

Analysis of Economic Sector Development In Aru Islands Regency

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Abstract

One strategy that can encourage economic growth is by prioritizing basic economic sectors in planned development programs to lead to better overall economic performance. The aim of this research is to find out whether the economic sectors in Aru Islands Regency are base sectors or non-base sectors. The analytical tools used in this research are Location Quotation (LQ) Analysis, Shift Share, Klassen Typology. From the research results, it can be seen that the results of the 2014-2023 LQ analysis show that there are 3 sectors in Aru Islands Regency which are the base sectors, namely the agriculture, forestry and fisheries sectors with an LQ value of 2.33, the Construction sector 1.40 and finally the Government Administration, Defense and mandatory social security sectors 5.41. Thus, there are 3 sectors which are the basic sectors in Aru Islands Regency, namely the agriculture, forestry and fisheries sectors, finally the Government Administration, Defense and mandatory social security sectors and the Construction sector.

Keywords : Sector Basis, sector non basis, LQ, Shift Share, Typology Class

INTRODUCTION

The development of island regions is an integral part of national development, however Looking at the problems that occur in island areas, it seems that there are no regulations underlies development in island areas as seen from limited infrastructure and also sea and air transportation facilities whose function is to unite activities the economy, both on large islands and small islands, as well as limitations empowerment of natural resources for this reason it is necessary to accelerate development because Apart from

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that, the development of island areas can also provide direct benefits or indirectly to the welfare of society and to reduce development gaps between regions, because what we see is development development in Indonesia is more focused on development in the western region but for Development in the eastern archipelago is still lagging behind both in terms of infrastructure and economics as well as from the aspect of human resources.

To accelerate economic development in this area, the government must do something studies taking into account local potential that is owned and has high economic value to be developed as well as supporting factors that can accelerate sector development economy so that it can become the main driver of the regional economy. Islands Regency Aru has a variety of potential resources that can certainly be developed managed according to availability and existing factors. Thus necessary identification of economic sectors so that efforts can be developed driving the economy in Aru Islands Regency. Utilization and development

Good resources will indirectly increase economic growth an area. General description of the growth rate of District Gross Domestic Product Aru Islands based on 2010 constant prices can be seen in the table below:

Table 1. Gross Regional Domestic Product Growth Rate On the basis of 2010 constant prices according to business fields in Aru Islands Regency (percent) 2014-2023

No	Business Field	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
1	Agriculture, Forestry and Fisheries	7.50	2.85	4.13	5.76	5.78	5.72	1.96	3.68	6.36	6.24
2	Mining and Quarrying	7.43	6.49	4.49	5.96	5.58	5.49	-0.04	2.72	2.53	2.94
3	Processing industry	5.79	3.57	6.14	8.13	6.36	3.28	-2.84	0.54	8.98	3.36
4	Procurement of Electricity, Gas	30.62	0.44	8.00	2.26	3.42	2.06	4.11	4.58	4.74	1.91
5	Water Supply, Management Garbage, Waste and Recycling	4.66	4.12	4.10	4.18	4.18	4.20	4,17	4,18	4,32	6,50
6	Construction	5.91	6.38	5.89	5.56	5.67	5,65	-664	1,55	2,09	4,18



7	Wholesale and Retail Trade, and Car and Motorbike Repair	7.50	7.83	7.72	7.72	8.11	8,31	-2,81	6,17	6,90	4,76
8	Transportation and Warehousing	8.07	6.87	5.91	4.22	4.25	4,42	-11,10	2,60	6,30	5,17
9	Provision of accommodation and food and drink	5.85	7.77	3.97	5.36	3.40	4,48	-1,99	2,53	7,07	6,13
10	Information and Communication	9.17	8.39	7.61	7.77	7.01	3,62	1,57	3,90	4,24	5,61
11	Financial Services and Insurance	7.55	8.84	8.78	2.13	4.87	4,04	3,69	4,92	0,24	-1,35
12	Real Estate	7.16	7.83	2.22	3.74	3.80	1,39	-0,02	1.25	3,05	4,91
13	Company Services	4.42	4.05	2.44	5.18	3.81	2,70	0,03	2,18	4,99	3,34
14	Government Administration, Defense and Mandatory Social Security	6.19	12.43	7.38	7.18	7.38	6,65	-1,82	2,74	3,27	0,55
15	Education Services	7.80	5.99	9.34	1.92	3.87	3,98	-0,22	2,43	4,38	3,56
16	Health Services and Social Activities	3.38	3.75	3.66	2.51	4.36	4,65	1,70	4,26	6,26	7,44
17	Other services	2.53	2.58	4.11	3.35	3.39	5,23	-0,80	1,91	9,71	5,17
GRDP		6.76	5.02	5.25	5.92	6.05	6.05	5,82	-0,04	3,47	5,64

Source Aru Islands Regency Central Statistics Agency, 2024

Based on table 1 above, it can be explained that the growth rate of Regional Domestic Product Gross according to business fields in Aru Islands Regency, it can be seen that the growth rate for every sector from 2014 to 2023 experiences fluctuations. If the government Aru Islands Regency must properly understand its biggest role in formation Gross Regional Domestic Product of Islands Regency. As well as what the economic potential is owned by the region and can be managed well, economic growth will increase. This is in line with the Solow-Swan 1956-1970 model of economic growth which emphasizes the importance of physical capital in driving long-term growth. With

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increasing infrastructure, it is hoped that there will be access and can create efficiency in order to improve economic added value, which can encourage further economic growth.

Gross Regional Domestic Product (GRDP) is a reflection of the economic progress of a region which is defined as the total added value of goods and services produced in one period of time year in that region. If seen from the GRDP side, Aru Islands Regency is one of them macroeconomic indicators that describe the economic conditions of a region over a period of time

The specific Gross Regional Domestic Product of Aru Islands Regency can be explained in the table below this.

Table 2 Gross Regional Domestic Product at Constant Prices 2010 According to Business Fields in Aru Islands Regency (Million Rupiah) 2014 – 2023

No	Business Field	2014	2015	2016	2017	2018
1	Agriculture, Forestry, and Fishery	1.016.550,27	1.045.534,36	1.088.726,28	1.151.457.05	1.016.550,27
2	Mining and Quarrying	14.117,00	15.032,55	15.707,47	16.643,26	14.117.00
3	Processing industry	55.361,16	57,339,58	60.860,19	65.810,80	55.361,18
4	Procurement of Electricity, Gas	667.71	670.66	724.34	740.73	667,71
5	Water Supply, Waste Management, Waste and Recycling	3.136,79	3.265,92	3.399.69	3.541,90	3.136,79
6	Construction	125.369,84	133.369,67	141.222.56	149.074,86	125.369,84
7	Wholesale and Retail Trade, and Car and Motorbike Repair	131.484,35	141.783,29	152.729,65	164.517.87	131.484,35
8	Transportation and Warehousing	24.581,80	26.270,05	27.823,71	28.996,81	24.581,80



9	Provision of accommodation and food and drink	7.705,67	8.304,61	8.634,49	9.097,19	7.705,67
10	Information and Communication	18.317,01	19.853,14	21.363,05	23.023,47	18.317,01
11	Financial Services and Insurance	14.900,69	16.217,93	17.641,13	18.016,12	14.900,69
12	Real Estate	4.315,37	4.653,30	4.756,72	4.934,57	4.315,37
13	Company Services	3.023,17	3.145,61	3.222,26	3.389,29	3.023,17
14	Government Administration, Defense and Mandatory Social Security	212.497,07	238.919,11	256.544,49	274.956,77	212.497,07
15	Education Services	45.083,78	47.784,23	52.245,84	53.247,67	45.083,78
16	Health Services and Social Activities	41.124,45	42.668,42	44.229,66	45.341,68	41.124,45
17	Other services	15.915,87	16.326,83	16.997,80	17.566,52	15.915,87
GRDP		1.734.152,01	1.821.139,26	1.916.829,34	2.030.406,56	2.153.277,59

From table 2 above it can be explained that Gross Regional Domestic Product (GRDP) is based on 2010 constant prices according to business fields in Aru Islands Regency show GRDP Aru Islands Regency in terms of the economic sector for all existing sectors from 2014- In 2023, it will be clear that the agriculture, forestry and fisheries sectors will still be dominated every year it increases. In 2014 GRDP in the agricultural, forestry and sectors fisheries amounting to IDR 1,287,760.18 and this sector continues to increase throughout the year 2023 amounting to IDR 1,538,261.59, this is purely due to every increase in GRDP in the business sector The agriculture, forestry and fisheries sectors are due to production which is carried out every year.

Therefore, based on an overview of the potential resources possessed by the Islands Regency Aru, should be able to make a positive contribution to the economy and income community and regional income, however there are still obstacles in developing

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this economic sector, namely inadequate infrastructure, limited understanding human resources, technology and also capital to support resource development This means that the potential cannot be utilized optimally for progress area.

THEORETICAL BASIS

Determining a commodity in the market is the result of the interaction between demand and supply factors. The price of tuna, like other commodities, is influenced by microeconomic theory, which involves the law of supply and demand. Several theories and concepts that are relevant to understanding the determination of tuna prices and traders' income are as follows:

Gross Regional Domestic Product (GRDP)

Gross Regional Domestic Product (GRDP) at the district or city level describes the ability of the district or city to create output (added value) at a certain time. Meanwhile, GRDP at the regional (provincial) level describes the province's ability to create output (added value) at a certain time

Definition of Gross Regional Domestic Product According to Sukirno 2016, (GRDP) is the amount of gross added value arising from all economic sectors in a region or province. The definition of gross added value is the added value of production (output) minus intermediate costs. The components of gross value added include income factor components (wages and salaries, interest, land rent and profits), depreciation and net indirect taxes. So by calculating the gross added value of each sector and then adding them together you will produce Gross Regional Domestic Product (GRDP).

Economic Theory of Regional Development

Regional economic development is a process in which regional governments and their communities process resources and form a partnership pattern between regional governments and the private sector to create new jobs and stimulate the development of economic activities (economic growth) in the region. The main problem in regional development lies in the emphasis on development policies that are based on the specificities of the region concerned (*endogenous development*) by using the potential of human resources.

Economic Growth Theory

Production costs, including operational and transportation costs, also influence the

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price of tuna. Tuna fish traders must take into account the costs of obtaining fish, including transportation costs from fishermen or processing factories, storage and distributors to the market. If distribution costs increase, for example due to higher fuel prices or other transportation barriers, the price of tuna on the market will also increase.

Merchant Income

Economic growth is defined as an action to increase production capacity which results in additional output which is generally measured using Gross Domestic Product (GDP) at the national level or Gross Regional Domestic Product (GRDP) at the regional level.

GDP or GRDP is an indicator or benchmark for the economic success of a country or region (Adisasmita, 2015). Economic growth is an economic problem and is an important phenomenon experienced by economies throughout the world, including the Indonesian economy. Economic growth is a benchmark for economic development in an area. Economic sector development is a process of changing a situation for the better with the aim of increasing income, employment opportunities and community prosperity.

Basic Economic Theory

Pricing is a strategic decision taken The concept of an economic base itself was first introduced by Douglas C. North in 1956. According to Douglas, the concept of an economic base depends on a region and this concept is determined by the number of competitive advantages possessed by a particular region. If a particular region has a number of sectors that can compete with other sectors outside the region, making it possible to export to other regions, then it is certain that increasing exports will produce a large and profitable effect on the economy in that region.

Basic economic theory says that the rate of economic growth in a region is determined by the magnitude of the increase in exports from that region. Economic activities are grouped into basic sectors and non-basic sectors (Tarigan, 2019). The Basic Sector is a sector that has great potential in determining regional development because its economic activities are able to serve markets both in that region and other regions. Indirectly, this base sector is able to export goods and services produced by the region to outside the region.

RESEARCH METHODOLOGY

To answer the problems that have been set, several data analysis methods are

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used, namely, *Location Quotient* used to determine the base and non-base sectors of Aru Islands Regency and analysis *Shift Share* as well as *Typology The class* to determine shifts and changes in sectors in the economy of the Aru Islands district.

RESULTS AND DISCUSSION

Analisis Location Quotient (LQ)

Location Quotient (LQ) is an analytical tool that can be used easily, quickly and precisely and can be used repeatedly using various changes in references and time periods. *Location Quotient* is the ratio between the GDP of a particular sector to the total value of GDP in an area compared to the same sector at a higher economic level.

The Location Quotient (LQ) analysis tool is used to identify the comparative advantages of economic sectors in Aru Islands Regency. This theory is used to analyze the diversity of economic bases. From this analysis it can be seen what sectors can be developed.

Table 3 LQ Calculation Results for Aru Islands Regency 2014-2023

Business Field	Year										Rate-rate
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Agriculture, Forestry and Fisheries	2.37	2.42	2.41	2.40	2.02	2.02	2.41	2.26	2.49	2.51	2.33
Mining and Quarrying	0.28	0.25	0.27	0.27	0.25	0.33	0.33	0.03	0.36	0.38	0.28
Processing industry	0.63	0.61	0.62	0.60	0.47	0.59	0.59	0.06	0.51	0.46	0.51
Procurement of Electricity, Gas	0.35	0.34	0.34	0.36	0.31	0.35	0.34	0.04	0.34	0.31	0.31
Water Supply, Waste Management, Waste and Recycling	0.36	0.37	0.37	0.37	0.32	0.37	0.38	0.04	0.39	0.39	0.34
Construction	1.05	1.06	1.08	1.07	1.83	1.03	1.96	1.09	1.92	1.92	1.40
Great Trade and Retail, and Car and Motorbike Repair	0.54	0.54	5.54	0.55	0.41	0.56	0.57	0.06	0.58	0.57	0.99



Transportation and Warehousing	0.25	0.26	0.27	0.27	0.22	0.26	0.27	0.02	0.26	0.26	0.23
Provision of accommodation and food and drink	0.25	0.24	0.26	0.26	0.21	0.26	0.27	0.02	0.28	0.28	0.23
Information and Communication	0.04	0.05	0.05	0.05	0.21	0.28	0.28	0.02	0.27	0.27	0.15
Financial Services and Insurance	0.22	0.23	0.23	0.22	0.18	0.22	0.21	0.02	0.22	2.09	0.38
Real Estate	0.07	0.07	0.06	0.06	0.63	0.74	0.72	0.07	0.69	0.70	0.38
Company Services	0.49	0.49	0.49	0.51	0.44	0.16	0.65	0.01	0.16	0.15	0.35
Government Administration, Defense and Security Mandatory Social	11.54	12.60	13.31	13.57	0.48	0.67	0.65	0.07	0.64	0.63	5.41
Education Services	0.48	0.13	0.14	0.13	0.37	0.44	0.43	0.05	0.43	0.42	0.30
Health Services and Social Activities	1.08	0.42	0.41	0.39	0.89	1.01	0.97	0.10	0.95	0.95	0.82
Other services	0.42	0.41	0.41	0.40	0.44	0.49	0.49	0.05	0.51	0.51	0.41

Source Data processed, 2024

Based on data on Gross Regional Domestic Product of Aru Islands Regency and Gross Regional Domestic Product of Maluku Province on the basis of 2010 constant prices from 2014-2023, calculations can be made using the method *Location Quotient* (LQ) to find out which sectors are base sectors and non-base sectors in Aru Islands Regency.

In the LQ value calculation table above, it can be seen that there are 3 sectors that have value *Location Quotient* > 1, namely the Government Administration, Defense and Mandatory Social Security sectors, the Agriculture, Forestry and Fisheries sectors and the Construction sector.

Government Administration, Defense and Mandatory Social Security sectors

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The Government Administration, Defense and Mandatory Social Security sectors are categorized as basic sectors with an LQ value > 1 , namely with an average LQ of 5.41. This is supported by quite large regional government spending in the Defense government administration sector and Mandatory Social Security for the community. Namely by providing mandatory social assistance to the community in the form of assistance for uninhabitable housing, assistance for MSMEs, distribution of prosperous rice, and other social assistance. This is one of the government's ways of organizing and one of its aims is to catch up as the second poorest region in Maluku.

Agriculture, Forestry and Fisheries Sectors

The results of the analysis show that for the Agriculture, Forestry and Fisheries sectors the average LQ value is $2.33 > 1$ with total GRDP from 2014 amounting to IDR 1,016,550.27 million rupiah up to 2023 IDR 1,538,261.59 million rupiah. The increase in this sector was due to production carried out in the agricultural sub-sector, forestry sub-sector and fisheries sub-sector. Apart from that, there has also been an increase in this sector because from data on the population working by business field and the percentage of Aru Islands Regency in figures from 2023, the majority of the population working by business field in Aru Islands Regency is in the agriculture, forestry and fisheries sectors.

Construction sector

Meanwhile, for the Construction sector, the average LQ value is $1.40 > 1$ with total GRDP from 2014 amounting to IDR 125,369.84 million rupiah up to 2023 amounting to IDR 167,837.33 million rupiah. The increase in this sector is due to development carried out by regional governments, including construction of facilities and infrastructure, road and bridge infrastructure, construction of sea and air transportation infrastructure, construction of office buildings, construction of health and educational facilities and infrastructure.

Meanwhile for 14 other sectors namely the Mining and Quarrying sector, Processing Industry, Gas Electricity Procurement sector, Water Procurement sector, waste and recycling management, wholesale and retail trade and car and motorbike repair sectors, transportation and warehousing sector, accommodation and food and drink provision sector, information and communication sector, financial and insurance services sector, real estate sector, corporate services sector, education services sector, health services sector and social activities, and other service sectors. These sectors are included in the non-basic sector category because they have a value < 1 . Because The

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rate of economic growth in Maluku Province is greater than the rate of economic growth in Aru Islands Regency.

Analisis Shift Share (SS)

Analysis method *shift-share* is one of the economic analysis methods used to determine development in a region, shown based on the condition of the economic structure, shifts in leading sectors over two periods of time, and knowing the position of a region's economic sector relative to the wider region. This analysis method was introduced by Perloff. *et al.* in 1960 (Lutfi Muta'ali, 2015). This method has been tested and proven in various fields in various countries (Wei Chen and Jiuping Xu, 2005).

The shift-share analysis of Aru Islands Regency was carried out using GRDP data on the basis of constant prices in 2014 and 2023. As *benchmark region* The region chosen was Maluku Province. In tables 4.4 and 4.6 the GRDP of Aru Islands Regency and Maluku Province as well as the GRDP growth rate in these two regions.

Table 4.Results of Shift Share Analysis Calculation for Aru Islands Regency 2014-2023

Business Field	Rn	Also	Row	New	Me	Bread	Anti
Agriculture, Forestry and Fisheries	0.33	0.29	0.34	3.382.899.04	-38.449.50	44.929.17	33.893.787,1
Mining and Quarrying	0.33	0.05	0.29	4.697.72	-3.861.48	33.600.57	3.443.681
Processing industry	0.33	0.49	0.30	18.423.21	89.960.50	-10.593.01.	9.779.070
Procurement of Electricity, Gas	0.33	0.33	0.26	22.220.20	471.708.93	-4.989.44.	4.889.396
Water Supply, Waste Management, Waste and Recycling	0.33	0.25	0.32	104.386.80	-229.282.16	199.688.51	74.793,15
Construction	0.33	0.34	0.25	417.208.59	131.817.92	-11.316.99	537.709.52
Wholesale and Retail Trade, and Car and Motorbike Repair	0.33	0.37	0.40	4.375.56	5.208.31	4.941.84	14.525,71
Transportation and Warehousing	0.33	0.21	0.23	81.803.87	-2.816.52	43.453.45	122.440,80



Provision of accommodation and food and drink	0.33	0.20	0.31	25.643.10	-9.866.87	8.370.75	24.146.98
Information and Communication	0.33	-2.90	0.38	60.955.76	-5.938.78	6.029.64	61.046,62
Financial Services and Insurance	0.33	0.34	0.29	495.868.54	1.824.45	-740.688.21	-2.429.95
Real Estate	0.33	-7.02	0.22	14.360.78	-3.174.81	3.130.23	14.316.20
Company Services	0.33	0.75	0.24	100.605.73	128.749.61	-1.552.43	227.802.91
Government Administration, Defense and Mandatory Social Security	0.33	0.96	0.35	7.071.525	13.420.78	-1.294.15	70.836.523,1
Education Services	0.33	-1.23	0.29	15.003.08	-7.086.03	689.448.86	69.736.591
Health Services and Social Activities	0.33	-0.48	0.31	13.685.48	-33.680.82	3.290.44	-1.670.49
Other services	0.33	0.11	0.28	5.296.51	-338.796.82	2.644.67	-33.085.56
GRDP				118.389.596	169.736.71	26.909,390	122.777.902,6

Source: Processed Data, 2024

Analysis *Shift-share* requires calculating the growth rate of the analyzed regional variable (sectoral GRDP) both in the regional economy and in the national economy. Apart from that, the growth rate for the national economy is also calculated. Table 4.4 presents these calculations. After the basic formulas needed in the analysis *Shift share* calculated, each component forming the formula can be calculated. Three types of analysis *Shift-share* have the same concept in defining the Nij and Mij components. Meanwhile, the Cij component has been determined to complete the analysis *Shift-share*.

Table 4.4 shows the results of the Shift Share calculation for Aru Islands Regency. It can be seen that the growth component of Maluku Province has influenced the economic growth of Aru Islands Regency. This can be seen in the value (Nij) of each sector in Aru Islands Regency which gives a positive value to the GRDP of Maluku Province which can be seen from the increase in growth of IDR 118,389.596 billion Rupiah. And it can be seen that the agriculture, forestry and fisheries sectors are sectors



whose growth increased by IDR 3,382,899.04, thus being positively influenced by national growth.

Meanwhile, the industrial mix component (Mij) shows the magnitude of changes in the economy region due to industrial mix. The results of the analysis show that the industrial mix has a positive influence but there is also a negative influence on development economy of Aru Islands Regency for several sectors. Negative values indicate that the sector composition of the GRDP of the Aru Islands Regency tends to be in the direction of the economy will grow relatively slowly in these sectors, namely like sectors agriculture, forestry and fisheries, mining and quarrying sector, water supply sector, Waste, Waste and Recycling Management, Transportation and Warehousing sector, sector Provision of Accommodation and Food and Drink, Information and Communication sector, Real Estate sector, Education Services sector, Health Services sector and Social Activities.

In Table 4.4 you can see the sectors that are positively influenced by the industrial mix, namely Processing Industry Sector, Electricity, Gas and Clean Water Procurement Sector, Construction Sector, Wholesale and retail trade and car and motorbike repair sectors and the services sector Finance, and Insurance and the corporate services sector as well as the government administration sector, defense and mandatory social security. This means that these sectors are leading to relatively fast growing economy.

Likewise, the competitive advantage component (Cij) produces a competitive advantage value (Cij) of IDR 26,909.390 billion, which can be seen in Table 4.4. This value indicates that the resulting competitive advantage will add to the economic development of Aru Islands Regency. This does not mean that the economy of Aru Islands Regency for all sectors is said to be competitive. This is because even though the aggregate value is positive, there are several sectors that have negative values, namely the processing industry sector, the construction sector Financial Services Sector, and Insurance, Corporate Services Sector as well as Government Administration, Defense and Mandatory Social Security Sectors.

Thus, based on the results of the Shift Share analysis of the industrial mix components (mij), the government must have a strategy on how to optimize natural resources which belongs specifically to the agriculture, forestry and fisheries sectors which have the largest contribution to GRDP in Aru Islands Regency. The government must strive to encourage this economic sector by providing equipment assistance and operational training for farmers but also fishermen to increase productivity so that they are able to produce quality agricultural, forestry and fisheries products.

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Klassen Typological Analysis

Klassen Typology Analysis is a description of the structure of economic growth. In this research, economic growth can be seen from the growth rate and contribution or role in GRDP. Klassen Typology Analysis is used to provide an overview of the pattern and structure of economic growth in each region.

Table 6 Results of Klassen Typology Analysis

Business Field	Kep Aru		Maluku Province		Information	quadrant
	Rate-rate growth (gi)	Rate-rate Contribution (and)	Rate-rate growth (g)	Rate-rate Contribution (s)		
Agriculture, Forestry and Fisheries	1,12	4,6	0,03	0,24	The sector is advanced and growing rapidly	1
Mining and Quarrying	0,05	2,3	0,01	0,13	The sector is advanced but depressed	2
Processing industry	0,05	1,6	0,08	0,11	The sector is advanced but depressed	2
Procurement of Electricity, Gas	0,04	1,2	0,04	0,07	The sector is advanced but depressed	2
Water Supply, Waste Management, Waste and Recycling	0,04	1,0	0,03	0,06	The sector is advanced but depressed	2
Construction	0,04	0,8	0,04	0,06	The sector is advanced but depressed	2
Wholesale and Retail Trade, and Car and Motorbike Repair	0,07	0,8	1,04	0,06	The sector is relatively lagging behind	4
Transportation and Warehousing	0,04	0,6	0,03	0,06	The sector is relatively lagging	4



					behind	
Provision of Accommodation and Eat Drink	0,05	0,6	0,03	0,05	The sector is advanced and growing rapidly	1
Information and Communication	0,06	0,5	-0,05	0,06	The sector is advanced but depressed	2
Financial Services and Insurance	0,05	0,5	0,06	0,06	The sector is relatively lagging behind	4
Real Estate	0,03	0,05	0,06	0,05	The sector is relatively lagging behind	4
Company Services	0,03	0,04	0,28	0,05	The sector is relatively lagging behind	4
Government Administration, Defense and Mandatory Social Security	0,06	0,05	2,34	0,06	The sector is relatively lagging behind	4
Education Services	0,04	0,04	0,28	0,06	The sector is relatively lagging behind	4
Health Services and Social Activities	0,05	0,04	0,17	0,05	The sector is advanced but depressed	2
Other services	0,04	0,04	0,01	0,05	The sector has potential and can still develop rapidly	3

Source: Data processed in 2024

Based on the results of the table above in the Klassen Typology classification, the sectors that make the largest contribution are the agriculture, forestry and fisheries sectors, which contribute 4.6 percent to Aru Islands Regency and 0.24 percent to Maluku

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Province. The growth rate for the agriculture, forestry and fisheries sectors was 1.12 percent for Aru Islands Regency and 0.03 percent for Maluku Province. The results of these calculations show that the Klassen Typology value in the agriculture, forestry and fisheries sectors in Aru Islands Regency is in Quadrant 1, which is included in the advanced and rapidly growing sector category. A sector can be said to be a developed sector and is growing rapidly because of its speed

The growth of the agricultural, forestry and fisheries sectors in Aru Islands Regency is greater than the growth rate of the agricultural, forestry and fisheries sectors in Maluku Province. Likewise, the contribution of the agricultural, forestry and fisheries sectors has a greater contribution value than the agricultural, forestry and fisheries sectors in Maluku Province.

However, from this research the author found that for calculations using the method *Location Quotient* (LQ) there are only 3 sectors whose LQ value is > 1 and are said to be basic sectors namely sector Government Administration, Defense and Mandatory Social Security, Agriculture sector, Forestry, and Fisheries and Construction sectors but for non-base sectors there are 14 sectors has its LQ value < 1 .

Meanwhile, for calculations using the Shift Share analysis tool, the industrial mix component values, on the other hand, for the agriculture, forestry and fisheries sectors, have negative values. This means the economy for the agriculture, forestry and fisheries sectors The economy is growing relatively slowly. There is a negative value in the agriculture, forestry and fisheries sectors also because the economic growth rate of Aru Islands Regency is smaller than the growth rate in Maluku Province.

On the other hand, based on the results of the Klassen typology calculations, those that provide the greatest growth and contribution are the agriculture, forestry and fisheries sectors. However, in reality, according to data from the Maluku Province Central Statistics Agency in 2024 figures, Aru Islands Regency is the 2nd (second) poorest area in Maluku Province. This is because of the 17 economic sectors or business fields in Aru Islands Regency, there are only 3 economic sectors that have an LQ value > 1 because they only have 20 percent, which is said to be the base sector, while the 14 sectors that have an LQ value < 1 or 80 percent are said to be non-base sectors. So the calculation results are good *Location Quotient* (LQ), *Shift Share*, then *Typology Class* can show which economic sectors are the base sectors in Aru Islands Regency. However, it does not rule out the possibility that these non-base sectors can also support or support the economy in Aru Islands Regency.

Thus, from the research results that have been explained, the Aru Islands Regency



government must determine what direction and policies can be implemented in order to encourage the economic sectors in Aru Islands Regency to become superior and competitive sectors. Apart from that, the regional government must be able to overcome the problem of poverty in Aru Islands Regency.

Economic Sector Development Strategy in the Aru Islands District

Aru Islands Regency, which has the motto "Mutiara Indah Cendrawasi Lestari" which means United to build Aru, provides spiritual strength for the regional government together with the community to unite in regional development efforts for Aru Islands Regency through creativity, innovation and collaboration in determining the direction and form of regional development itself so that its management can be focused and successful in accordance with regional development demands. As stated in Law No. 32 of 2004 concerning regional decentralization.

For this reason, the Aru Islands Regency government must create a business climate that is conducive and attractive to various groups. The ability to attract investors and reliable human resources are the two main things to be able to develop and manage existing resources, including natural resources.

In line with this, the Aru Islands Regency Government is very aware that one of the factors for the success of regional development must be supported by 3 (three) main pillars, namely the regional government, the community and the private sector. This implies that the regional development of the Aru Islands Regency is not only the responsibility of the community and the business world, but together, the three of them contribute and actively participate in the implementation of regional development.

Another strategy that must be implemented is that the government must improve the quality of human resources (HR) in facing the era of globalization and the development of information technology with the main priority being those operating in basic sectors such as farmers and fishermen. Apart from that, it is also in the construction sector to repair and build road infrastructure, bridges and facilities and infrastructure that can be enjoyed for the welfare of the community. And also other government assistance to reduce the problem of poverty in the Aru Islands Regency area. This strategy is one way to anticipate weaknesses in Aru Islands Regency in the form of minimal human resource quality and lack of facilities and infrastructure as well as information. This strategy is carried out in order to overcome problems or weaknesses in the Aru Islands Regency by taking advantage of existing opportunities, namely collaborating with the central government but also the provincial government as well as establishing

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cooperation and partnerships with the private sector or other parties, it is hoped that these weaknesses can be overcome. And the government must also try to address the 14 other sectors which are still categorized as non-basic sectors. So that these economic sectors are also able to support the economy in Aru Islands Regency

Apart from that, the regional government of Aru Islands Regency must strengthen and empower regional institutions in facing competition between regions and the era of globalization which demands high competitiveness. This strategy must be based on strength and coordination between related institutions, services or agencies. This power strategy must be developed to avoid threats in the form of competition between regions. Especially in economic sectors that have not been able to compete and face the era of globalization and information that demands high competitiveness through structuring the management of real potential sector development in facing the era of globalization and digitalization as well as keeping selling prices stable.

DISCUSSION

In developing the economic sector in Aru Islands Regency, there are various opportunities and challenges that must be faced. This district has great potential in the fisheries, agriculture and tourism sectors, each of which has the potential to become the main pillar of the regional economy. However, to be able to realize this potential to the fullest, several obstacles need to be overcome, ranging from infrastructure problems to natural resource management issues.

Potential of the Fisheries and Marine Sector

The fisheries and marine sector is the main strength of Aru Islands Regency. With abundant marine resources, this sector can become the main source of income for the community. However, the biggest challenge in this sector is the issue of sustainability of marine resources. Overfishing practices and damage to marine ecosystems caused by environmentally unfriendly activities need to be managed wisely so that the fisheries sector remains productive. Therefore, implementing policies that support sustainable fisheries management is very important. Apart from that, there is a need to strengthen the local fishery product processing industry, such as salted fish or other processed products, which can add added value and increase the competitiveness of regional products on the international market.



Agriculture and Plantation Sector

Agriculture and plantations also have an important role in the economy of Aru Islands Regency. Commodities such as coconuts, cloves, nutmeg and coffee can be a major source of income. However, the agricultural sector in this area is still hampered by inadequate infrastructure, such as damaged roads and a lack of adequate transportation facilities to distribute agricultural products to markets. Additionally, a lack of efficient agricultural technology hampers productivity. Therefore, it is important for local governments to encourage innovation in the agricultural sector and provide training to farmers regarding modern agricultural methods that are more productive and environmentally friendly. Increasing market access for agricultural products through collaboration with the private sector and development of better distribution infrastructure will support the growth of this sector.

Potential of the Tourism Sector

The Aru Islands have natural beauty that has great potential to be developed into a major tourism destination. Beautiful beaches and underwater riches that are still preserved provide great opportunities for marine tourism. However, the development of the tourism sector is still hampered by the lack of basic infrastructure such as roads, ports and adequate accommodation facilities. Apart from that, the problem of less intensive tourism promotion causes a lack of interest from tourists, both domestic and international. For this reason, tourism development needs to be carried out with a sustainable approach, maintaining a balance between economic needs and environmental preservation. Regional governments need to collaborate with the private sector in building tourism facilities and involve local communities in managing tourist destinations so that the economic impact can be felt by all levels of society.

Infrastructure as the Main Constraint

The main problem hampering the development of the main economic sectors in Aru Islands Regency is inadequate infrastructure. Limited inter-island transportation access causes the distribution of goods and services to be expensive and inefficient. On the other hand, the lack of provision of energy and clean water in several regions also hinders the development of the industrial sector. For this reason, the main priority in developing this area is improving basic infrastructure, such as ports, airports and roads, which will increase accessibility and facilitate the flow of goods and people. Apart from that, the development of other supporting infrastructure, such as better internet networks

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and telecommunications systems, will also open up new opportunities for the development of technology-based economic sectors and creative industries.

Human Resources and Education

Quality human resources are an important factor in supporting the development of economic sectors in Aru Islands Regency. Even though it has large natural resource potential, if it is not supported by a skilled and educated workforce, it will be difficult to exploit this potential optimally. Quality education and skills training are the keys to increasing competitiveness this area. Training programs focused on leading sectors such as fisheries, agriculture and tourism must be strengthened. In addition, improving vocational education and technology-based skills that are in line with market needs will help create a workforce that is ready to use and more productive.

Sustainable Management of Natural Resources

The abundant natural resources in Aru Islands Regency have great potential to support economic development, but if not managed well, this potential could turn into a problem. Environmental damage due to uncontrolled exploitation of natural resources can have negative long-term impacts. Therefore, it is important for local governments to adopt sustainable natural resource management policies. The use of environmentally friendly technology and the application of green economy principles in various economic sectors will strengthen regional economic resilience and maintain ecosystem balance.

Sustainable Economic Development Strategy

The economic development strategy for Aru Islands Regency needs to focus on economic diversification, infrastructure development, and improving the quality of human resources. Economic diversification will reduce dependence on one sector and provide new opportunities for other sectors that can absorb jobs. Improving better infrastructure will facilitate the flow of goods and services, while strengthening human resources through education and training will create a workforce that is more competent and ready to compete. It is also important to build closer collaboration between local governments, the private sector and communities in economic development. This collaboration will encourage innovation, increase efficiency and open up investment opportunities that can have a positive impact on the regional economy in the long term.

This discussion revealed that although Aru Islands Regency has enormous economic potential, the challenges faced in developing the economic sector such as

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infrastructure, sustainable management of natural resources, and limited human resources need serious attention. With the right strategy, the development of the economic sector in this area can be carried out in a sustainable manner, improving community welfare and reducing dependence on sectors that are vulnerable to market changes. Improved infrastructure and better management will open up wider economic opportunities and push Aru Islands Regency towards more advanced and inclusive development.

CONCLUSION

Based on the results of the research and discussion, several things can be concluded in this research, namely

1. The results of the 2014-2023 LQ analysis show that there are 3 sectors in Aru Islands Regency which are the base sectors, namely the agriculture, forestry and fisheries sectors with an LQ value of 2.33, the Construction sector 1.40 and finally the Government Administration, Defense and mandatory social security sectors 5.41.
2. Based on the results of the shift share analysis of the agricultural, forestry and fisheries sectors, it shows that overall the growth of the agricultural, forestry and fisheries sectors in Aru Islands Regency is faster than the growth of the agricultural, forestry and fisheries sectors in Maluku Province.
3. Based on the calculation results of the Klassen typology analysis, the agricultural, forestry and fisheries sectors are in quadrant 1, namely in the advanced and rapidly growing sector category because the growth rate and contribution of the agricultural, forestry and fisheries sectors in Aru Islands Regency is greater than the growth rate and contribution of the agricultural, forestry and fisheries sectors in Maluku Province. Likewise, with the sector providing accommodation and food and drink, the calculation results are also in quadrant 1, which is referred to as a developed and rapidly growing sector.

SUGGESTIONS

Based on the research results and discussion and conclusions, the suggestions that can be put forward in this research are as follows:

1. There are fourteen sectors out of 17 sectors that are included in the non-basic sector category but have positive shift share values and should be of concern to the government for further development.

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2. It is hoped that the government can build good cooperation with the community and the private sector to be able to develop the economy in Aru Islands Regency. Apart from that, local governments must improve the quality of human resources (HR) in facing the era of globalization and the development of information technology with the main priority being those operating in basic sectors such as farmers and fishermen.
3. This research certainly has limitations, therefore it is hoped that future researchers who have similar research can use it as a reference and develop it even better.

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