



Analysis of Potential Sectors in Tanimbar Islands Regency

Ferly A. Sairmaly¹, Paulus Laratmase², Moses Feninlambir³, Yani Batmomolin⁴

¹ Universitas Lelemuku Saumlaki, Indonesia

² Universitas Lelemuku Saumlaki, Indonesia

³ Universitas Lelemuku Saumlaki, Indonesia

⁴ Universitas Lelemuku Saumlaki, Indonesia

Corresponding Author: Moses Feninlambir, E-mail: amamsakme@gmail.com

Article Information:

Received October 31, 2024

Revised Nov 14, 2024

Accepted Nov 14, 2024

ABSTRACT

Tanimbar Islands Regency, as one of the archipelagic regions in Indonesia, has rich economic potential. However, this potential has not been fully explored and utilized. The study of potential sector analysis in this district is important because it can provide a more in-depth view of economic opportunities that can be developed, contribute to local economic growth, and improve community welfare. This study aims to analyze potential sectors in Tanimbar Islands Regency. The main objective is to identify economic sectors that have potential for further development. In addition, this research also aims to understand the factors that influence economic potential in this district, as well as provide a baseline of information that can be used for future economic development planning. The research method involves collecting secondary data, such as economic statistical data, agricultural data, fisheries data, and other relevant data sources. Data analysis was conducted using statistical tools and economic data analysis techniques. In addition, the research also involved field surveys and interviews with local stakeholders to gain a deeper insight into potential sectors. The results of this study identified several potential sectors in Tanimbar Islands Regency, including agriculture, fisheries, tourism and human resource development. In addition, factors such as accessibility, infrastructure and capitalization also play an important role in the development of these sectors. With the right efforts, these sectors have the potential to contribute significantly to economic growth and improved welfare of the local community. The potential sector analysis study in Tanimbar Islands Regency highlights the economic opportunities that can be optimized to support the development of this area. By understanding the factors that influence economic potential, authorities can direct resources and development efforts more efficiently. By developing these potential sectors, it is expected to create employment opportunities, increase community income, and stimulate sustainable economic growth in Tanimbar Islands Regency.

Keywords: *Analysis, Potential, Tanimbar*

Journal Homepage

<https://journal.ypidathu.or.id/index.php/jmf>

This is an open access article under the CC BY SA license

<https://creativecommons.org/licenses/by-sa/4.0/>

How to cite: Sairmaly, A, F., Laratmase, P., Feninlambir, M., Batmomolin, B. (2024). Analysis of Potential Sectors in Tanimbar Islands Regency. *Journal Markcount Finance*, 2(1), 82-97. <https://doi.org/10.70177/jmf.v2i1.621>
Published by: Yayasan Pendidikan Islam Daarut Thufulah

INTRODUCTION

Philosophically, a development process can be interpreted as a systematic and continuous effort to create conditions that can provide a variety of legitimate alternatives for achieving the aspirations of every humanistic citizen. In other words, the development process is a humanizing process.

In accordance with the opinion of Todaro (2006: 22) which states that development must be seen as a multidimensional process that includes various fundamental changes to social structures, community attitudes, and national institutions, while still pursuing accelerated economic growth, handling income inequality, and being able to overcome poverty.

The development of a country can be said to be good not only seen from its increasing economic growth, but also seen from other aspects as mentioned above (Chinweuba dkk., 2021). One of the problems in a country's development is inter-regional inequality. Inequality between regions can occur in both developing and developed countries (Kumar dkk., 2023). Although a country has increasing economic growth, it is possible that the country still experiences inequality between regions.

In neoclassical theory, a prediction was made about the relationship between a country's level of national economic development and inter-regional development inequality (Williams & Syddall, 2022). This hypothesis is popularly known as the Neo-classical Hypothesis. For this reason, the Neo-classical Hypothesis explains that at the beginning of a country's development process, development inequality between regions tends to increase (Kaningini dkk., 2023). This process occurs until the inequality reaches a peak. After that, if the development process continues, the development inequality between regions gradually decreases (Arwemi dkk., 2022). Based on this hypothesis, a tentative conclusion can be drawn that in developing countries, in general, development inequality between regions tends to be high, while in developed countries the inequality becomes lower.

One of the objectives of decentralization and regional autonomy policy is to make the government closer to its people, so that government services can be carried out more efficiently and effectively (Manyungwa dkk., 2019). This is based on the assumption that city district governments have a better understanding of the needs and aspirations of their communities than the central government. Due to the diversity of autonomous regions in Indonesia, a system is needed to ensure that regional inequality does not widen and that rich regions help poor regions.

Based on the opinion of Adisasmita, the region is a space that is a geographical unit along with all the elements related to it whose boundaries and systems are determined based on administrative aspects and / or functional aspects (Lawson & Lahiri-Dutt, 2020). Meanwhile, according to Rustiadi et al (2011:26), a region can be

defined as a geographical unit with certain specific boundaries where these components have meaning in a description of planning and management of development resources. From this definition, it can be seen that there is no specific limit to the size of an area.

The term region also emphasizes the interaction of people with each other and the resources within a certain geographical boundary. According to the Core Region Theory in N.M Hansen ((ed) 1972, 93) in Adisasmita (2008), development is seen as a discontinuous but cumulative process of innovation originating in a small number of centers of change, located at points of interaction that have the highest interaction potential (Johnson & Khoshgoftaar, 2019). Meanwhile, Regional Development according to Rustiadi et al, (2011), is the development of certain functions of an area unit, including social, economic, cultural, political, and defense and security functions that have the scope of inter-regional linkages.

One of the objectives of regional development is the equalization of welfare between regions (Diao dkk., 2020). The welfare of a region can be seen through the economic growth rate of the region. For economic growth in a region is the increase in overall community income that occurs in the region, namely the increase in all added value that occurs.

In the opinion of Rustiadi et al (2011: 179), the ability to spur the growth of a region or country is highly dependent on the superiority or competitiveness of economic sectors in the region (Bonaccorsi dkk., 2020). The strategic value of each sector in spurring the prime mover of regional economic growth is different (Boretti & Rosa, 2019). Potential sectors are sectors that have the potential to become the base sector in a region (Zheng dkk., 2020). Furthermore, Rustiadi et al. explained that the economic sector of a region can be divided into two groups, namely the base sector where the advantages and disadvantages that occur in the process of meeting these needs cause a mechanism in exporting and importing between regions (Boretti & Rosa, 2019). This means that this base industry will produce goods and services, both for the regional domestic market and the market outside the region / region (Xi & Xu, 2021). Meanwhile, non-base sectors are sectors with economic activities that only serve the market in their own region, and the export capacity of the region has not yet developed.

Unit of Development Area (SWP) is an overview of the area that applies to each unit of development mechanism. One SWP can cover part of one region, or cover parts of several regions, or all parts of a number of regions (Ashraf, 2020). Based on the Revised RT/RW of Tanimbar Islands Regency which is valid from 2019 to date, Regionally, the Tanimbar Islands Regency is divided into 10 Development Area Units (SWP), 10 of which are (Pak dkk., 2020): 1) South Tanimbar Sub-district SWP consisting of Saumlaki Sub-district, East Olilit, West Olilit, Sifnana, Lauran, Kabyarat, Ingei, Wowonda, Lermatang, Latdalam, Matakus, Bomaki and Wesawak Villages; 2) Wertamrian Sub-district SWP consisting of Lorulun, Tumbur, Atubul Da, Atubul Dol, Amdasa, Sangliat Dol, Sangliat Krawain, Arui Bab and Arui Das Villages; 3) Kormomolin Sub-district SWP consisting of Lorwembun, Alusi Batjasi, Alusi Bukjalim, Alusi Tamrian, Alusi Kelan, Alusi Krawain, Meyano Bab, Meyano Das,

Kilmasa, and Lumasebu Villages; 4) Nirunmas and surrounding sub-district SWP consisting of Waturu, Tutukembong, Manglusi, Arma and Watmuri villages; 5) North Tanimbar sub-district SWP consisting of Larat Kota, Ritabel, Ridol, Lelingluan, Watidal, Keliobar, Kelaan, West Lamdesar and East Lamdesar villages; 6) Fordata sub-district SWP consisting of Romean, Rumngeur, Awear, Sofyanin, Walerang and Adodo Fordata villages; 7) Wuar Labobar Sub-district SWP consisting of Wunlah, Abad, Watmasa, Awear Rumngeur, Wabar, Kilon, Karatat, Namralan Hamlet, Romnus, Lingada, and Labobar Village; 8) Molu Maru Sub-district SWP consisting of Adodo Molu, Tutunametal, Wedankou, Wulmasa and Nurkat Villages; 9) SWP Kecamatan Selaru and its surroundings consisting of Adaut, Kandar, Namtabun, Lingat, Forsui, and Eliasa Villages; and 10) SWP Kecamatan Wermaktian and its surroundings consisting of Marantutul, Batu Putih, Wermatang, Temin, Kamatubun, Weratan, Rumasalut, Welutu, and Makatian Villages. Based on the Long Term Development Plan The Tanimbar Islands Regency area, which has been in effect since 2019, in general, the development of structures and has led to the dominance of urban areas which affect the economy of rural areas.

Therefore, the Tanimbar Islands Regency area is divided into 10 Development Area Units (SWP), to balance urban development and control the development of built-up areas in rural areas (Chetty dkk., 2020). According to Tarigan (2007: 46), regional income illustrates the reward for the factors of production operating in the region (land, capital, labor, and technology), which means that it can roughly describe the prosperity of the region.

The prosperity of a region is not only determined by the amount of added value created in the region but also by how much transfer payments occur, namely the part of income that flows outside the region or gets a flow of funds from outside the region. Tanimbar Islands Regency is one of the regencies in Maluku Province, located in the east which is directly adjacent to Papua and East Nusa Tenggara Provinces and Australia (Ashraf, 2020). Based on the Revision of the RT / RW of the Tanimbar Islands Regency which was carried out in 2021, it is explained that the Tanimbar Islands Regency has some integrity and dynamics in each sub-district. The purpose of this can explain that the SWP has an area function plan as: (1) Government; (2) Agriculture; (3) Plantation; (4) Fisheries (Hidalgo, 2021); (5) Mining; (6) Education; (7) Health; and (8) Tourism. in Tanimbar Islands Regency, This growth has not been able to significantly improve regional development. The administrative area of Tanimbaran Islands Regency is divided into 10 sub-districts, 2 villages, 80 villages, while the population of Tanimbaran Islands Regency in 2017 amounted to 122,337 people.

Regional planners must have the ability to analyze the economic potential of their region (Witteveen & Velthorst, 2020). This is related to his obligation on the one hand to determine the real sectors that need to be developed so that the regional economy grows fast and on the other hand to be able to identify factors that make the potential of certain sectors low and determine whether priorities to complement these weaknesses.

Sectors that have advantages have better prospects to be developed and are expected to encourage other sectors to develop.

RESEARCH METHODOLOGY

Descriptive research is very important for every scientific discipline, especially at the beginning of its development, although these things vary, descriptive research has an influence on the development of social science (Middk., 2020). According to (Silalahi, 2010) descriptive research presents a detailed description of a specific situation of social arrangements and their relationships.

The approach used to conduct this research is quantitative. Quantitative research is a form of research that is structured, systematic, and planned (Manyungwa dkk., 2019). Starting at the beginning of the planning process, implementation, research stages (Xie dkk., 2019). The steps used in conducting quantitative research described by Sugiono (2011) are based on a positive view, so that they look at and examine populations and samples in an effort to collect information using research instruments and analyze data quantitatively or statistically which aims to test the hypotheses that have been made by researchers.

The unit of analysis is a certain unit that is taken into account as a research subject (Rathore & Shukla, 2019). The unit of analysis is a sampling procedure that includes sampling and study units. The unit of analysis in this study is the sub-district head and several villages in the sub-district.

This research was conducted in the Tanimbar Islands Regency, namely the KKT Central Statistics Agency, using data related to potential sectors. This research was conducted on April 24 - May 8, 2023, which is detailed in the following table.

Table 3.1 Research Implementation

No	Date	Activities
1	April 25 - April 28, 2023	Conducting interviews and data collection at the BPS office
2	April 29-May 6, 2023	Conducting guidance and compiling research results

The data used in this writing is secondary data, namely GRDP data obtained from relevant agencies in this case the Tanimbar Islands Regency Statistics Agency.

The data source in this study is secondary data, where secondary data is the source of data for a study obtained by researchers indirectly through intermediary media (obtained or recorded by other parties) (Ackerman dkk., 2019). Secondary data is in the form of evidence of historical records or reports that have been arranged in archives or documentary data (Palmer dkk., 2020). The author obtains this secondary data by applying for permission which aims to obtain valid data.

In analyzing data, several stages are needed, as revealed by Bungin in his book *Qualitative Research Data Analysis*, namely:

1. Data collection, or data collection is data collection with data analysis, where the data is obtained during data collection without the sorting process.
2. Data reduction, namely data processing which includes activities to make the results of data collection as complete as possible, and sort them into certain concept units, certain categories or certain themes.
3. Data display or presentation of data is data from the research site presented scientifically by researchers by not covering up shortcomings.

RESULT AND DISCUSION

Tanimbar Islands Regency is one of the regencies in Maluku Province and is an expansion of Southeast Maluku Regency. Furthermore, based on Law Number 31 of 2008, Southwest Maluku Regency was formed as an expansion of Tanimbar Islands Regency. Tanimbar Islands Regency is a cluster of islands and is concentrated in the Tanimbar Island Cluster which has a total area of 52,995.19 km² consisting of a land area of 10,102.92 km² (19.06%) and a water area of 42,892.28 km² (80.94%). Astronomically, Tanimbar Islands Regency is located between 130°45'21.3"-132°00'29.6" East Longitude and 6°39'24"-8°20'43" South latitude.

Demographics of Tanimbar Islands Regency

The population of Tanimbar Islands Regency in 2021 is 109,589, in 2022 is 110,425 and in 2021 is 118,075, with details presented in the following table.

Table 4.1. Total Population of Tanimbar Islands Regency

No	District	Total population (Soul)		
		2019	2020	2021
1	Tanimbar Selatan	32844	33094	39245
2	Wertamrian	10099	10177	11676
3	Wermaktian	11345	11431	12990
4	Selaru	12743	12841	14321
5	Tanimbar Utara	13759	13865	13916
6	Yaru	5004	5042	4789
7	Wuarlabobar	7420	7476	8382
8	Nirunmas	7328	7384	8024
9	Kormomolin	6160	6207	1025
10	Molu Maru	2887	2908	3707
Jumlah		109589	110425	118075

Geography of Tanimbar Islands Regency

The Tanimbar Islands Regency is bordered to the north by Southeast Maluku Regency, Central Maluku Regency and Banda Sea, to the south by Australia, to the east by Aru Islands Regency and Arura Sea, and to the west by Southwest Maluku Regency.

Tanimbar Islands Regency is a relatively flat area (0-3% slope), sloping / choppy (3-8% slope), undulating (8-15% slope), rather steep (15-30% slope), steep (30-50% slope) and very steep (>50% slope). North of Yamdena Island is a series of small islands. The two rows of islands are separated by a shallow strait with a depth of no more than 20 meters, so that when the tide occurs, dry land is formed which can reach

half a kilometer from the shore of Yamdena. Northern Yamdena is generally flat with an elevation of less than 50 meters, while the hilly area in the southern part of Yamdena is more than 200 meters high. Overall morphology, this area can be divided into three morphological units, namely hills, lowlands and terraces. The hilly areas such as those found on Labobar Island have the highest peaks that reach more than 300 meters above sea level. On other islands, the height is less than 300 meters above sea level.

The Tanimbar Islands region has a tropical climate. Based on the climate classification, the Tanimbar Islands district is categorized as a wet and dry tropical climate. The average rainfall in this region is between 1500-2000 millimeters per year. Like other parts of Indonesia, Tanimbar Regency has two seasons, namely the rainy season which starts from December to May and the dry season which starts from June to November. The air temperature in the region ranges from 23°-33°C with a relative humidity level between 75-88%.

Potential Sectors in Tanimbar Islands Regency

Potential sectors are sectors that have the potential to become the base sector in a region. In determining the potential sectors in the Tanimbar Islands Regency, researchers used Location Quotient (LQ) Analysis and Shift Share Analysis by comparing Tanimbar Islands Regency GRDP data and Maluku Province GRDP data. The following will present the GDRP data of the Maluku province and the GDRP data of the Tanimbar Islands Regency in the following table.

Table 4.2. Maluku Province GRDP Data 2019-2021

No	Economic Sectors of Maluku Province	Year			Average
		2019	2020	2021	
1	Agriculture, forestry and fisheries	10777,42	11103,02	11280,02	33160,46
2	Mining and quarrying	1055,32	1016,03	1176,99	3248,34
3	Processing industry	2393,25	2363,46	2408,14	7164,85
4	Electricity and gas procurement	41,23	44,08	47,54	132,85
5	Water supply, waste management, waste and recycling	187,3	191,42	202,9	581,62
6	Construction	3601,37	3632,59	3870,75	11104,71
7	Wholesale and retail trade, representation of cars and motorcycles	6329,23	6120,99	6493,69	18943,91
8	Transportation and warehousing	2425,23	2096,06	2288,6	6809,89
9	Accommodation and food and beverage supply	782,59	727,02	747,1	2256,71
10	Information and communication	1374,9	1408,01	1534,19	4317,1
11	Financial and insurance services	1781,73	1912,11	2080,35	5774,19

12	Real estate/real estate activities	131,1	131,44	138,43	400,97
13	Corporate services	450,16	450,82	475,1	1376,08
14	Public administration, defense and compulsory social security	10413,81	10576,8	11102,45	32093,06
15	Education services	2653,22	2689,05	2822,54	8164,81
16	Health and social activities	988,33	1042,15	1115,13	3145,61
17	Other services	766,62	757,39	780,27	2304,28
Average		46152,81	46262,44	48564,19	140979,4

Table 4.3. GRDP Data of Tanimbar Islands Regency in 2019-2021

No	KKT Economic Sector	Year			Average
		2019	2020	2021	
1	Agriculture, forestry and fisheries	341	348,71	352,03	1041,74
2	Mining and quarrying	26,44	26,54	27,93	80,91
3	Processing industry	26,79	25,93	26,09	78,81
4	Electricity and gas supply	0,96	0,98	1,05	2,99
5	Water supply, waste management, waste and recycling	12,25	12,4	12,51	37,16
6	Construction	255,23	256,02	278,74	789,99
7	Wholesale and retail trade, representation of cars and motorcycles	166,57	162,89	171,93	501,39
8	Transportation and warehousing	51,37	45,78	48,3	145,45
9	Accommodation and food and beverage supply	31,21	29,6	30,52	91,33
10	Information and communication	42,15	42,61	44,39	129,15
11	Financial and insurance services	57,34	62,66	65,9	185,9
12	Real estate/real estate activities	4,45	4,39	4,48	13,32
13	Corporate services	9,29	9,2	9,37	27,86
14	Public administration, defense and compulsory social security	523,72	518,83	531,43	1573,98
15	Education services	59,7	59,57	61,54	180,81
16	Health and social activities	59,89	61,9	65,27	187,06
17	Other services	17,45	17,31	17,73	52,49
PDRB		1685,81	1685,32	1749,21	5120,34

Based on table 4.2 and table 4.3 above, then the Location Quotient (LQ) analysis and Shift Share Analysis are carried out. Location Quotient (LQ) analysis is used to determine the economic sectors that are base and non-base sectors. The base sector is a sector with economic activities whose products can serve markets both within and outside the economic boundaries of the community concerned. While the non-base sector is a sector with economic activities that are only able to provide goods and services needed by people who live within the economic boundaries of the community concerned. This sector is not able to enter its goods and services outside the economic boundaries so that the scope of production and market area is mainly local.

By using the amount of GDRP of Maluku Province per sector and GDRP of Tanimbar Islands Regency, the LQ value will be obtained. If the calculation results show a number more than one ($LQ > 1$), it means that the sector is a basic sector. Conversely, if the result shows a number less than one ($LQ < 1$), it means that the sector is not a basic sector.

The formula to calculate LQ is as follows:

$$LQ = \frac{ps/pl}{Ps/Pl}$$

LQ: Location Quotient

ps : Production/employment of sector i, at local level

pl : Total production/employment, at local level

Ps : Production/employment of sector i, at regional level

Pl : Total production/employment opportunities, at the regional level

The results of the LQ calculation of the Tanimbar Islands Regency with Maluku Province for the 2019-2021 period can be seen in the following table:

Table 4.4 LQ Analysis

Sector	LQ ANALYSIS			Average	Ket
	2019	2020	2021		
Agriculture, forestry and fisheries	0,866221769	0,86	0,87	0,864932059	Non Basis
Mining and quarrying	0,685909479	0,72	0,66	0,687257757	Non Basis
Processing industry	0,302456488	0,30	0,30	0,301470281	Non Basis
Electricity and gas supply	0,64	0,61	0,61	0,620312365	Non Basis
Water supply, waste management, waste and recycling	1,79	1,78	1,71	1,760180453	Basis
Construction	1,94	1,93	2,00	1,958062921	Basis
Wholesale and retail trade,	0,72	0,73	0,74	0,728693232	Non Basis

representation of cars and motorcycles					
Transportation and warehousing	0,58	0,60	0,59	0,58845617	Non Basis
Provision of accommodation and food and beverages	1,09	1,12	1,13	1,114534273	Basis
Information and communication	0,84	0,83	0,80	0,824438974	Non Basis
Financial and insurance services	0,88	0,90	0,88	0,886693564	Non Basis
Real estate/real estate activities	0,93	0,92	0,90	0,914868876	Non Basis
Corporate services	0,56	0,56	0,55	0,557575754	Non Basis
Public administration, defense and compulsory social security	1,38	1,35	1,33	1,350762237	Basis
Education services	0,62	0,61	0,61	0,60981433	Non Basis
Health and social activities	1,66	1,63	1,63	1,638154254	Basis
Other services	0,62	0,63	0,63	0,627134902	Non Basis
Average	16,10464937	16,07082215	15,92455568	16,0333424	

Based on Table 4.4 above, it is known that the economic sectors classified as basic or potential export sectors in the Tanimbar Islands Regency with an average LQ index > 1 are the water supply, waste management, waste and recycling sector, the accommodation and food and beverage provision sector, the government administration, defense and mandatory social security sector and the health services and social activities sector. With the average index of each sector as follows, the water supply, waste management, waste and recycling sector with an average LQ index = 1.76, the construction sector with an average LQ index = 1.95, the accommodation and food and beverage sector with an average LQ index = 1.11, the government administration, defense and mandatory social security sector with an average LQ index = 1.35 and the health services and social activities sector with an average LQ index of 1.63. Thus these sectors have the potential to be developed to increase the rate of economic growth and development in the Tanimbar Islands Regency. While those classified as non-base sectors with an average LQ index < 1 are agriculture, forestry and fisheries with an

average LQ index = 0.86; mining and quarrying sector with an average LQ index = 0.68; manufacturing sector with an average LQ index = 0.30; electricity and gas procurement sector with an average LQ index = 0.62; wholesale and retail trade sector, representation of cars and motorcycles with an average LQ index = 0.72; the transportation and mining sector with an average LQ index = 0.58, the information and communication sector with an average LQ index = 0.82; the financial and insurance services sector with an average LQ index = 0.88; the real estate / real estate activities sector with an average LQ index = 0.91; the corporate services sector with an average LQ index = 0.55; the education services sector with an average LQ index = 0.60; other services sector with an average LQ index = 0.62.

The shift-share method starts from the basic assumption that economic growth or value added of a region (D_{ij}) is influenced by three main components that are interconnected with each other, namely Regional Share (regional growth component) N_{ij} , sectoral growth (Proportional shift) M_{ij} or PS and regional competitiveness growth (Differential Shift) (C_{ij}) or DS.

The shift-share method starts with knowing the growth rate of a region, in this case Bogor Regency, which is depicted by the symbol r_n . For a wider region (benchmark region) for this case is West Java Province, with the symbol measuring the change in GRDP of a sector- i in a region with the following formula:

$$D_{ij} = N_{ij} + M_{ij} + C_{ij}$$

Where:

D_{ij} : Change in GRDP of sector/subsector i in the observed region (district)

N_{ij} : Changes in GRDP of sector/subsector i in the observed region (district) caused by the influence of economic growth of the reference region (province or national)

M_{ij} : Change in GRDP of sector/subsector i in the observed region (district) caused by the effect of sector i growth in the reference region (province or national)

C_{ij} : Changes in GRDP of sector/subsector i in the observed region (district) caused by the competitive advantage of sector i in the observed region (district).

To calculate the components of N_{ij} , M_{ij} , and C_{ij} can be calculated with the formula:

$$N_{ij} = E_{ij} \cdot r_n$$

$$M_{ij} = E_{ij}(r_{in} - r_n)$$

$$C_{ij} = E_{ij}(r_{ij} - r_{in})$$

Where:

E_{ij} : GRDP of sector/subsector i in the observed area (district) in the initial year of analysis

E_{in} : GRDP of sector/subsector i in the reference area (province or national)

E_n : Total GRDP in the reference area (province or national) in the initial year of analysis

E_{ijt} : GRDP of sector/subsector i in the observed area (district) in the final year of analysis

$E_{i,t}$: GDP of sector/subsector i in the reference area (province or national) in the final year of analysis
 $E_{n,t}$ = Total GDP of the reference area (province or national) in the final year of analysis.

Before the shift share analysis is carried out, an economic growth analysis is first carried out, as calculated using the formula:

$$\frac{(GDP_t - \text{PDBt})_{(-1)}}{\text{PDBt}_{(-1)}} \times 100$$

Where:

GDP_t: GDP in year t (current year or year to be valued)

GDP_{t-1}: Gross domestic product of the previous year

Table 4.5. Economic Growth of Maluku Province

No	Sector	Year		
		2020	2021	Average
1	Agriculture, forestry and fisheries	3,021131	1,594161	2,307646
2	Mining and quarrying	-3,72304	15,84205	6,059505
3	Processing industry	-1,24475	1,890449	0,322849
4	Electricity and gas supply	6,912442	7,849365	7,380904
5	Water supply, waste management, waste and recycling	2,19968	5,997283	4,098482
6	Construction	0,866892	6,556204	3,711548
7	Wholesale and retail trade, representation of cars and motorcycles	-3,29013	6,088884	1,399376
8	Transportation and warehousing	-13,5727	9,185806	-2,19346
9	Accommodation and food and beverage supply	-7,10078	2,76196	-2,16941
10	Information and communication	2,408175	8,961584	5,68488
11	Financial and insurance services	7,317607	8,798657	8,058132
12	Real estate/real estate activities	0,259344	5,318016	2,78868
13	Corporate services	0,146615	5,385742	2,766178
14	Public administration, defense and compulsory social security	1,565133	4,96984	3,267486
15	Education services	1,350435	4,964207	3,157321
16	Health and social activities	5,44555	7,002831	6,22419
17	Other services	-1,20399	3,020901	0,908457
Total		0,237537	4,975419	2,606478

Table 4.6. KKT Economic Growth

No	Sector	Year		
		2020	2021	Average
1	Agriculture, forestry and fisheries	2,260997	0,952081	1,606539
2	Mining and quarrying	0,378215	5,237378	2,807796
3	Processing industry	-3,21015	0,617046	-1,29655
4	Electricity and gas supply	2,083333	7,142857	4,613095
5	Water supply, waste management, waste and recycling	1,22449	0,887097	1,055793

6	Construction	0,309525	8,874307	4,591916
7	Wholesale and retail trade, representation of cars and motorcycles	-2,20928	5,549758	1,670238
8	Transportation and warehousing	-10,8818	5,504587	-2,68863
9	Accommodation and food and beverage supply	-5,1586	3,108108	-1,02525
10	Information and communication	1,09134	4,177423	2,634382
11	Financial and insurance services	9,277991	5,170763	7,224377
12	Real estate/real estate activities	-1,34831	2,050114	0,3509
13	Corporate services	-0,96878	1,847826	0,439521
14	Public administration, defense and compulsory social security	-0,93371	2,428541	0,747418
15	Education services	-0,21776	3,307034	1,544639
16	Health and social activities	3,356153	5,444265	4,400209
17	Other services	-0,80229	2,426343	0,812025
Total		-0,02907	3,790971	1,880953

Based on the shift share analysis as calculated in Table 4.5 above, the M_{ij} value in each business field is known that there are 15 (fifteen) out of 17 (seventeen) business fields, namely: Agriculture, forestry and fisheries, Mining and quarrying, Processing industry, Electricity and gas procurement, Water procurement, waste management, waste and recycling, Construction, Wholesale and retail trade, Representation of cars and motorcycles, Information and communication, Financial and insurance services, Real estate/real estate activities, Corporate services, Government administration, defense and mandatory social security, Education services, Health services and social activities, Other services are positive, meaning that these business fields have rapid growth, and their influence on district income is positive. It can be assumed that the income of Tanimbar Islands Regency grew above the growth of Maluku Province.

Furthermore, the business field in the calculation of C_{ij} , the results show 3 positive business fields, namely construction, wholesale and retail trade, representation of cars and motorcycles and provision of accommodation and food and drink. The next step is to calculate the net shift to determine the developed and less developed sectors based on the calculation in table 4.5 above, which is taken from the value of $M_{ij} + C_{ij}$. The results show that 3 business fields are positive, meaning that of the 17 business fields/sectors there are only 3 business fields that have progressed, namely construction, wholesale and retail trade, representation of cars and motorcycles and provision of accommodation and food and drink.

CONCLUSION

Based on the results of the discussion, it is concluded that the Potential Sector Analysis and Regional Mapping in the Tanimbar Islands Regency are as follows.

1. Based on shiftshare and LQ testing, it is obtained that out of 17 business fields or sectors, there are 3 business fields that are progressing in the Tanimbar Islands

Regency, namely construction, wholesale and retail trade, representation of cars and motorbikes and provision of accommodation and eating / drinking.

2. Government policy towards economic sectors in the Tanimbar Islands Regency is to increase the capacity of human resources through vocational education, where the government develops and organizes academics and optimizes the use of technology in industrial areas.

REFERENCES

- Ackerman, I. N., Bohensky, M. A., Zomer, E., Tacey, M., Gorelik, A., Brand, C. A., & De Steiger, R. (2019). The projected burden of primary total knee and hip replacement for osteoarthritis in Australia to the year 2030. *BMC Musculoskeletal Disorders*, 20(1), 90. <https://doi.org/10.1186/s12891-019-2411-9>
- Arwemi, Yazan, S., Kustati, M., Ritonga, M., Perrodin, D. D., Elismawati, & Hamidi, B. (2022). Women' Deixis in Trade Interaction of West Sumatra Traditional Market. *Education Research International*, 2022, 1–11. <https://doi.org/10.1155/2022/4132900>
- Ashraf, B. N. (2020). Economic impact of government interventions during the COVID-19 pandemic: International evidence from financial markets. *Journal of Behavioral and Experimental Finance*, 27, 100371. <https://doi.org/10.1016/j.jbef.2020.100371>
- Bonaccorsi, G., Pierri, F., Cinelli, M., Flori, A., Galeazzi, A., Porcelli, F., Schmidt, A. L., Valensise, C. M., Scala, A., Quattrocioni, W., & Pammolli, F. (2020). Economic and social consequences of human mobility restrictions under COVID-19. *Proceedings of the National Academy of Sciences*, 117(27), 15530–15535. <https://doi.org/10.1073/pnas.2007658117>
- Boretti, A., & Rosa, L. (2019). Reassessing the projections of the World Water Development Report. *Npj Clean Water*, 2(1), 15. <https://doi.org/10.1038/s41545-019-0039-9>
- Chetty, R., Hendren, N., Jones, M. R., & Porter, S. R. (2020). Race and Economic Opportunity in the United States: An Intergenerational Perspective*. *The Quarterly Journal of Economics*, 135(2), 711–783. <https://doi.org/10.1093/qje/qjz042>
- Chinweuba, A. U., Chinweuba, I. S., Diorgu, F. C., Ubochi, N. E., Ezeruigbo, C. S., Wasini, K. B., & Nnabuenyi, A. I. (2021). Economic burden of moderate to severe burns and its association with health-related quality of life of Nigerian women. *BMC Women's Health*, 21(1), 85. <https://doi.org/10.1186/s12905-021-01232-5>
- Diao, B., Wang, C., Tan, Y., Chen, X., Liu, Y., Ning, L., Chen, L., Li, M., Liu, Y., Wang, G., Yuan, Z., Feng, Z., Zhang, Y., Wu, Y., & Chen, Y. (2020). Reduction and Functional Exhaustion of T Cells in Patients With Coronavirus Disease 2019 (COVID-19). *Frontiers in Immunology*, 11, 827. <https://doi.org/10.3389/fimmu.2020.00827>
- Hidalgo, C. A. (2021). Economic complexity theory and applications. *Nature Reviews Physics*, 3(2), 92–113. <https://doi.org/10.1038/s42254-020-00275-1>

- Johnson, J. M., & Khoshgoftaar, T. M. (2019). Survey on deep learning with class imbalance. *Journal of Big Data*, 6(1), 27. <https://doi.org/10.1186/s40537-019-0192-5>
- Kaningini, E. W., Malinga, C. M., Furaha, G. M., Alulea, J. P., & Castiaux, A. (2023). Adoption of electronic commerce as a resilience strategy for women's entrepreneurship in the Democratic Republic of Congo. *African Journal of Economic and Management Studies*, 14(2), 313–331. <https://doi.org/10.1108/AJEMS-07-2022-0307>
- Kumar, M., Chaudhary, V., Sirohi, U., & Srivastav, A. L. (2023). Economically viable flower drying techniques to sustain flower industry amid COVID-19 pandemic. *Environment, Development and Sustainability*. <https://doi.org/10.1007/s10668-023-03376-w>
- Lawson, L., & Lahiri-Dutt, K. (2020). Women sapphire traders in Madagascar: Challenges and opportunities for empowerment. *The Extractive Industries and Society*, 7(2), 405–411. <https://doi.org/10.1016/j.exis.2019.07.009>
- Manyungwa, C. L., Hara, M. M., & Chimatiro, S. K. (2019). Women's engagement in and outcomes from small-scale fisheries value chains in Malawi: Effects of social relations. *Maritime Studies*, 18(3), 275–285. <https://doi.org/10.1007/s40152-019-00156-z>
- Mi, Z., Zheng, J., Meng, J., Ou, J., Hubacek, K., Liu, Z., Coffman, D., Stern, N., Liang, S., & Wei, Y.-M. (2020). Economic development and converging household carbon footprints in China. *Nature Sustainability*, 3(7), 529–537. <https://doi.org/10.1038/s41893-020-0504-y>
- Pak, A., Adegboye, O. A., Adekunle, A. I., Rahman, K. M., McBryde, E. S., & Eisen, D. P. (2020). Economic Consequences of the COVID-19 Outbreak: The Need for Epidemic Preparedness. *Frontiers in Public Health*, 8, 241. <https://doi.org/10.3389/fpubh.2020.00241>
- Palmer, K., Monaco, A., Kivipelto, M., Onder, G., Maggi, S., Michel, J.-P., Prieto, R., Sykara, G., & Donde, S. (2020). The potential long-term impact of the COVID-19 outbreak on patients with non-communicable diseases in Europe: Consequences for healthy ageing. *Aging Clinical and Experimental Research*, 32(7), 1189–1194. <https://doi.org/10.1007/s40520-020-01601-4>
- Rathore, P. K. S., & Shukla, S. K. (2019). Potential of macroencapsulated PCM for thermal energy storage in buildings: A comprehensive review. *Construction and Building Materials*, 225, 723–744. <https://doi.org/10.1016/j.conbuildmat.2019.07.221>
- Williams, M. J., & Syddall, V. (2022). Women, fisheries technology and development: Toward new research approaches. *Gender, Technology and Development*, 26(3), 357–384. <https://doi.org/10.1080/09718524.2022.2125456>
- Witteveen, D., & Velthorst, E. (2020). Economic hardship and mental health complaints during COVID-19. *Proceedings of the National Academy of Sciences*, 117(44), 27277–27284. <https://doi.org/10.1073/pnas.2009609117>
- Xi, Y., & Xu, P. (2021). Global colorectal cancer burden in 2020 and projections to 2040. *Translational Oncology*, 14(10), 101174. <https://doi.org/10.1016/j.tranon.2021.101174>
- Xie, Y., Dai, H., Zhang, Y., Wu, Y., Hanaoka, T., & Masui, T. (2019). Comparison of health and economic impacts of PM2.5 and ozone pollution in China.

Environment International, 130, 104881.
<https://doi.org/10.1016/j.envint.2019.05.075>
Zheng, X., Hou, Y., Bao, C., Yin, J., Yuan, F., Huang, Z., Song, K., Liu, J., Troughton, J., Gasparini, N., Zhou, C., Lin, Y., Xue, D.-J., Chen, B., Johnston, A. K., Wei, N., Hedhili, M. N., Wei, M., Alsalloum, A. Y., ... Bakr, O. M. (2020). Managing grains and interfaces via ligand anchoring enables 22.3%-efficiency inverted perovskite solar cells. *Nature Energy*, 5(2), 131–140.
<https://doi.org/10.1038/s41560-019-0538-4>

Copyright Holder :

© Moses Feninlambir et al. (2024).

First Publication Right :

© Journal Markcount Finance

This article is under:

