

Analysis of Competitive Agricultural Sector Competitiveness in Langkat Regency Hardwood Subsector (Plantation)

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Abstract: This study aims to identify the leading sectors that exist in Central Java, and then those sectors are identified which sectors have export competitiveness. This study uses GRDP data on the basis of Constant 2010 Prices. The data in this study uses secondary data from the data www.bps.go.id and sumut.bps.go.id. Langkat Regency in 2017 The analysis method used in this study is the analysis of Location Quotient (LQ), Concentration Index (CI), Specialization Index (SI), Location Index (LI), and Revealed Comparative Advantage (RCA). Results of Location Quotient analysis of commodity plantation base is Kec. Bahorok (Rubber Commodity, Cinnamon, Areca Palm, Aren), Kec. Serapit (Rubber, Cocoa, Areca, Pecan) Commodity, Kec. Salapian (Rubber, Coffee, Cinnamon, Candlenut, Aren) Commodity, District Kutambaru (Rubber, Cocoa, Areca, Pecan) Commodity, Kec. Sei Bingai (Commodity of Palm Oil, Cocoa, Coffee, Areca Palm, Pecan, Kapuk, Aren), Kec. Kuala (Rubber, Cocoa, Coffee, Areca Nut, Pecan, Kapuk, Aren) Commodity, Kec. Binjai (Oil Palm Commodity, Kapuk, Aren), Kec. Stabat (Commodity Cocoa, Pinang, Sugar Cane, Kapuk, Wampu Subdistrict (Palm Oil, Cocoa, Areca Palm), Batang Serangan District (Rubber Commodity, Palm Oil, Cinnamon, Kemiri, Kapuk), P Tualang Subdistrict (Rubber Commodity, Cocoa, Areca Palm, Sugar Cane, Pepper), Hinai District (Palm Oil, Cocoa, Kapuk, Aren), Secanggih District (Palm Oil, Cocoa, Areca Palm, Sugar Cane, Pepper), Tanjung Pura District (Palm Oil Commodity, Cocoa, Pinang, Aren), Gebang District (Palm Oil, Cocoa, Pinang, Aren), Sei Lapan District (Rubber Commodity, Cocoa, Kapuk, Aren), West Brandan District (Palm Oil Commodity, Palm Sugar), Besitang Subdistrict (Palm Oil Commodity, Palm Sugar), Pangkalan Susu Subdistrict (Palm Oil, Cocoa, Pinang, Aren) Commodity, Pematang Jaya District (Palm Oil Commodity, Cocoa). The sum of all the differences is positive 1. The Specialization Index (SI) is $1/100 = 0.1$, this value does not show significant differences in distribution for each sector. While the total positive difference is 8.3, the Location Index (LI) = $8.3 / 100 = 0.083$. Based on the calculation of the Location Index (LI) = 0, the distribution / distribution in the area for the sector is the same as the distribution of the "reference variable". Then it is relatively balanced. Based on the table above, the calculation of the RCA Index is if the value of an RCA of a commodity is more than one ($RCA > 1$), the commodities of Rubber Tobacco and Gum in North Sumatra Province have competitiveness above the average of exports of Indonesian Rubber Tobacco and Sap. If the RCA value is less than one ($RCA < 1$), the competitiveness of North Sumatra Province's coffee commodity exports do not have competitiveness against commodity exports of Indonesian Coffee.

1 INTRODUCTION

The agricultural sector is the most important sector and is a major driver in the economy of Langkat Regency. The use of land that is differentiated becomes agricultural land (paddy fields and non-paddy fields) and non-agricultural land which in 2017 most of the land is available. used as

agricultural land which is equal to 626,329 ha (not including community forest). This is what makes the agricultural sector (including forestry in it) towards the increase in the Gross Regional Domestic Product (GDP) of Langkat Regency in 2017 increasing by 4.73 percent and becoming the dominant sector in its role in the economic structure of Langkat Regency with the value of economic growth over the years

2015 experienced an average growth of 5.88 percent per year.

Table 1: Percentage Distribution Of Gross Regional Domestic Product Of Langkat Regency By Industry Of Current Market Prices (Percent)

	Industry	2013	2014	2015	2016	2017
A	Agriculture, Forestry And Fishing	43.75	41.65	39.85	39.68	39.42
B	Mining And Quarrying	10.09	9.74	9.88	9.84	9.55
C	Manufacturing	14.44	14.94	15.31	15.45	16.24
D	Electricity And Gas	0.22	0.20	0.20	0.19	0.20
E	Water Supply, Sewerage, Waste Management And Remediation Activities	0.04	0.40	0.04	0.03	0.04
F	Construction	6.76	7.47	7.37	7.46	7.36
G	Wholesale And Retail Trade; Repair Of Motor Vehicles And Motorcycle	9.16	9.86	10.99	10.90	10.86
H	Transportation And Storage	2.09	2.19	2.30	2.33	2.32
I	Accommodation And Food Service Activities	2.03	2.12	2.16	2.17	2.25
J	Information And Communication	0.96	0.9	0.93	0.94	0.96
K	Financial And Insurance Activities	1.92	2.00	2.06	2.07	2.04
L	Real Estate Activities	2.85	2.98	2.91	2.93	2.93
M, N	Business Activities	0.53	0.55	0.55	0.56	0.57
O	Public Administration And Defence; Compulsory Social Security	3.43	3.52	3.63	3.64	3.49
P	Education	1.11	1.15	1.14	1.13	1.10
Q	Human Health And Social Work Activities	0.46	0.47	0.48	0.47	0.47
R, S, T, U	Other Services Activities	0.17	0.19	0.20	0.21	0.21
	Gross Regional Domestic Product	100,00	100,00	100,00	100,00	100,00
	Gross Regional Domestic Product Without Oil And Gas	97.75	97.85	98.07	98.40	98.49

Source: GRDP BPS of Langkat Regency 2018

Determination of superior commodities in an area is the first step towards agricultural development that rests on the concept of efficiency to achieve a comparative and competitive advantage in the face of the globalization of trade faced. The step towards efficiency can be taken by using commodities that have comparative advantages both in terms of the area of harvest, production, and supply and demand.

One strategy that can be used in regional economic development through the agricultural sector in the current era of regional autonomy is through the development of regional superior commodities. The development of superior commodity-based areas is expected to spur the growth of a region which in turn can increase people's income. Optimal and integrated utilization of the potential of superior and potential areas is a

requirement that needs to be considered so that the welfare and prosperity of the community can be achieved (Mubyarto, 2000).

The success in international trade of a country can be seen from its competitiveness, this competitiveness is a general concept used in the economy, which refers to the commitment to market competition towards its success in international competition. Competitiveness has become the key for companies, countries and regions to be successful in their participation in globalization and world free trade.

North Sumatera Province has superior export products with developments and changes in both the export volume and export value each year. The increase or decrease in exports in North Sumatera Province was due to the competitiveness of these products. With this competitiveness the role of the government apparatus and exporters of North Sumatera Province is required to keep export products still capable of competitiveness in the international market.

Table 2: Foreign Trade of North Sumatera Province

Tahun	Export		Import		balance (000 US\$)
	Net Weight (ton)	FOB Value (000 US\$)	Net Weight (ton)	CIF Value (000 US\$)	
2000	5,166,654	2,437,764	2,620,106	775,287	1,662,477
2001	5,492,341	2,294,796	2,830,242	860,758	1,434,038
2002	6,622,573	2,891,996	2,684,055	819,298	2,072,698
2003	5,490,113	2,687,877	2,343,122	679,811	2,008,066
2004	7,512,890	4,239,409	3,221,858	953,359	3,286,050
2005	8,174,804	4,563,075	3,717,119	1,178,006	3,385,069
2006	8,704,824	5,523,901	4,404,172	1,456,987	4,006,914
2007	7,841,873	7,082,899	4,745,767	2,109,879	4,973,020
2008	8,520,892	9,261,977	5,880,759	3,696,065	5,565,912
2009	8,058,927	6,460,117	5,236,553	2,724,236	3,735,881
2010	7,992,103	9,147,778	6,171,734	3,576,248	5,571,530
2011	8,161,004	11,883,269	6,718,063	4,953,462	6,929,807
2012	8,695,941	10,393,936	6,813,898	5,164,751	5,229,185
2013	9,275,890	9,598,008	6,949,117	5,108,510	4,489,497
2014	9,087,526	9,361,110	7,391,305	5,046,514	4,314,596
2015	9,008,520	7,752,788	6,853,734	3,988,439	3,764,348
2016	2,005,094	1,727,122	1,708,356	843,953	883,170
2017	2,038,194	2,302,776	1,522,457	958,967	1,343,809

Source: BPS Statistics Of Sumatera Utara Province

North Sumatera Province has superior export products with developments and changes in both the export volume and export value each year. The increase or decrease in exports in North Sumatera Province was due to the competitiveness of these products. With this competitiveness the role of the government apparatus and exporters of North Sumatera Province is required to keep export products still capable of competitiveness in the international market.

Determination of a commodity as a regional superior commodity must be adjusted to the potential of natural resources and human resources owned by the region. Commodities selected as regional superior commodities are commodities that have high productivity and can provide added value

so that they have a positive impact on people's welfare. In addition, the determination of regional superior commodities must also consider the contribution of a commodity to economic growth and aspects of equitable development in an area (Syahroni, 2005).

Food crop productivity is still not maximized due to technological mastery that is lacking and weak in skills in farming. In addition, farming capital is limited, not all residents who own farms have agricultural land, not all of them have irrigated land, community income is still dependent on agriculture, agricultural management is still traditional, it is difficult to find cheap fertilizer. Farmers generally process their own products and some are sold around Langkat Regency, lack of innovation in product processing, agricultural production is sold out once a harvest and the food processing industry is still minimal.

The value of production is not proportional to the cost of production and market mechanisms that have not been maximized and only cover the local area so that farmers can find prices determined by other parties relatively low. This resulted in the level of agricultural production in Langkat Regency not being able to lift the economy of the surrounding communities and still lagging behind and not developing. Seeing this condition requires complementary efforts between the agricultural sector and other potentials in continuing development. This reflection implies that the importance of developing the agricultural sector in Langkat Regency functions as providing employment, providing commodity diversity and reducing the poor population.

2 THEORETICAL FRAMEWORK

The local resource-based potential agribusiness approach was developed with the concept of superior commodity sectors in each region. This concept results in a comparative and competitive number of superior local resource commodities. Comprehensively, superior commodities are developed in market prospects. This development requires a synergic link between processing and marketing. Provision of inputs for production, processing and marketing of output can be realized by developing networks with other regions. The network of cooperation between regions in agribusiness development can be in the form of product marketing network development or in providing inputs (Bappeda West Java 2006 in Sari 2014).

The environmental and regional aspects that will be developed become one of the centers of attention in achieving maximum results from the agribusiness approach. This means that to spur national economic growth it is absolutely necessary to synergize the development of an agribusiness approach with regional development in general. Therefore it is necessary to pay attention to the concept of agricultural area development with a reference to producing superior commodities through an agribusiness approach (Ratnawati et al, 2000).

The role of leading commodities on regional development

In the development of a region, regional development is the most important part, especially in rural areas that are sensitive to global scale changes. This change requires regional planning by considering internal, social and economic growth aspects to minimize the number of underdeveloped villages. In simple terms, the concept of regional development needs to be carried out in rural planning to encourage local economic growth and strengthen communities in the lower levels so that it can affect the market sustainably (Maryati 2009).

Setiawan (2006) in his research revealed that leading sector growth in a region not only had an impact on economic growth within the region but also had an impact on economic growth outside the region. Growth in leading sectors in each region has an impact on output growth, gross added value, and employment in the region (intraregional) and also affects other interregional areas.

According to the Agricultural Research Agency (2003), superior commodities are mainstay commodities that have a strategic position to be developed in an area whose determination is based on various considerations both technically (soil and climate conditions) and socio-economic and institutional (technological mastery, resource capability, human, infrastructure, and local socio-cultural conditions).

Bacherin (2003) states that the determination of superior commodities needs to be taken into account in the formulation of priority development programs by policy makers given the various limited resources possessed by both financial resources, human resources, and land resources. In addition to the success of achieving development goals and objectives, it is also expected to be better because the activities carried out are more focused on priority programs. Regional boundaries in determining superior commodities are usually administrative areas at the national, provincial and district levels. From several studies that have been carried out, the development of superior commodities is determined based on the basic

economic theory, biophysical aspects of land suitability), economic feasibility, spatial planning, and community desires.

The development of a superior commodity-based area has criteria in driving the development of a region that has a significant contribution to increasing production, income and expenditure, has a future and backward relationship and to other regions, is able to compete and absorb labor and is oriented towards the preservation of natural resources and environment. Whereas in the district / city, district superior commodities are expected to meet the criteria: in the criteria of national superior commodities, having economic values that meet domestic and external needs, having a prospective and highly competitive market, having the potential to be added value in agro-industry, and able widely cultivated.

Each region has different characteristics, both in terms of population and resources. This makes the potential will also vary, so that regional development policies must be in accordance with the characteristics of the area. According to Sari (2008) the determination of superior commodities in an area becomes a necessity with the consideration that commodities are able to compete sustainably with the same commodities produced by other regions, as well as efficient production and have comparative and competitive advantages.

3 RESEARCH METHOD

The data / source collection technique in this research is that the author conducted a literature research by taking references from previous studies, journals, books and literature relating to the topic used as research for additional data. Data is obtained from www.bps.go.id Langkat and sumut.bps.go.id.

The analytical method used to solve the research objectives is:

Location Quotient Methods (LQ)

LQ analysis is used to determine superior commodities in terms of production. This approach is often used to measure the economic base. In the LQ technique the measurement of economic activity is relatively based on gross added value or labor.

$$LQ = \frac{\frac{p_i}{p_t}}{\frac{P_i}{P_t}}$$

Where:

p_i = Production (harvest area) of commodity types i at the sub-district level

p_t = Production (harvest area) of food crops for all commodities at the sub-district level

P_i = Production (harvest area) type of commodity i at the district level

P_t = Production (harvest area) of commodity crops j at the district level

Concentration Index Methods (CI)

Concentration Index (CI) is called a concentration index, which refers to the ratio between the workforce and the population as shown in the following formula:

$$CI = \frac{\frac{E_i^R}{P_i^R}}{\frac{E_i^N}{P_i^N}}$$

Where :

E_i^N = total population (labor force) of industry i to area k

P^R = area (labor force) area k

P^N = national population (labor force)

Specialization Index Methods (SI)

Specialization Index (SI) analysis is one way to measure the behavior of overall economic activity. The formula calculates the Specialization Index (SI), i.e.

$$IS = \sum Si \text{ untuk } S_i > 0$$

$$\text{Dan } S_i = \frac{L_i^N}{L^N} - \frac{L_i^K}{L^K}$$

Where :

L_i^N = number of national industrial labor (labor force) i

L_i^K = total labor force (labor force) industry i area k

Location Index Methods (LI)

Location Index (LI) does not focus on an area, but on one sector the distribution is between different regions. The distribution of the workforce in a sector for different regions is compared with its distribution in all areas of the "reference variable".

The formula calculates the Location Index (LI) in the following formula:

$$IL = \sum Lw \text{ untuk } L_w > 0$$

$$\text{Dan } L_w = \frac{TL_w}{TL} - \frac{L_{iw}}{TL_i}$$

Revealed Comparative Advantage Methods (RCA)

Revealed Comparative Advantage (RCA) is a technique for determining comparative

competitiveness of a region (country, province, etc.). Basically this technique measures the export performance of a commodity that is used to compare the share of a commodity that is traded with the total export in a region (Tumengkol et al., 2015). RCA calculations can be described as follows.

$$RCA = \frac{P_t/Q_t}{R_t/S_t}$$

Where :

P_t = value of export of commodity i i Province of North Sumatra year t

Q_t = the total value of exports of non-oil commodities in North Sumatra Province in year t

R_t = value of Indonesia's export commodity i year t

S_t = total value of exports of Indonesian non-oil commodities in year t

4 ANALYSIS

In general, the economic condition of Langkat Regency is reflected in the development of GDP in recent years. The figures listed in the GRDP are figures that show added value formed and constitute overall income for the economy of the district. From Table 1, it can be calculated that in 2017 the contribution of Langkat Regency GRDP to the North Sumatera Province GRDP, both on the basis of constant prices and current prices, has not reached 6%. There is even a tendency to decline throughout the period 2013 - 2016. Only in 2017 there was an increase in the contribution percentage of 5.05%.

There are three main sectors in Langkat Regency which contribute to the provincial economy, namely the agricultural sector, mining and quarrying sector, and the building sector. The agricultural sector contributes an average of 5.08% in 2017.

Location Quotient Methods (LQ)

The results of the analysis of Location Quotient (LQ) values on the production and area of plantation crops are presented in the table below:

Table 3: Calculation and Classification of LQ Value of Plantations (Plantation) by District In Langkat Regency in 2017 (Tons)

No	District	Rubber	Palm Oil	Cocoa	Coffe	Cinnamon	Betelnut	Candlenut	Cass	Paper	Kapak	Palm Sugar
1	Bahorok	1.81	0.93	0.65	0.33	1.41	1.14	0.58	0.00	0.00	0.00	1.89
2	Serangai	1.65	0.93	1.61	0.00	0.00	2.07	1.07	0.00	0.00	0.00	0.00
3	Salipiun	2.03	0.92	0.81	1.06	2.77	0.37	1.45	0.00	0.00	0.00	2.06
4	Kulindem	2.91	0.84	1.85	0.00	0.00	1.89	5.10	0.00	0.00	0.00	0.00
5	Sri Bagan	0.82	1.01	1.76	5.33	0.00	0.67	4.49	0.00	0.00	1.26	3.81
6	Kuala	1.69	0.84	1.64	5.11	0.00	2.90	5.75	0.00	0.00	2.91	1.33
7	Seknan	0.25	1.07	0.84	0.00	0.00	0.18	0.00	0.00	0.00	3.26	3.31
8	Bujan	0.04	1.06	1.43	0.00	0.00	1.45	0.00	4.18	0.00	0.64	0.17
9	Stabat	0.12	0.58	10.87	0.00	0.00	7.34	0.00	2.41	0.00	1.48	0.04
10	Wangsas	0.52	1.05	0.69	0.51	0.00	1.00	0.00	0.00	0.00	3.05	0.70
11	Batang Serangan	1.12	1.00	0.37	0.71	4.57	0.37	1.05	0.00	0.00	2.57	10.15
12	Semat Seberang	3.88	0.75	2.59	0.00	0.00	3.76	0.00	0.00	0.00	0.00	0.17
13	Padang Tualang	1.78	0.93	1.85	8.76	0.00	3.00	1.84	0.00	0.00	1.10	0.59
14	Hinan	0.06	1.08	1.73	0.00	0.00	0.81	0.00	0.00	0.00	1.19	1.25
15	Serampangan	0.01	1.07	4.68	0.00	0.00	4.27	0.00	1.17	8.56	0.00	0.71
16	Tanjung Pura	0.00	1.09	1.51	0.00	0.00	1.36	0.00	0.00	0.00	0.71	2.54
17	Cebang	0.10	1.88	1.33	0.00	0.00	4.73	0.00	0.00	0.00	0.79	2.05
18	Jubatan	6.36	0.55	0.28	0.00	0.00	4.96	0.00	0.00	0.00	1.40	0.63
19	Sri Lagan	1.24	0.99	0.35	1.12	0.00	0.20	0.38	0.00	0.00	4.16	2.07
20	Berasid Buarit	0.28	1.06	0.87	0.00	0.00	0.87	0.00	0.00	0.00	0.00	1.10
21	Beutung	0.29	1.06	0.93	0.00	0.00	0.21	0.00	0.00	0.00	0.91	26.55
22	Pangkaln Saus	0.22	1.06	3.06	0.00	0.00	1.28	0.00	0.00	0.00	0.00	1.41
23	Pematang Jaya	0.36	1.06	1.31	0.00	0.00	0.93	0.00	0.00	0.00	0.00	0.00
	Total	27.65	22.12	45.53	22.95	18.96	48.19	21.95	7.77	8.56	23.16	62.18

Source: Data processed by Researchers

Where,
 = base (with value LQ >1)
 = Non Base (with value LQ ≤ 1)

Concentration Index Methods (CI)

Table 4: The calculation of Concentration Index (CI) Value

Langkat Workforce	Number of population Langkat (Jiwa)	North Sumatra Work Force	Total Population of SUMUT (Jiwa)	Concentration Index Value (CI)
454,350	1,013,385	6,391,098	13,937,797	0.98

Source: Data processed by Researchers

Specialization Index Methods (SI)

Table 5: The calculation of Index Specialization Value (SI)

Main Employment Field	(1)	(2)	(3)	(4)	(4) - (3)
	Work Force Langkat	Work Force Sumut	Work Force Langkat (%)	Work Force Sumut (%)	
Agriculture, Forestry And Fishing	182,111	2,619,010	44.6	41.3	(3.3)
Mining And Quarrying	9,160	36,001	2.2	0.5	(1.8)
Manufacturing	32,831	396,744	8.0	7.6	0.5
Electricity, Water Supply And Gas	0	52,594	0.0	0.2	0.2
Construction	23,740	333,268	5.8	6.0	0.2
Trade, Hotel and real estate activities	83,660	1,013,577	20.5	21.3	0.9
Transportation and communication	13,285	38,929	3.3	5.4	2.2
Financial and insurance activities	7,210	51,323	1.8	2.3	0.5
Social Service	56,685	338,310	13.9	15.5	1.6
Others	0	406,208	0.0	0.0	0.0
Total	408,682	4,879,756	100.0	100.0	1.0

Source: Data processed by Researchers

The total of all the differences is positive 1. The Specialization Index (SI) is 1/100 = 0.1, this value does not show significant differences in distribution for each sector. In other words, SI = 0.1, the distribution of the workforce of an activity sector in Langkat Regency is the same as in the North Sumatera Province. Furthermore, there is a relative over representation in the mining and quarrying sector. Furthermore, it also seems that over representation is relatively in the agricultural sector (the difference in value is negative because the percentage of North Sumatera Province is lower than the value of Langkat District).

Location Index Methods (LI)

Table 6: The calculation of Index Location Value (LI)

Main Employment Field	(1)	(2)	(3)	(4)	(4)-(3)
	Work Force Langkat	Work Force Sumut	Work Force Langkat (%)	Work Force Sumut (%)	
Agriculture, Forestry And Fishing	182,111	2,619,010	44.6	53.7	9.1
Mining And Quarrying	9,160	36,001	2.2	0.7	(1.5)
Manufacturing	32,831	396,744	8.0	8.1	0.1
Electricity, Water Supply And Gas	0	52,594	0.0	1.1	1.1
Construction	23,740	333,268	5.8	6.8	1.0
Trade, Hotel and real estate activities	83,660	1,013,577	20.5	20.8	0.3
Transportation and communication	13,285	38,929	3.3	0.8	(2.5)
Financial and insurance activities	7,210	51,323	1.8	1.1	(0.7)
Social Service	56,685	338,310	13.9	6.9	(6.9)
Others	0	406,208	0.0	8.3	8.3
Total	408,682	4,879,756	100.0	100.0	1.0

Source: Data processed by Researchers

The total of all positive differences is 8.3, then the Location Index (LI) = $8.3 / 100 = 0.083$. Based on the calculation of the Location Index (LI) = 0, the distribution / distribution in the area for the sector is the same as the distribution of the "reference variable". Then it is relatively balanced.

Revealed Comparative Advantage Methods (RCA)

Table 7: Level of Competitiveness of Plantation Export Products in North Sumatra Province

Years	Coffee	Tobacco	Rubber
2007	1.12	1.06	1.58
2008	1.77	1.26	1.82
2009	1.28	0.86	1.29
2010	1.12	1.13	1.33
2011	1.09	1.27	1.18
2012	1.07	1.34	1.17
2013	1.04	1.47	1.11
2014	1.11	1.40	1.01
2015	0.79	1.65	1.00
2016	0.90	1.91	1.19
2017	0.95	1.71	1.14

Source: Data processed by Researchers

Based on the table above, the calculation of the RCA Index is if the value of an RCA of a

commodity is more than one ($RCA > 1$), the commodities of Rubber Tobacco and Gum in North Sumatra Province have competitiveness above the average of exports of Indonesian Rubber Tobacco and Sap. If the RCA value is less than one ($RCA < 1$), the competitiveness of North Sumatra Province's coffee commodity exports do not have competitiveness against commodity exports of Indonesian Coffee.

5 RESULTS

Based on the results of Location Quotients Analysis (LQ) which shows that the commodity is LQ Value > 1 , it can be concluded that each sub-district has superior commodity (One District and One Commodity), which is based on the highest LQ value in each sub-district. the following: Bahorok Sub-district namely Rubber, Cinnamon, Areca Palm, Aren; Serapit District, namely Rubber, Cocoa, Areca Nut, Pecan; Salapian District, namely Rubber, Coffee, Cinnamon, Pecan, Aren; Kutambaru District, namely Rubber, Cocoa, Areca Palm, Pecan; Sei Bingai Sub-district namely Palm Oil, Cocoa, Coffee, Areca Palm, Pecan, Kapuk, Aren; Kuala Subdistrict namely Rubber, Cocoa, Coffee, Areca Palm, Pecan, Kapuk, Aren; Binjai Subdistrict namely Palm Oil, Kapuk, Aren; Stabat District, namely Cocoa, Areca Palm, Sugar Cane, Kapuk; Wampu District, namely Palm Oil, Cocoa, Areca Palm; Batang Serangan Subdistrict namely Rubber, Palm Oil, Cinnamon, Pecan, Kapuk; Seberang Sawit Subdistrict namely Rubber, Cocoa, Areca Palm; Padang Tualang Subdistrict namely Rubber, Cocoa, Areca Palm, Sugar Cane, Pepper; Hinai Subdistrict namely Palm Oil, Cocoa, Kapuk, Aren; Secanggang District, namely Palm Oil, Cocoa, Areca Palm, Sugar Cane, Pepper; Tanjung Pura Subdistrict namely Palm Oil, Cocoa, Areca Palm, Aren; Gebang District, namely Palm Oil, Cocoa, Areca Palm, Aren; Sei Lapan District, namely Rubber, Cocoa, Kapuk, Aren; West Brandan District, namely Palm Oil, Palm Sugar; Besitang District, namely Palm Oil, Palm Sugar; Pangkalan Susu Subdistrict namely Palm Oil, Cocoa, Areca Palm, Aren; Pematang Jaya District, namely Palm Oil, Cocoa.

The Total of all the differences is positive 1. The Specialization Index (SI) is $1/100 = 0.1$, this value does not show significant differences in distribution for each sector. In other words, $SI = 0.1$, the distribution of the workforce of an activity sector

in Langkat Regency is the same as in the North Sumatra Province.

The Total of all positive differences is 8.3, then the Location Index (LI) = $8.3 / 100 = 0.083$. then the distribution / distribution in the area for the sector is the same as the distribution of the "reference variable".

The Calculation of RCA, in 2017 coffee commodities from North Sumatra province did not have competitiveness against Indonesian coffee commodity exports because value of $RCA < 1$, but in the tobacco and natural rubber commodities had a value of $RCA > 1$ so that it had competitiveness above the average export of Indonesian rubber and tobacco

6 CONCLUSIONS

Based on the results of Location Quotients Analysis (LQ) which shows that the commodity is LQ Value > 1 , it can be concluded that each sub-district has superior commodity (One District and One Commodity), which is based on the highest LQ value in each sub-district. the following: Bahorok Sub-district namely Rubber, Cinnamon, Areca Palm, Aren; Serapit District, namely Rubber, Cocoa, Areca Nut, Pecan; Salopian District, namely Rubber, Coffee, Cinnamon, Pecan, Aren; Kutambaru District, namely Rubber, Cocoa, Areca Palm, Pecan; Sei Bingai Sub-district namely Palm Oil, Cocoa, Coffee, Areca Palm, Pecan, Kapuk, Aren; Kuala Subdistrict namely Rubber, Cocoa, Coffee, Areca Palm, Pecan, Kapuk, Aren; Binjai Subdistrict namely Palm Oil, Kapuk, Aren; Stabat District, namely Cocoa, Areca Palm, Sugar Cane, Kapuk; Wampu District, namely Palm Oil, Cocoa, Areca Palm; Batang Serangan Subdistrict namely Rubber, Palm Oil, Cinnamon, Pecan, Kapuk; Seberang Sawit Subdistrict namely Rubber, Cocoa, Areca Palm; Padang Tualang Subdistrict namely Rubber, Cocoa, Areca Palm, Sugar Cane, Pepper; Hinai Subdistrict namely Palm Oil, Cocoa, Kapuk, Aren; Secanggang District, namely Palm Oil, Cocoa, Areca Palm, Sugar Cane, Pepper; Tanjung Pura Subdistrict namely Palm Oil, Cocoa, Areca Palm, Aren; Gebang District, namely Palm Oil, Cocoa, Areca Palm, Aren; Sei Lapan District, namely Rubber, Cocoa, Kapuk, Aren; West Brandan District, namely Palm Oil, Palm Sugar; Besitang District, namely Palm Oil, Palm Sugar; Pangkalan Susu Subdistrict namely Palm Oil, Cocoa, Areca Palm, Aren; Pematang Jaya District, namely Palm Oil, Cocoa.

The total of all the differences is positive 1. The Specialization Index (SI) is $1/100 = 0.1$, this value does not show significant differences in distribution for each sector. In other words, $SI = 0.1$, the distribution of the workforce of an activity sector in Langkat Regency is the same as in the North Totalatra Province. Furthermore, there is a relative over representation in the mining and quarrying sector. Furthermore, it is also seen that over representation is relatively in the agricultural sector (the difference in negative values is because the percentage of North Totalatra Province is lower than the value of Langkat Regency).

The total of all positive differences is 8.3, then the Location Index (LI) = $8.3 / 100 = 0.083$. Based on the calculation of the Location Index (LI) = 0, the distribution / distribution in the area for the sector is the same as the distribution of the "reference variable". Then it is relatively balanced.

Based on the table above, the calculation of the RCA Index is if the value of an RCA of a commodity is more than one ($RCA > 1$), the commodities of Rubber Tobacco and Gum in North Sumatra Province have competitiveness above the average of exports of Indonesian Rubber Tobacco and Sap. If the RCA value is less than one ($RCA < 1$), the competitiveness of North Sumatra Province's coffee commodity exports do not have competitiveness against commodity exports of Indonesian Coffee.

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