

# Analysis Of Fisheries Sector Development In Aru Islands Regency Novianti Mariana Nada

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## **Abstract:**

*Aru Islands Regency, which is located in Maluku Province, Indonesia, which is also an archipelagic area has 547 islands consisting of 28 inhabited islands and 519 uninhabited islands or not occupied by residents according to BPS data for Aru Islands Regency 2023. To accelerate economic development in this area, The government must carry out a study taking into account local potential and has high economic value to be developed as well as supporting factors that can accelerate the development of the fisheries sub-sector so that it can become the main driver regional economy. The main objectives of this research are (1) To find out whether the fisheries sector is the base sector in Aru Islands Regency. (2) To find out how much the fisheries sector contributes to the economy in Aru Islands Regency. The analytical tools used in this research are Location Quation (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 sector, Defense and mandatory social security 5.41. Thus, the fisheries sector is proven to be the base sector in Aru Islands Regency.*

**Keywords:** Sector Basis, LQ, Shift Share, Typology Class

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## **I. Introduction**

In Indonesia, there are several Fisheries Management Areas of the Republic of Indonesia (also called WPP NRI) which describe the division of fisheries management areas based on ecology, regional characteristics and fish resources which are used as the basis for sustainable fisheries management. Based on the Regulation of the Minister of Maritime Affairs and Fisheries of the Republic of Indonesia Number 18/Permen-Kp/2014 concerning the Fisheries Management Areas of the Republic of Indonesia, the Fisheries Management Areas of the Republic of Indonesia are divided into 11 fisheries management areas with one of the locations being the Aru Islands Regency.

Regarding the geographical conditions in Aru Islands Regency, which is spread across islands, the marketing and distribution of fishery products is hampered and the consequence is that the collection of fishery products is also not optimal. Therefore, it is necessary to build a fish collection center that is equipped with *cold storage*. However, almost some areas are still constrained by the availability of electricity. Therefore, there needs to be stronger efforts from the regional government and central government to develop power generation infrastructure that is more spread out in the Islands Regency area with greater capacity to support the collection of fishery products. Access to transportation in the form of ports and the availability of transportation facilities (people's ships and goods ships) also need to be improved so that fishermen can access the Fish Auction Place (TPI) more easily and cheaply so that the added value obtained by fishermen will be greater. In this way, obstacles to marketing the results of this catch can be minimized, especially in remote village areas. Until now, many fishermen's catches can only be sold when someone orders them or when buyers/collectors come.

Therefore it is necessary to identify factors that influence it development of the fisheries sector in each region, so that further It is known how the economic development of the fisheries sector in the research area is appropriate with these factors. Based on the background above, the formulation of this research problem is as follows:

1. Is the fisheries sector a basic sector in Aru Islands Regency?
2. How big is the contribution of the fisheries sector to the economy in Aru Islands Regency?

## **II. Literature Review**

### **Fisheries Theory**

#### **Definition of Fisheries**

According to Law no. 45 of 2009 Fisheries are all activities related to the management and utilization of fish resources and their environment starting from pre-production, production, processing to marketing carried out in a fisheries business system. Due to the development of the fisheries subsector, it is hoped that it will be able to increase production, expand job opportunities and business opportunities, and can contribute to improving the welfare of fishermen and improving the regional economy.

The meaning of fisheries has been defined by several scientists, according to Hempel and Pauly, 2002, fisheries are the activities of exploiting biological resources from the sea. The definition of fisheries that he expressed is limited to marine fisheries, because fisheries all originate from hunting activities which must be distinguished from farming activities such as cultivation.

#### **Gross Regional Domestic Product (GRDP)**

Understanding GRDP 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).

#### **Basic Economic Theory**

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. Based on this theory, the basic sector needs to be developed to stimulate the economy of a region. The non-based sector is a sector that can only provide goods and services to people within the boundaries of the economic area or only to meet needs within its own area. This non-based sector can also be said to be a supporting sector in regional development.

#### **Potential Sectors**

The main problem in regional development lies in the resources and potential that exist to create an increase in the number and types of employment opportunities for regional communities. To realize this goal, there is cooperation between the government and the community to identify the potential that exists in the region and is needed as a strength for regional economic development.

Potential sectors or leading sectors can be interpreted as economic sectors or productive business activities that are developed as development potential and can become the economic basis of a region compared to other sectors in a direct or indirect relationship (Tjokroamidjojo, 1993).

#### **Previous Research**

Previous studies are useful as comparison and reference material which provides an overview of previous research results related to the title and topic researched by the author. Some previous research related to this title, one of which is by Ariel Anshary Ismail (2023) which discusses Analysis of the Role of the Fisheries Sector in Economic Development and Community Welfare in Pangkep Regency. From the research results, it can be seen that the contribution of the fisheries sector can provide the greatest benefit to Pangkep's economic development

## **III. Results And Discussion**

The results of this research show that There are 3 sectors with an LQ value  $>1$ , namely the agriculture, forestry and fisheries sector with an LQ value of 2.33, the Construction sector 1.40 and finally the Government Administration, Defense and mandatory social security sector 5.41. which means that the role of this sector in the region concerned is more prominent than the role of that sector in the higher economy and can be used as an indication that the region has a surplus of sector i products so that it can export them to other regions efficiently, as well as showing that the region has advantages comparative for sector i in question. These sectors are the basic or leading sectors in Aru Islands Regency.

Meanwhile for the other 14 sectors, namely the Mining and Quarrying sector, Processing Industry, Gas Electricity Procurement sector, Water Procurement sector, waste and recycling processing, wholesale and retail trade and car and motorbike repair sectors, transportation and warehousing sector, accommodation provision sector and food and drink, information and communication sector, financial services and insurance 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. However, it does not rule out the possibility that these sectors can also support the basic sector economy in Aru Islands Regency.

The results of the Shift Share analysis for Aru Islands Regency show that overall the sector in Maluku Province has a positive Nij (National Share) component value. Positive growth in the agricultural, forestry and fisheries sectors also shows that the GRDP value of the agricultural, forestry and fisheries sectors increases every year. This illustrates that the growth of this sector is positively influenced by national growth.

For the industrial mix components (Mij) as a whole, it shows a positive value, namely: 169,736.71 and from a total of 17 sectors there are those that show positive values but there are also sectors that show negative values such as the agriculture, forestry and fisheries sector, the mining and excavation sector, the Water Supply sector, Waste Management, Waste and Recycling, the Transportation sector and Warehousing, Accommodation and Food and Drink Provision sector, Information and Communication sector, Real Estate sector, Education Services sector, Health Services and Social Activities sector, but this indicates that there is growth in every sector in the area.

Likewise, with the competitive advantage component (Cij), there are 11 sectors that have positive values, namely the agriculture, forestry and fisheries sector, the mining and quarrying sector, the Water Supply, Waste, Waste and Recycling Management sector, the Wholesale and Retail Trade sector, and Car Repair. and Motorcycles, the Transportation and Warehousing sector, the Accommodation and Food and Drink Provision sector, the Information and Communication sector, the Real Estate sector, the Education Services sector, the Health Services and Social Activities sector, and other service sectors. Meanwhile, 6 other sectors showed negative values. Thus, looking at the values of proportional shift and differential shift, a sector can be grouped into four quadrants or groups.

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 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 an advanced sector and growing rapidly because the growth rate of the agriculture, forestry and fisheries sectors in Aru Islands Regency is greater than the growth rate of the agriculture, forestry and fisheries sectors in Maluku Province. Likewise, the contribution of the agriculture, forestry and fisheries sectors has value greater contribution from the agriculture, forestry and fisheries sectors in Maluku Province. By seeing the great potential, the government must try to encourage this sector so that it has regional competitiveness

## **IV. Closing**

### **A. Conclusion**

1. The results of the 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 class typology analysis of the agricultural, forestry and fisheries sectors, they are in quadrant 1, namely in the category of developed and rapidly growing sectors 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 sector agriculture, forestry and fisheries in Maluku Province.

### **B. Recommendations**

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.
2. 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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