regency / City based on the 2010 constant price (percent) of 2011-2015 as contained in Attachment 1 to GRDP Per Capita by Regency / City based on Constant 2010 Prices Year 2011-2015 as contained in Attachment 2, Classification of Regions in Table 2 below:

Table 2 Classification of Regencies / Municipalities in North Sumatra Province According to Klassen Typology, 2011-2015

PDRB Per Capita (y)	Y1 > y	Y1 < y
Rate Growth PDRB (r)		
	he area is fast forward and fast growing: 1. Pematang Siantar 2. Medan	Rapid Developed Areas: 1. Nias 2. Mandailing Natal 3. Tapanuli Selatan 4. Deli Serdang 5. Pakpak Barat 6. Samosir 7. Padang Lawas Utara 8. Padang Lawas 9. Nias Utara 10. Binjai 11. Gunung Sitoli
R1 < r	Regional Forward But Depressed 1. Labuhan Batu 2. Batu Bara 3. Labuhan Batu Selatan 4. Labuhan Batu Utara 5. Sibolga	Relative Areas Disadvantaged 1. Tapanuli Tengah 2. Tapanuli Utara 3. Toba Samosir 4. Asahan 5. Simalungun 6. Dairi 7. Karo 8. Langkat 9. Nias Selatan 10. Humbang Hasundutan 11. Serdang Begadai 12. Nias Barat 13. Tajung Balai 14. Tebing Tinggi 15. Padang Sidempuan

In 2011 Toba Samosir regency is still included in the category of advanced areas but depressed because the regional per capita GRDP is greater than the GRDP of the

Province of North Sumatra. However, starting in 2012 until 2015 has decreased to relatively lagged areas due to the decline in economic growth rate from 2012 to 2015. When viewed from the scale of GDP, Toba Samosir District continues to increase from 2011-2015 but when compared with the districts / cities existing in North Sumatra Province Toba Samosir Regency is still far behind. This is because the agriculture, forestry and fishery sector which is the leading sector less encouraged. From the results of interview authors with employees of the Office of Agriculture and Bappeda Toba Samosir this is due to several factors, among others:

- a. The conversion of agricultural land to non-agricultural high enough,
- b. Prices of agricultural products are unstable,
- c. Land management is not yet optimal,
- d. Ability in post-harvest processing and marketing of agricultural products / livestock is still low,
- e. Management of agribusiness and livestock management has not been optimal,
- f. Institutional capacity / agricultural groups are not yet optimal,
- g. Water use and governance is not yet optima.

Similarly, the sector of accommodation and drinking accommodation is closely related to the growing tourism sector in Toba Samosir regency. Lake Toba has been designated as one of the national tourism destinations. But besides Lake Toba there are other tourism potentials, natural potential, cultural values, and historical objects / places. Problems encountered include:

- a. Management and exploration of potential - tourism potential not yet optimal,
- b. The integration and synergy between tourism actors in tourism development is still low.

E. Analysis of commodity or superior sector in Toba Samosir regency

Location Quotient Analysis (LQ) is used to find out the economic sectors in GRDP that can be classified into basic and non-base sectors. LQ is a comparison of the magnitude of the role of a sector in Toba Samosir to the size of the sector's role at the level of North Sumatra Province. Index LQ Toba Samosir District Year 2011-2015 can be seen in Table 3 below:

During the period 2011-2015, GRDP per capita at constant price of Toba Samosir Regency has increased. In 2011 the GDP per capita of Toba Samosir Regency is about

3,792,702.18 (million) rupiah or equivalent to 651.115 rupiah per person per month. The value is increasing in 2012 to 3,985,032.53 (million) rupiah or equivalent to 683,675 rupiah per person per month. Increased again in 2013 to 4,178,496.09 (million) rupiah equivalent to 716,031 rupiah per person per month. In 2014 it reached 4,355,070.20 (million) rupiah equivalent to 731,666 rupiah per person per month up to 2015 GRDP per capita of Toba Samosir Regency reached 4,553,171.40 (million) rupiah with income per person per month equivalent to 760,112 rupiah.

If $LQ > 1$ means that the sector's role in the area is more prominent than the sector's role nationally. Conversely, if $LQ < 1$, the role of the sector in the area is smaller than the role of the sector nationally. From table LQ PDRB Toba Samosir regency from 2011-2015 can be seen some sectors that become the leading sector in Toba Samosir Regency that is Agriculture, Forestry and Fishery Sectors with average LQ value equal to 1.40; Accommodation and Drinking Supply Sector at 1.35; Government Administration, Defense and Social Security sectors amounted to 2.91 and Education Services Sector of 1.31.

Government Administration, Defense and Social Security Sector have the highest average LQ score in Toba Samosir District which is 2.91. Activities in this sector include activities undertaken by the government which means that every economic activity and business field in Toba Samosir Regency rely more on the role of government in its development.

Agricultural, Forestry and Fishery Sector is the largest sector that has a share in increasing PDRB Toba Samosir District with an average LQ value of 1.40 and is a sector that is still favored at present in Toba Samosir Regency with some commodities that can be developed such as rice, corn, vegetables, coffee and others.

The Provision of Accommodation and Drinking Sectors also contributed substantially to the increase of GRDP of Toba Samosir Regency at 1.35. This is due to the increasingly developed tourism activities in the Lake Toba Region in general and the emergence of new tourist objects in Toba Samosir District in particular that is able to attract investors in developing their business in Toba Samosir regency.

The Education Service Sector is a sector that plays a role in increasing the GRDP of Toba Samosir Regency with LQ value of 1.31.

Table 3 Calculation Result of Location Quotient Index (LQ) Kabupaten Toba Samosir Year 2011-2015

Sectors	2011	2012	2013	2014	2015	Rata-Rata
Agriculture, Forestry and Fisheries	1,38	1,39	1,40	1,40	1,39	1,40
Mining and excavation	0,31	0,29	0,24	0,23	0,22	0,26
Processing industry	0,64	0,62	0,61	0,58	0,57	0,60
Procurement of Electricity and Gas	0,48	0,54	0,59	0,62	0,66	0,58
Water Supply, Waste Management, Waste and Recycling	0,58	0,54	0,60	0,54	0,52	0,55
Construction	0,93	0,95	0,96	0,98	1,00	0,97
Large and Retail Trade; Car and Motorcycle Repair	0,87	0,87	0,88	0,89	0,88	0,88
Transportation and Warehousing	0,61	0,60	0,61	0,62	0,63	0,61
Provision of Accommodation and Drinking	1,38	1,36	1,34	1,34	1,32	1,35
Information and Communication	0,49	0,49	0,50	0,50	0,51	0,50
Financial Services and Insurance	0,49	0,49	0,49	0,52	0,53	0,51
Real Estat	0,67	0,68	0,67	0,68	0,68	0,68
Company Services	0,95	0,95	0,95	0,94	0,94	0,94
Administration of Government, Defense and Social Security	2,85	2,90	2,94	2,95	2,94	2,91
Educational Services	1,26	1,30	1,31	1,32	1,35	1,31
Health Services and Social Activities	0,89	0,88	0,88	0,86	0,86	0,88
Other Services	0,31	0,31	0,31	0,30	0,30	0,31

Source: BPS Toba Samosir 2011-2016 (processed)

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V. CONCLUSION AND SUGGESTION

A. Conclusion

Based on the results of analysis by using several methods of analysis about the study of Toba Samosir as a center of growth in North Sumatra Province can be drawn some conclusions as follows:

- a. If seen from the level of the Province of North Sumatra, until in 2015 Toba Samosir regency is still in the fourth awareness of the area that is left behind because it is an area of economic growth and income perkapitanya lower than the average province.
- b. Toba Samosir Regency has the leading sectors of Agriculture, Forestry and Fisheries with an average LQ of 1.40; Accommodation and Drinking Supply Sector at 1.35; Government Administration, Defense and Social Security sectors amounted to 2.91 and Education Services Sector of 1.31.

B. Suggestion

From the general conclusion that Toba Samosir Regency already has the ability to develop its own area but if compared with other regencies / cities are still far behind so there are some suggestions as input for the development of Toba Samosir regency as the center of growth in North Sumatra Province:

- a. The need for local government cooperation with the private sector and the community in managing the city and the environment in Toba regency so that Toba Samosir regency is more able to increase the attractiveness such as decorate existing buildings with the motif gorga or ulos.
- b. Toba Samosir district economic growth rate is still left behind the local government is expected to promote the existing superior sectors by increasing the usefulness of each product or goods / services produced to further be exported to other areas. Like creating ulos cloths into shirts and ornaments, enhance the creation of leading commodities in agriculture, plantation and forestry.
- c. It needs special attention from the central government and provincial government in general and local government in particular to further promote the sector of accommodation and drinking water associated with the development of Lake Toba area as a tourist destination with the addition of facilities and infrastructure of accommodation in the form of hotels and restaurants in Toba Samosir District.
- d. Toba Samosir regency as one of the areas in Lake Toba as a tourist destination needs more optimum management and excavation of the existing tourism potentials as well as the integration and synergy between tourism actors in the development of the tour.

REFERENCES

- [1] Adisasmita, Rahardjo, 2008. Pengembangan Wilayah Konsep dan Teori. Yogyakarta. Graha Ilmu
- [2] Arsyad, Lincolin, 1996. Analisis Potensi Pembangunan Ekonomi Daerah, Modul Program Penataan Manajemen Sektor Ekonomi Strategis, Kerjasama Direktorat Jenderal PUOD-Depdagri dengan Pusat Penelitian dan Pengkajian Ekonomi dan Bisnis Universitas Gajah Mada. Yogyakarta.
- [3] Badan Pusat Statistik Sumatera Utara, 2011.
- [4] Kabupaten Toba Samosir Dalam Angka.2011-2016
- [5] Badrudin, Rudy, 2012, Ekonomika Otonomi Daerah , Yogyakarta : UPP STIM YKPN

- [6] Badan Pusat Statistik Kabupaten Toba Samosir, 2016, Produk Domestik Regional Bruto (PDRB) 2016
- [7] Badan Pusat Statistik Propinsi Sumatera Utara, 2016, Produk Domestik Regional Bruto (PDRB) 2016
- [8] Boediono, 1981. Teori Pertumbuhan Ekonomi, Edisi 1, BPFE, Yogyakarta.
- [9] Setiono, Dedi, 2010. Ekonomi Pengembangan Wilayah. Teori dan Analisis. Jakarta Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia
- [10] Helmi, Syafrizal dan Muslich Lufti, 20015, Analisis Data, Medan : USU Press
- [11] Larengkum, Dirgahayu, Vecky Masinambow dan Krest Tolosang. 2012. Pengaruh Anggaran Pendapatan Belanja Daerah Terhadap Produk Domestik Regional Bruto di Kabupaten Kepulauan Talaud.
- [12] Mardiasmo, 2002, Otonomi & Manajemen Keuangan Daerah, Yogyakarta : Penerbit Andi
- [13] Nazir, Moh, 1983, Metode Penelitian, Jakarta : PT. Gramedia
- [14] Peraturan Presiden Nomor 3 Tahun 2016 tentang Percepatan Pelaksanaan Proyek Strategis Nasional
- [15] Peraturan Presiden Nomor 49 Tahun 2016 tentang Badan Otorita Pengelola Kawasan Pariwisata Danau Toba
- [16] Sirojuzilam, 2015. Pembangunan Ekonomi Regional, Medan : USU Press
- [17] 2011. Problematika Wilayah Kota dan Daerah. Medan : Usu Press
- [18] 2008. Disparitas Ekonomi dan Perencanaan Regional, Medan : Pustaka Bangsa Press
- [19] Siegel, Sidney, 2011, Statistik Nonparametik untuk Ilmu-ilmu Sosial, Jakarta : PT. Gramedia
- [20] Sjafrizal, 2012, Ekonomi Wilayah dan Perkotaan, Jakarta : PT. Raja Grafindo Persada
- [21] Sukirno Sadono, 2006. Mikroekonomi Teori Pengantar. Edisi 3, Medan : PT. Raja Grafindo Persada
- [22] Suparmoko, M, 1993. Kaitan antara Sektor Pertanian dan Bukan Pertanian, Pertumbuhan dan Pemerataan dalam Pembangunan Pertanian, Jakarta : PERHEPI
- [23] Todaro, Michael, P, 1999. Pembangunan Ekonomi di Dunia Ketiga, Edisi Keenam Jilid 1, Jakarta : Penerbit Erlangga
- [24] Tarigan, Robinson, 2005, Perencanaan Pembangunan Wilayah , Medan : Bumi Aksara
- [25] Tarigan, Robinson, 2005, Ekonomi Regional , Medan : Bumi Aksara
- [26] Undang-Undang Nomor 33 Tahun 2004 tentang Perimbangan Keuangan antara Pemerintah Pusat dan Pemerintah Daerah
- [27] Undang- Undang Nomor 9 Tahun 2015 tentang Perubahan Kedua atas Undang- Undang Nomor 24 Tahun 2014 tentang Pemerintahan Daerah
- [28] Wikarya, Uka, 2015, Analisis Model Input Output, Jakarta : LPEM FE UI