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## THE ROLE OF LEADING SECTOR IN REALIZING INCLUSIVE ECONOMIC DEVELOPMENT IN NORTH CENTRAL TIMOR DISTRICT

*Peran Sektor Unggulan Dalam Mewujudkan Pembangunan Ekonomi Inklusif di Kabupaten Timor Tengah Utara*

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### ABSTRACT

*Inclusive economic development prioritizes equity in order to realize economic justice for all. Therefore, each local government is expected to be able to optimize the leading sector so that it can act as the locomotive of the regional economy. This study aims to determine changes and shifts in the economic sector and then formulate appropriate strategies in developing leading sectors in realizing quality development in North Central Timor Regency. The analytical tools used are Shift Share analysis, Klassen typology and SWOT analysis. The type of data used is primary data for the needs of SWOT analysis and secondary data for the needs of shift share analysis and classification typology, especially GRDP and Employment data per sector from 2015-2020. The results of the study show that the agricultural sector is the leading sector because it has the largest contribution value in the formation of GRDP but on the other hand it also holds various poverty problems in it. From these conditions, the results of the SWOT Analysis recommend the right policy in an effort to realize inclusive development is the Strength-Opportunity (SO) Strategy where the government is expected to take advantage of the strengths of the agricultural sector by looking at all aspects of the opportunities that exist.*

**Keywords:** *inclusive economic development, leading sector, shift-share, typology analysis*

## ABSTRAK

*Pembangunan ekonomi inklusif mengutamakan pemerataan guna mewujudkan keadilan ekonomi bagi seluruh lapisan masyarakat. Oleh karena itu, sudah seharusnya setiap pemerintah daerah diharapkan mampu mengoptimalkan sektor unggulan agar dapat berperan sebagai lokomotif penggerak ekonomi daerah. Penelitian ini bertujuan untuk mengetahui perubahan dan pergeseran sektor perekonomian kemudian merumuskan strategi yang tepat dalam pengembangan sektor unggulan dalam mewujudkan pembangunan yang berkualitas di Kabupaten Timor Tengah Utara. Alat analisis yang digunakan adalah analisis Shift Share, Tipologi Klassen dan SWOT Analisis. Jenis data yang digunakan adalah data primer untuk kebutuhan analisis SWOT dan data sekunder untuk kebutuhan analisis shift share dan tipologi kelas, terkhususnya data PDRB dan Tenaga Kerja per sektor dari tahun 2015-2020. Hasil penelitian menunjukkan bahwa Sektor pertanian merupakan sektor unggulan karena memiliki nilai kontribusi terbesar dalam pembentukan PDRB akan tetapi disisi lain juga menyimpan ragam permasalahan kemiskinan didalamnya. Dari kondisi ini maka hasil Analisis SWOT merekomendasikan kebijakan yang tepat dalam upaya mewujudkan pembangunan yang inklusif adalah Strategi (SO) Strength-Opportunity dimana pemerintah diharapkan memanfaatkan kekuatan sektor pertanian dengan melihat segala peluang yang ada.*

**Kata Kunci:** *pembangunan ekonomi inklusi, sektor unggulan, shift share, tipologi kelas*

## INTRODUCTION

In the last decade, inclusive economic development has begun to receive serious attention from the world economic body. Through the Secretary General of the United Nations, at the 15th General Conference of the United Nations Industrial Development Organization on December 2-6 in Lima-Peru City, he emphasized that every country needs to implement inclusive and sustainable development (Gupta & Vegelin, 2016). The National Development Planning Agency (Bappenas) defines Inclusive Economic Development as an effort to create economic growth with the principle of making it easy for all levels of society in accessing broad job opportunities in an equitable manner, increasing welfare and reducing disparities between groups and regions (Hartati, 2021).

One of important determining factors in realizing economic justice is employment opportunities. There is a negative linearity relationship between job opportunities and unemployment. The higher the job opportunities obtained by a person, the number of unemployment rates will decrease so as to create conducive economic conditions (Gupta & Vegelin, 2016). Under conditions of full employment, it will create sustainable development and at the same time increase inclusiveness (Suryanto, 2014).

East Nusa Tenggara Province is one of the provinces that has a fairly crucial poverty problem. The Central Bureau of National Statistics (2021), noted that nationally Nusa Tenggara Timur Province was in the 32nd position out of a total of 34 provinces in Indonesia as the poorest province. Only two levels above the Provinces of Papua and West Papua. One of the factors causing the high poverty rate is because there are still symptoms of exclusivity in regional development. The exclusivity of regional development that occurs not only between districts or cities but also between cities and villages. This condition occurs as a result of the characteristics of the region in NTT Province which geographically consists of many islands causing development connectivity between one region and another in infrastructure development such as access to transportation, energy and telecommunications which requires a very large budget so that it is difficult to realize. Indications of regional inequality can be seen from the level of community welfare and also the quality of economic development in various regions (Alfiansyah & Budyanra, 2020).

One of the areas in NTT Province that has a significant contribution in contributing to poverty is the North Central Timor Regency. The Central Bureau of Statistics of NTT Province (2021) noted that TTU Regency ranks eighth out of a total of 22 regencies/cities in NTT Province as an area with a fairly high percentage of poverty. The high poverty rate is also caused by the low performance of the regional economy which is shown by the low value of nine economic sectors in Gross Regional Domestic Product. Of the nine sectors, the agricultural sector has the largest contribution to the total Gross Regional Domestic Product of TTU Regency because most of the population are farmers.

Since 2015-2020, based on data released by the Central Statistics Agency (2021), the percentage of the most dominant economic sector is the agricultural sector at 45.07 percent. However, from year to year the contribution value of the agricultural sector is decreasing and this condition triggers higher unemployment and poverty rates. In 2015 the percentage of the poverty rate was 21.33 percent and increased in 2020 by 24.07 percent. It is clear here that although the agricultural sector has the largest contribution to North Central Timor Regency's GRDP and can be said to be the leading sector, it has not been able to reduce the number of poor people.

Recognizing that poverty is a multidimensional problem with various characteristics in it, it needs to receive serious attention from all stakeholders and be addressed immediately because it involves human dignity. Poverty alleviation in the regional context requires harmonization of program integration in every relevant agency, both government agencies, businesses, financial institutions and banks with the participation of the wider community (Prawoto., 2010). The main problems faced by agricultural development are disparities in access to production factors, both inputs and outputs, inequality in land

ownership and technology accessibility. This condition causes low community income and high levels of poverty in the agricultural sector (Nalle., 2018).

Responding to these conditions, one way that can be taken by local governments in an effort to reduce regional development inequality is to explore and utilize the potential of leading sectors so that they can be used as the main locomotive for driving the economic sector and other sub-sectors. In principle, regional development must be oriented towards solving problems of poverty alleviation, unemployment and inequality between regions (Kamaruddin & Alam, 2019).

The agricultural sector has an important role as a driving force for the economy of NTT Province, but the performance of this sector tends to be less than optimal as reflected in the ability to absorb labor which is relatively declining. The role of local governments to encourage the performance of leading sectors is the main key to its success. Based on these conditions, it is necessary to study how the pattern of shifting economic sectors and the classification of economic sectors in regional development planning is needed because the growth of the economic sector will provide a multiplier effect on other sectors and can improve the economy. growth (Pasaribu et al, 2020).

The formulation of local government policies in supporting appropriate regional development programs and accommodating regional potential will also affect a series of integrated economic activities in various sectors and sub-sectors of the economy so that the main target of development goals such as job creation, increase income, animate investment passion and diversify economic activities can be achieved.

By mapping economic potential based on leading sectors, there are several important things that can be obtained by local governments in developing investment interests, including; *First*, the government has a valid database so that it can be used as promotional material to attract investors and also negotiate with the central government in support of development programs prioritized by the regions. *Second*; the government can develop various policy frameworks that are more targeted and systematic that are able to eliminate challenges and obstacles, both structural, institutional and legal in business development and regional investment (Prawoto, 2010).

Realizing the importance of the government's role in realizing inclusive development based on the mapping of leading sectors, the main objectives of this research are: 1) To find out the pattern of changes and shifts in the regional economic sector; 2) Knowing the classification of economic sector growth and; 3) To find out the right strategy in developing leading sectors so that they are able to realize inclusive economic development in TTU Regency.

## RESEARCH METHOD

This research is a type of qualitative research using data from the publications of the Central Statistics Agency for the Province of NTT from 2015-2020. There are several stages of analysis to find out the shift and mapping of leading sectors so that they can determine the right strategy to realize inclusive development. The data collection technique used is by (i) observation; This is done by making direct observations of the object of research such as various farmer activities ranging from pre-production to marketing of agricultural products. (ii) interviews; It is intended that researchers get complete information on various series of agricultural production activities and also the obstacles faced. (iii) documentation; collect publication data that are directly related to the need for data analysis such as economic growth data for TTU Regency and NTT Province, sectoral growth rate data for TTU Regency and NTT Province, labor data per sector that exists both in TTU Regency and in NTT Province. Then the last data collection technique is (iv) by compiling and distributing questionnaires; it is intended that researchers obtain information related to indicators of strengths, weaknesses, opportunities and threats in relation to the development of leading sectors.

In addition to secondary data in the form of publications from BPS NTT Province and TTU Regency, the type of primary data used for SWOT analysis needs. Therefore, the sample in this study is the Regent of the Head of the Level II Region of TTU Regency as the owner of the regional development program, the Head of the Regional Development Planning Agency (Bappeda) of TTU Regency, several competent academics in the field of agricultural sector development, agricultural business actors and also several academics. active farmers who live in Sasi Village, TTU Regency, so the number of samples used is 60 respondents.

In an effort to achieve the research objectives, there are several stages and analytical tools used, including: *First*; Shift Share analysis. This analysis was conducted to determine the economic performance of the analysis area compared to the higher reference area. Shift Share analysis is an analytical tool that is very appropriate to use to see changes and shifts in the structure of the regional economy. In this analysis the GRDP variable is used to describe economic growth in TTU Regency as an analysis area compared to the reference area in this case the NTT Province. The shift share analysis itself consists of three main components, which include national share values, differential shifts, and proportional shifts. Tarigan (De Fretes, 2017).

*Second*; Classification Typology Analysis. According to Mahmudi (Wahyuningsih, 2021), the typology of classification is the mapping or classification of an economic sector into four main quadrants based on the value of economic growth and the contribution of each economic sector in the formation of the GRDP of a particular region. This sectoral classification is

divided into 4 quadrants consisting of leading sectors, potential sectors, developing sectors and lagging sectors. By determining the average economic growth as the vertical axis and the average income per capita as the horizontal axis, then dividing it into four quadrants, accurate results will be obtained regarding the classification of leading, potential, developing and underdeveloped sectors.

*Third;* SWOT analysis. Freddy Rangkuti (Astuti & Ratnawati, 2020), explains that the SWOT analysis is a study based on the systematic and measurable identification of various factors, both internal and external to determine the right strategy for companies/institutions or government agencies. The results of the identification of internal factors are classified as strengths and weaknesses known as the Internal Factor Analysis Summary (IFAS) which consists of strengths and weaknesses. While external factors are known as External Factor Analysis Summary (EFAS) which consists of opportunities and threats. The results of the comparative analysis of IFAS and EFAS produce a SWOT matrix to determine the right strategy in developing leading sectors in order to realize inclusive development in TTU Regency.

## RESULT AND DISCUSSION

### Shift Share Analysis

In principle, shift share analysis is used to see the pattern of changes in the shift in economic structure by comparing the GRDP growth value of each sector in the analysis area with the GRDP value in areas with higher status (reference areas/national regions). Shift Share analysis components will be divided into three components, namely National Share, Proportional Shift and Differential Shift. The share component is the value of National Share ( $N_s$ ), which is a component that shows the magnitude of the change in the Regency's GRDP if the proportion of changes is the same as the national growth rate during the 2015-2020 period. While the shift component is the deviation from the national share in the growth of the GRDP value in the analysis area which can be seen from the value of the Proportional Share and Differential Shift components. So that the increase in the GRDP value of a sector can be broken down from the National Share, Proportional Shift and Differential Shift or if it is formulated  $\Delta E_{r,i,t} = (N_{s,i} + P_{r,i} + D_{r,i})$ . The table below shows the development of TTU Regency's GRDP value between 2015 and 2020, for comparison, Provincial GRDP data is used for the same period.

Table 1 Analysis of Shift Share of North Central Timor Regency on the basis of Constant Prices by Business Sector (Million Rupiah). 2015-2020

Sector	GRDP of NTT Province (Million Rupiah)			TTU Regency GRDP (Million Rupiah)		
	2015	2020	$\Delta E_{N.i,t}$	2015	2020	$\Delta E_{r.i,t}$
	$E_{N.i,t-n}$	$E_{N.i,t}$		$E_{r.i,t-n}$	$E_{r.i,t}$	
Agriculture	14,244.98	16,504.10	2,259.12	278,987.59	1,384,444.70	1,105,457.11
Mining and excavation	664.14	880.1	215.96	6,534.32	65,799.80	59,265.48
Processing industry	587.15	745.2	158.05	8,247.86	36,119.10	27,871.24
Electricity. Gas And Clean Water	58.77	87	28.23	1,742.36	2,286.20	543.84
Construction	4,834.57	6,543.00	1,708.43	32,101.50	334,370.30	302,268.80
Trade. Hotel and Restaurant	5,354.16	7,320.00	1,965.84	37,705.97	187,739.60	150,033.63
Transportation and Communication	6,053.12	8,292.70	2,239.58	33,226.22	351,869.80	318,643.58
Finance. Leasing and Corporate Services	2,932.22	4,037.30	1,105.08	13,969.54	155,203.00	141,233.46
Other Services	11,605.01	15,366.30	3,761.29	99,200.47	790,110.70	690,910.23
<b>Amount</b>	<b>46,334.12</b>	<b>59,775.70</b>	<b>13,441.58</b>	<b>51,1715.83</b>	<b>3,307,943.20</b>	<b>2,796,227.37</b>

Source: Processed Secondary Data Year 2021.

### Calculation of National Share (Ns)

In this analysis, the aim to be obtained is to obtain information on how the influence of national economic growth can have an impact on the value of the economic sectors that make up GRDP in the analysis area. Where in this study the reference area or reference area is NTT Province, while the analysis area is TTU Regency. o be able to know the results of the calculation of the National Shares can be seen in the following table.

The National Share Value explains the increase in the economic sector in the formation of the total value of GRDP in the analysis area and its contribution to the reference area. Based on the results of data analysis in table 2 above, it can be seen that during the 2015-2020 observation period the regional economic performance in TTU Regency experienced an absolute increase of Rp. 148.397.590.000. The biggest contribution in contributing to the regional income of TTU Regency comes from the agricultural sector with a value of Rp. 80,906,400,000 followed by the service sector of Rp. 28.768.590.000 and the Hotel and Restaurant Trade sector of Rp. 10.934.730.000 and the transportation and communication sector of Rp. 9.635.600.000. These results also explain that the economic performance of the TTU Regency area is still very much dominated by the agricultural sector and there is even a disparity in sectoral contributions that

is very unbalanced between the agricultural sector and other economic sectors. Increasing the contribution of the agricultural sector to the formation of regional GRDP is believed to reduce income disparities (Hamdika et al., 2019).

Table 2. National Share (NS) of TTU Regency in 2015-2020

Sector	$E_{r,t,t-n}$	$\frac{E_{r,t,t-n}}{E_{r,t,t-n}}$	C	National Share
	(a)	(b)	(a),x,(b)	(c),-(a)
Agriculture,	278,987.59	1.29	359,893.991	80,906.40
Mining,and,excavation	6,534.32	1.29	8,429.2728	1,894.95
Processing,industry	8,247.86	1.29	10,639.7394	2,391.88
Electricity.,Gas,,And,Clean,Water	1,742.36	1.29	2,247.6444	505.28
Construction	32,101.50	1.29	41,410.935	9,309.44
Trade.,Hotel,and,Restaurant	37,705.97	1.29	48,640.7013	10,934.73
Transportation,and,Communication	33,226.22	1.29	42,861.8238	9,635.60
Finance.,Leasing,and,Corporate,Services	13,969.54	1.29	18,020.7066	4,051.17
Other,Services	99,200.47	1.29	127,968.606	28,768.14
<b>Amount</b>	<b>511,715.83</b>	<b>11.61</b>	<b>660,113.421</b>	<b>148,397.59</b>

Source: Processed Secondary Data Year 2021

### Proportional Shift Calculation

This component of the analysis aims to find out how the proportion of sectoral growth forming GRDP is in the analysis area (TTU Regency) and in the reference area (NTT Province). The results of the calculation of the proportional shift component can be seen in the table 3.

From Table 3, it is known that the areas shaded in red indicate that the sector in TTU Regency is growing slower than the proportion of growth in its national territory, where from the results of the proportional shift analysis it is known that there are 2 sectors in TTU Regency which are slower than the Provincial area NTT, namely the Agriculture sector and the Manufacturing Industry sector. The local government should pay more attention to the agricultural sector and also the manufacturing industry sector about how these sectors have a large positive impact on regional economic growth because the agricultural sector is believed to be the mainstay sector in TTU Regency and as a locomotive for other sectors to grow and develop. The author recommends agriculture policies taken by the TTU Regency government are to expand agriculture, facilitate market access, provide subsidies in the form of superior seeds, develop technology in agricultural development, eliminate slash-and-burn agriculture, and improve the quality of human resources. this making a

major contribution to the agricultural sector can grow and develop rapidly and have a good impact on regional income or regional economic growth.

Table 3 Calculation of Proportional Shift in TTU Regency 2015-2020

Sector	$E_{r,i,t-n}$	$\frac{E_{,Nit}}{E_{,Nit-n}}$	$\frac{E_{,Nt}}{E_{,Nt-n}}$	(d)	Proportional Share
	(a)	(b)	(c)	(b)-(c)	(a) x (d)
Agriculture	278,987.59	1.16	1.29	-0.13	-36,268.3867
Mining and excavation	6,534.32	1.32	1.29	0.03	196.0296
Processing industry	8,247.86	1.27	1.29	-0.02	-164.9572
Electricity. Gas And Clean Water	1,742.36	1.48	1.29	0.19	331.0484
Construction	32,101.50	1.35	1.29	0.06	1926.09
Trade. Hotel and Restaurant	37,705.97	1.37	1.29	0.08	3,016.4776
Transportation and Communication	33,226.22	1.37	1.29	0.08	2,658.0976
Finance. Leasing and Corporate Services	13,969.54	1.38	1.29	0.09	1,257.2586
Other Services	99,200.47	1.32	1.29	0.03	2,976.0141
<b>Amount</b>	<b>511,715.83</b>	<b>12.02</b>	<b>11.61</b>	<b>0.41</b>	<b>-24,072.328</b>

Source: Processed Secondary Data Year 2021

### Differential Shift Calculation

In the analysis of the components of the Differential Shift, it is intended to be able to find out how the percentage of economic sectors that make up GRDP in the analysis area has a competitive advantage or competitive sector compared to the same sector in the analysis reference area. In this study, the analysis area is TTU Regency and the reference/reference area is NTT Province. To find out the results of data analysis can be seen in the table 4.

Based on the Differential Shift analysis, it is known that there are 8 sectors in TTU Regency that are growing faster based on internal location factors, namely the Agriculture, Mining and Quarrying, Processing Industry, Construction, Trade, Hotel and Restaurant, Transportation and Communication, Finance, Rental and Company Services, and Other Services. Meanwhile, 1 sector experienced negative growth, namely the Electricity, Gas and Clean Water sector.

Table 4 TTU Regency Differential Shift Calculation for 2015-2020

Sector	$E_{r.i.t}$	$\frac{E_{,Nit}}{E_{,Nit-n}}$	$E_{r.i.t-n}$	(d)	Differential Shift
	(a)	(b)	(c)	(b) x (c)	(a) - (d)
Agriculture	1,384,444.70	1.16	278,987.59	323,625.6044	1,060,819.10
Mining and excavation	65,799.80	1.32	6,534.32	8,625.3024	57,174.50
Processing industry	36,119.10	1.27	8,247.86	10,474.7822	25,644.32
Electricity. Gas And Clean Water	2,286.20	1.48	1,742.36	2,578.6928	-292.49
Construction	334,370.30	1.35	32,101.50	43,337.025	291,033.28
Trade. Hotel and Restaurant	187,739.60	1.37	37,705.97	51,657.1789	136,082.42
Transportation and Communication	351,869.80	1.37	33,226.22	45,519.9214	306,349.88
Finance. Leasing and Corporate Services	155,203.00	1.38	13,969.54	19,277.9652	135,925.03
Other Services	790,110.70	1.32	99,200.47	130,944.6204	659,166.08
<b>Amount</b>	<b>3,307,943.20</b>	<b>12.02</b>	<b>511,715.83</b>	<b>636,041.0927</b>	<b>2,671,902.11</b>

Source: Processed Secondary Data Year 2021

The electricity, gas and clean water sectors have a negative value, meaning that this sector is growing slower than the national level due to internal location factors, namely this sector is proven to have the smallest contribution role out of the other eight sectors. Local governments must be able to develop this sector so that in the future it can grow and develop and make a major contribution to GRDP.

### Klassen Typology

The Klasen typology analysis in this study was used to determine the leading sectors in North Central Timor Regency based on sectoral potential mapping. The value used to determine the position of each sector which is divided into 4 quadrants based on the comparison of the average growth rate of the sector and also the value of the contribution of the economic sector between the analysis area (TTU Regency) and the regional reference represented by the NTT Province. The results of the analysis can be seen in table 5 below.

Table 5 Growth Rate and Contribution of the GRDP Sector of NTT Province and TTU Regency in 2015-2020

Sector	NTT Province		TTU District	
	Average Growth (S)	Average Contribution (Sk)	Average Growth (Si)	Average Contribution (Ski)
Agriculture	2,7	29,15	3,52	48,70
Mining and excavation	5,58	1,45	4,49	1,58
Processing industry	4,47	1,26	5,49	1,33
Electricity, Gas And Clean Water	14,56	0,14	10,57	0,2
Construction	6,33	10,63	4,63	8,27
Trade, Hotel and Restaurant	12,55	11,88	11,52	6,32
Transportation and Communication	11,94	13,41	8,68	8,95
Finance, Leasing and Corporate Services	24,77	6,62	14,30	3,63
Other Services	5,28	25,47	12,84	20,93

Source: Processed Secondary Data Year 2021

Table 6. Classification of TTU Regency Sector GRDP in 2015-2020 Based on Klassen Typology

Quadrant I	Quadrant II
An advanced and rapidly growing sector ( <i>developed sector</i> ) si > s dan ski > sk	Sector developed but depressed (stagnant sector) si < s dan ski > sk
1. Agriculture 2. Processing industry	3. Mining and excavation 4. Electricity, Gas. And Clean
Quadrant III	Quadrant IV
Potential sector or still developing ( <i>developing sector</i> ) si > s dan ski < sk	Relatively underdeveloped sector si < s dan ski < sk
5. Other Services	6. Construction 7. Trade, Hotel and Restaurant 8. Transportation and Communication 9. Finance, Leasing and Corporate Services.

Source: Processed Secondary Data Year 2021

In accordance with the results of the analysis in Table 6. In the GRDP of TTU Regency, there are sectors that are included in the developed and rapidly developing sectors, namely the agricultural sector with an average growth of 3.25 and an average contribution of 48,70. Meanwhile, the sectors that are included in the developed but depressed sector are the Mining and Excavation sector, as well as the Electricity, Gas and Clean Water sector. Sectors classified as potential sectors or still developing are other service sectors, while the sectors that are relatively lagging behind are the Construction sector, Trade, Hotel and Restaurant sector, Transportation and Communication sector, as well as the Finance, Leasing, and Corporate Services sector.

Based on the results of the classification typology analysis, the agricultural sector and the manufacturing industry sector are classified as advanced and growing rapidly in TTU Regency, but in the Shift Share analysis on the Proportional Shift component, these sectors are proven to experience slow growth to the GRDP of the Province of NTT. It can be concluded that although the agricultural sector is the leading sector because of its contribution and higher growth rate compared to the same sector in the reference area, in this case the NTT Province, but with a negative proportional shift value indicates that the agricultural sector does not have a competitive advantage compared to other sectors. The results of this study are not much different from those found by Sragen (2012) which explains that one of the sectors categorized as the leading sector in Sragen City is the agricultural sector but there are still various problems in its development.

Some of the basic problems that cause the low qualification of the agricultural sector as a leading sector are caused by several important factors, including Traditional agricultural patterns (sub systems), lack of access to technology and market access, low quality of human resources and no less important are caused by low added value due to untouched agribusiness and agro-industry in the agricultural sector (Syahza & Suarman, 2018).

## **SWOT Analysis**

After knowing the Shift Share value and grouping potential sectors through the Klassen Typology, the sectors that become potential sectors are the agricultural and the manufacturing industry sectors. The next stage is to conduct a follow-up study through a SWOT analysis with the aim that the author is able to find the right strategy in developing the agricultural sector which is believed to be the locomotive of the regional economy in an effort to realize inclusive economic growth in TTU Regency.

From the results of quantitative calculations, the next step is to interpret them in the form of a Cartesian Diagram (SWOT) to be able to find out the strategy for developing the agricultural sector in the future as follows:

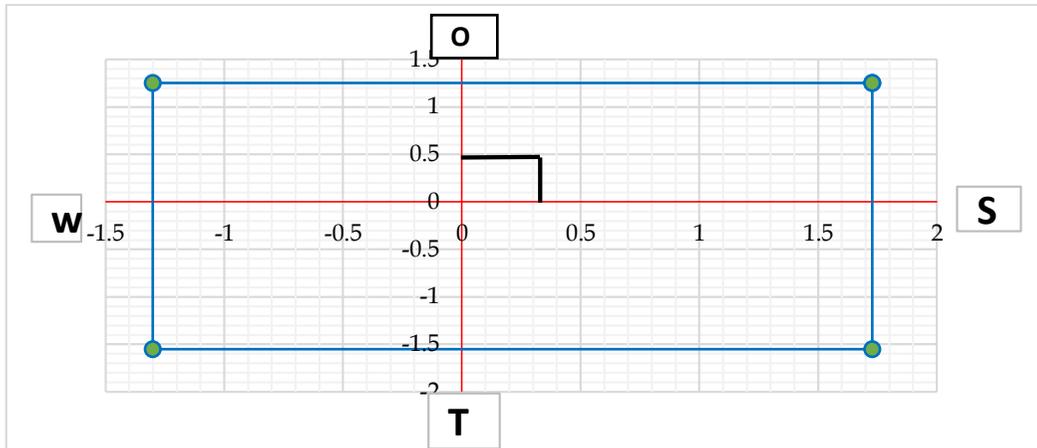


Figure 1  
SWOT Analysis Results

From the results of the quantitative SWOT analysis above, the agricultural sector in TTU Regency is in Quadrant 1 (Positive-Positive). This is because the analysis of internal factors for aspects of strengths and weaknesses represented by the horizontal axis of the accumulation of the average value on aspects of strength is higher than that of weakness. Likewise on the vertical axis which is the analysis of external factors, the opportunity aspect has a higher average value than the threat aspect. This position shows that the agricultural sector is in a fairly strong position and has the potential to continue to be developed. The strategic recommendation given is to develop more sectoral potential so that it can have a good impact on regional economic development in order to realize inclusive economic growth in TTU Regency.

The position of the Agricultural Sector is currently in cell 1 which shows the growth of the agricultural sector. Inside the cell, the internal-external (IE) matrix is the result of the intersection of the coordinates between the internal and external values. The agricultural sector has an IFAS value (strengths and weaknesses) of 3.25 which can be concluded that the agricultural sector is in a strong position, but the external condition (EFAS) is sufficient because it is in a position of 2.87. This means that the position of the agricultural sector is strong and high enough to continue to be empowered as a leading sector in realizing inclusive development. For more details, see the SWOT Matrix image below:

High 3	(1) Growth <b>Position Agriculture Sector</b>	(2) Growth	(3) Retrenchment
Currently 2	(4) Stability	(5) Growth	(6) Retrenchment
Low 1	(7) Growth	(8) Growth	(9) Retrenchment

Figure 2  
SWOT Analysis Matrix

Based on the results of data analysis obtained from shift share analysis and class typology, information is obtained that the agricultural sector is the leading sector and is believed to be able to encourage inclusive economic growth in North Central Timor Regency. This means that the largest absorption of labor is in the agricultural sector. However, the serious problem here is that the high contribution and rate of growth of the agricultural sector is inversely proportional to the magnitude of the poverty rate. The results of this study are also in line with the results of Syairozi research (2020) which revealed that the greatest poverty in Malang Regency is in the agricultural sector. The same thing was also expressed by (Ponto et al., 2015) who found that there was a fairly strong and negative correlation between the GRDP variable in the Agricultural Sector and poverty. This means that if the GRDP value of the agricultural sector is low, the poverty rate in the Sangihe Islands Regency will increase.

Realizing the importance of the contribution of the agricultural sector in realizing inclusive development, by looking at the results of the SWOT analysis, the position of TTU Regency in the development of the agricultural sector lies in determining the SO strategy. This is further strengthened by the results of sectoral classification analysis where the position of the agricultural sector has a strong position with high development potential. Therefore, strategic steps that can be taken by the regional government as the owner of the policy-making authority include:

**First;** Take a spatial approach and strengthen the analysis of the potential mapping of agricultural sub-sector commodities in all sub-districts in TTU Regency, totaling 24 sub-districts. This is done so that regional planners can find out where an area has a competitive advantage in agricultural production activities (Arifien et al., 2012). The results of other research conducted by (Arham et al., 2019) reveal that in planning the development of the agricultural sector in rural areas, accurate data information is needed about the various potentials possessed, so that regional planners are able to carry out well directed planning system in order to realize sustainable development.

*Second*, massive agricultural infrastructure development with adequate government budget support. The development of the agricultural sector that is mutually integrated with other sectors in order to overcome the relatively high poverty rate in TTU Regency must be directed with adequate budget support, both sourced from APBD funds and balancing funds sourced from the APBN. The development of agricultural infrastructure is closely related to the support of access to electricity and telecommunications networks, considering the topography of TTU Regency which is mountainous and quite wide. This is intended so that farmers have access to good communication in supporting agricultural production and marketing activities. In addition to electricity and telecommunications networks, other supporting infrastructure that is considered very urgent is adequate transportation facilities in the form of road access to facilitate the mobility of goods and services and increase the value of farming efficiency (Purwansyah et al., 2013). The high percentage of unpaved roads in TTU District makes it difficult for farmers to sell their agricultural products in urban areas. As a result, the nature of agricultural products that are not durable and easily damaged are widely used by farmers for their own household consumption needs. This is exacerbated by the minimal role of traditional markets that have been built by local governments in each central sub-district. The poor road infrastructure in every village in TTU Regency is a strong indication of regional development disparities. As Sutrisno (2012) found in his research, it was revealed that one of the causes of the high poverty rate in the agricultural sector is also caused by regional development disparities.

Furthermore, other supporting infrastructure currently needed by the farming community in TTU Regency is the construction of a large-scale irrigation system in the form of dams and reservoirs in each potential area to produce agricultural sub-sector commodities. Due to the lack of rainfall due to the long summer, the characteristics of the agricultural area in TTU Regency are characterized by dry land agriculture (Malelak., 2019). Realizing this condition, the local government through the relevant technical offices must strengthen agricultural production activities with the support of an adequate irrigation system. The importance of the irrigation system is one of the important factors that also affects the increase in productivity and welfare of farmers (Triasni., 2019).

*Third*, Strengthening Human Resources/Employment in the Agricultural Sector. Education is an important factor in relation to one's skills and expertise. Facts show that on average those who work in the agricultural sector are those with low education. The average age of the workforce working in the agricultural sector is dominated by the elderly population, which can even be said to be a non-productive age group. Almost no productive young people want to work in the agricultural sector even though they have a high level of education. The low interest of productive and educated youth groups who want to work in the

agricultural sector is more due to the image or perspective that reveals that the agricultural sector is identical with unskilled and dirty workers. In addition, the agricultural sector is seen as a less promising sector as a hope for the future due to the low added value of the agricultural sector (Supriyati., 2019). This condition demands that every stakeholder, be it the government, non-governmental organizations, the private sector and academia, in accordance with their respective roles, increase understanding through various academic platforms and also training programs to increase interest in working in the agricultural sector.

*Fourth;* Build the concept of Agribusiness and strengthen the institutional system of the agricultural sector to support all series of farming activities. As found in this study, the average farmer in TTU District works as a sub-system farmer. This means traditional and conventional farming to meet the needs of daily life. Therefore, the general policy in the future that needs to get the main priority of all stakeholders is the improvement and empowerment of an integrated agribusiness system from upstream to downstream (Prawoto., 2010).

There are 4 main subsystems of agribusiness that institutionally need to be considered, including: *First;* up-stream agribusiness subsystem. This subsystem concerns the support for the availability of all forms of adequate agricultural production inputs so that every farmer in TTU Regency has the same opportunity to obtain them. Included in this sub-system include the provision of superior seeds, fertilizers, pesticides and also the provision of appropriate technology in processing agricultural land (Khairad., 2020). *Second;* agricultural subsystem (on farm agribusiness). In this subsystem what needs to be considered is the primary need in an effort to produce quality agricultural products. Cultivation of all commodities in the agricultural sector needs to get good support from the sub-system at the upstream level. The use of quality production inputs can increase the productivity of the agricultural sector (Mulyono et al., 2017). *Third;* Downstream subsystem (downstream agribusiness). The sub-system at the downstream level is related to marketing strategies and also the use of post-harvest technology in order to be able to increase the added value of the agricultural sector. Processed agricultural products need to get a touch of agroindustry. *Fourth;* agribusiness support subsystem (supporting institution). In this subsystem, the development of the agricultural sector needs support from various interrelated institutions. Among them are financial institutions both formal and informal, higher education institutions, research institutions, extension workers, information providers, support for transportation facilities and targeted government policies in the context of developing the agricultural sector. The existence of an integrated synergy between institutions is believed to be able to increase the competitiveness of the agricultural commodities produced and inclusive development in the TTU district can be realized (Khairad., 2020).

## CONCLUSION AND SUGGESTION

### Conclusion

Based on the results of the analysis and discussion of the data described above, several important things that can be concluded in this study include: the sector that has the largest National Share value is the agricultural sector, while the smallest value is in the Electricity, Gas and Clean Water sector. Based on the results of the Proportional Shift analysis, it is known that there are 2 sectors in TTU Regency which are slower than the NTT province, namely the Agriculture sector and the Manufacturing Industry sector. Based on the Differential Shift analysis, it is known that there are 8 sectors in TTU Regency that are growing faster based on internal location factors, namely the Agriculture, Mining and Quarrying sector, Processing Industry, Construction, Trade, Hotel and Restaurant, Transportation and Communication, Finance, Rental and Company Services. , and Other Services. Meanwhile, 1 sector experienced negative growth, namely the Electricity, Gas and Clean Water sector.

Based on Klassen's Typology analysis, the sectors that are included in the developed and developing sectors are the agricultural sector and the manufacturing sector. Meanwhile, the advanced but depressed sectors were the Mining and Excavation sector, as well as the Electricity, Gas and Clean Water sector. Furthermore, the potential sector is the service sector, while the sectors that are relatively lagging behind are the construction sector, the trade sector, hotels and restaurants, the transportation and communication sector, as well as the financial, leasing and corporate services sector.

Based on the results of data analysis regarding the position of the agricultural sector using a SWOT diagram and matrix analysis, it shows that the agricultural sector is in a growth phase. The development strategy that is suitable to be applied to the agricultural sector in TTU Regency is the SO (Strength-Opportunities) Strategy. This position shows that the agricultural sector is in a strong position and has great opportunities.

### Suggestion

Some of the main things that can be done by the Regional Government of TTU Regency to realize inclusive economic development through the role of the agricultural sector as a leading sector include: *First*; conduct spatial mapping of potential agricultural sub-sector commodities in all 24 sub-districts. *Second*; Provision of a budget that is more in favor of regional infrastructure development to remote villages, especially in areas that have the potential to produce superior commodities in the agricultural sector. *Third*; Strengthen the capacity of reliable Human Resources/Manpower in Agriculture through various trainings and formal education. *Fourth*; Applying the concept of

Agribusiness and strengthening the institutional system of the agricultural sector from upstream to downstream to support the entire series of farming activities.

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