ANALYSIS OF FISHERIES SECTOR ECONOMIC GROWTH STRUCTURE IN BANDUNG CITY

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ABSTRACT

This study aims to analyze the theory of the basis of economic growth and analyze the growth rate of the fisheries sector in Bandung based on a comparison of the total gross regional domestic production of cities and provinces. The research began in March 2019 until July 2019. The research method was carried out by survey methods which were collected both through decision surveys which were then analyzed quantitatively and presented descriptively. This research data consists of two types, namely primary data and secondary data. Data analysis included Shift Share Analysis and Location Quotient Analysis (LQ). Based on research conducted on the Analysis of the Economic Growth Structure of the Fisheries Sector in the City of Bandung, it can be concluded that the Fisheries Sector is a non-base sector in the City of Bandung with a LQ value of 0.0015. Shows the growth value of the net shift in the production of the fisheries sector in Bandung City with an average from 2013-2017 of -1.355.298,37. The fisheries sector shows a PB value <0, meaning that the fisheries sector in Bandung has a slow growth rate

Keywords: Bandung City, Fisheries Sector, Shift Share Analysis and Location Quotient (LQ) Analysis

INTRODUCTION

The base sector which is the leading sector is the economic sector in an area whose existence has played a major role in the economic development of the region. One of them is seen from the indicators having high growth and large employment. The fisheries sector is a very important and potential sector in national and regional economic growth, both in terms of income and employment (Rizal.et al, 2008).

An area is said to experience economic growth if there is an increase in the real Gross Regional Domestic Product (GRDP) in the region. If the economic growth rate is negative, it means that economic activity shows a decrease, on the contrary if the economic growth rate is positive, it means that economic activity has increased. (Arsyad, 2010).

According to the Bandung Central Statistics Agency in 2018, economic growth is one of the macro indicators to see the real economic performance in a region. The rate of economic growth is calculated based on changes in the GRDP based on the constant price of the relevant year against the previous year. Economic growth can be seen as an increase in the amount of goods and services produced by all business fields of economic activity in an area over a period of a year. Bandung City's economic growth rate in 2017 is 7.21%. This shows a decrease in economic growth of 0.58% when compared to 2016.

According to the Regional Medium-Term Development Plan (RPJMD) of the City of Bandung 2018, the amount of fisheries production in the City of Bandung annually exceeds the target set. In 2009, fishery production reached 208.09% or more than double the target. In 2012 fishery production reached 103.91% of the target set. The level of fish consumption in the city of Bandung also annually exceeds the target set. In 2012 the level of fish consumption in the city of Bandung reached 102.64%

RESEARCH METHODS

The research method was conducted by survey method. The survey method is one part of the descriptive type of research method to make a picture of the situation or an event Nazir (2005). This method will explain the results of quantitative data processing.

The data used consists of primary data and secondary data. Primary data obtained directly in the form of questionnaires or interviews with relevant parties and documentation. Secondary data were obtained from existing sources. Secondary data used includes the form of time series data five years back, 2013-2017 obtained from the Fisheries and Maritime Services Office in West Java, various statistical data and data relating to economic growth in the fisheries sector in Bandung City from the Department of Food and Agriculture Defense of Bandung City, BPS Bandung City, West Java Bappeda, and West Java Fisheries and Maritime Services.

Analysis of the data used in this research is descriptive quantitative while the analysis used is the Shift Share analysis and Location Quotient (LQ) analysis. a description of the situation or event of Nazir (2005). This method will explain the results of quantitative data processing.

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RESULTS AND DISCUSSION

Geographical location and Regional Conditions of the City of Bandung

Bandung City is located in the West Java region and is the Capital of the Province of West Java. Astronomically, Bandung is located between 107o36 'East Longitude and 6o55' South Latitude. Based on its geographical position, Bandung City has boundaries: North - Bandung Regency and West Bandung Regency; Selatan - Bandung Regency; West - Cimahi City; Timur - Bandung Regency. Bandung city is located at an altitude of 700 meters above sea level (asl). The highest point is in Ledeng Subdistrict, Cidadap Subdistrict with an altitude of 892 meters above sea level and the lowest in Rancanumpang Subdistrict, Gedebage Subdistrict with an altitude of 666 meters above sea level.

The total area of Bandung is 167.31 km2 which is divided into 30 sub-districts covering 151 sub-districts with 1,584 neighborhood units (RW) and 9,873 neighborhood units. In 2017, relative rainfall occurs throughout the year with varying intensity each month. The highest rainfall occurred in April, which amounted to 559.6 mm. While the lowest rainfall was in December where rainfall only reached 59.9 mm. During 2017, the average temperature of Bandung City was 23.8oC. The highest temperature in Bandung in 2017 reached 30.5oC in September and a minimum temperature of 18.8oC in August.
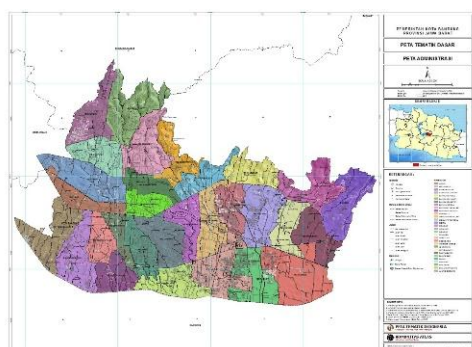

Figure. 1. Map of Bandung City Area

Bandung city has two main rivers, the Cikapundung River and the Citarum River and their tributaries which generally flow to the south and meet at the Citarum River. With such conditions, south Bandung is very vulnerable to flooding problems, especially in the rainy season. Various kinds of characteristics are formed due to the location of Bandung itself. All of that is a capital for regional progress. Here the influence of modernization development has a clear impact on changes in political, economic, social, cultural, defense and security life.

General Economic Conditions

The development of economic development in an area, can be seen from the level of economic growth. Gross Regional Domestic Product (GRDP) is a macro indicator that is often used in addition to other micro indicators such as the level of job creation and price stability.

Based on the 2010 constant prices, the value of Bandung's GRDP in 2017 increased compared to 2016. The increase was influenced by increased production in all business fields that were free from the influence of inflation. Bandung City's GRDP value in 2017 based on 2010 constant prices, reached 172.852 billion rupiah. This figure increased by 11.654 billion from 161.198 billion rupiah in 2016. This shows that during 2017 there was an economic growth of 7.21 percent, slower than the previous year's economic growth which reached 7.79 percent.

Table 1. Results of the 2013-2017 Fisheries Sector LQ Analysis

Year	LQ Value
2013	0.0018
2014	0.0016
2015	0.0015
2016	0.0014
2017	0.0014

The fisheries subsector is a non-base sector indicated by LQ values below 1 (0.0015). The fisheries subsector in Bandung is said to be a non-economic sector, because this sector has not been able to meet the needs of fisheries in a particular area of Bandung and has no potential to carry out export activities and the sector has not been able to make a large contribution to the region, not only to the regions itself but also to meet the needs of other regions.

Growth rate and the role of the fisheries sector

Table 2. Changes in the GDP of the Fisheries Sector in the City of Bandung and West Java in 2013-2017 Constant Prices.

Year	(ΔY_i)	Precentase Change (%)	(ΔY_j)	Precentase Change (%)
2013/2014	0.002397	0.12	742.83	8.09
2014/2015	0.034514	1.78	679.44	6.85
2015/2016	-0.083398	-4.22	532.69	5.02
2016/2017	0.14	7.14	353.25	3.17

Note : ΔY_i = Bandung City

Δy_j = West Java Province

Table 2 shows the fisheries sector in Bandung City has fluctuated from year to year. While the percentage change in West Java's GRDP has declined from year to year. The percentage change in West Java Province's GRDP is slightly larger than the fisheries sector in Bandung City, this is due to the very broad scope of West Java Province accompanied by the contribution of the sea fishing sector. While Bandung city only covers the cultivation and processing sectors. The fisheries sector in Bandung City experienced a decline in 2015/2016 because the GDP value of the Bandung fisheries sector from 2015 to 2016 declined according to interviews. in 2016/2017 it increased again. As for the fisheries sector, West Java Province has decreased from year to year. The percentage value of change in Bandung City in 2016/2017 is higher than the percentage change in West Java Province while in 2013/2014 to 2015/2016 West Java Province has a higher percentage value than Kota Bandung.

Table 3. Ratio of GRDP Fisheries in Bandung City and West Java Province in 2013-2017.

Year of Analysis	ri	Ri	Ra
2013/2014	0,071	1,14	1.1
2014/2015	0,075	1,08	1.1
2015/2016	0,076	1,16	1.1
2016/2017	0,081	0,86	1.1

Note :

ri = ratio of GDP in the fisheries sector in Bandung

Ri = GDP ratio of the fishery sector of West Java Province

Ra = provincial GRDP ratio

Table 3 shows that the growth rate of the fisheries sector in Bandung City and West Java Province can be said to have a progressive growth rate, this is indicated by a positive ratio value. Ra value is the GRDP growth value obtained based on the calculation of the difference in the total provincial GRDP of the base year of analysis (2013) divided by the total provincial GRDP of the base year of analysis (2013). Ra value is the value that indicates the growth of the reference. The Ri value was obtained from the calculation of the difference in the West Java Province's GRDP in the fisheries sector in the initial year of analysis (2017) with the West Java Province's GRDP in the base year of analysis divided by the West Java Province's GRDP in the base year of analysis (2013). Based on the reference value (Ra), the value of Ri shows a value that is in line with the reference value, in 2014/2015 the value of Ri decreased slightly from the reference value and in 2015/2016 the value of Ri increased and in 2016/2017 the value of Ri decreased lower than the reference value. Furthermore ri value is obtained from the calculation of the difference between the GRDP of the fisheries sector in the city of Bandung in the initial analysis year (2017) with the GRDP of the fisheries sector in the city of Bandung in the base of the analysis divided by the PDRB in the base year of analysis (2013). The ratio of the GDP of Bandung City and the ratio of the GDP of the Province of West Java when viewed based on the reference value of growth in the Province of West Java develops slightly larger.

Table 4. Share Components of the Bandung City Fisheries Sector with West Java Province in 2013-2017.

Year	KPP
2013/2014	1.204.747,9
2014/2015	1.266.345,57
2015/2016	1.330.421,63
2016/2017	1.405.389,60

Note : KPP = Component of Provincial Growth

The Proportional Growth Component or Share Component is a component of economic growth that explains the increase in the provincial-level GRDP with the district / city level (Ghufron 2008). The value of the share component is obtained from the product of the Bandung City GRDP based on the analysis of Ra. Table 10 shows the value of the proportional growth component or share component. The KPP value of the fisheries sector in Bandung City and West Java Province shows a positive value. In 2016/2017 the value of KPP with a value of 1,405,389.60 shows the highest value of the KPP. In 2013/2014 with a value of 1,204,747.9, it showed the smallest KPP value, in 2014/2015 it was worth 1,266,345.57 and in 2015/2016 it was 1,330,421.63. A sector that has a positive KPP value means that the sector of regional economic growth has resulted in growth in Bandung experiencing positive growth.

Table 5. Mixing Components of the Bandung City Fisheries Sector with West Java Province in 2013-2017.

Year	PP
2013/2014	-1,212,994.38
2014/2015	-1,275,051.31
2015/2016	-1,339,616.54
2016/2017	-1,341,818.68

Note : PP = Proportional Growth

Table 5 shows the proportional growth (PP) contribution of the fisheries sector to the province. Based on the proportional growth (PP) of the fisheries sector from year to year contributes negatively it shows that from year to year the growth rate decreases. Year 2013/2014 (PP Value -1,212,994.38), 2014/2015 (PP Value -1,275,051.31), 2015/2016 (PP Value -1,339,616,54) and 2016/2017 (PP Value -1,341,818.68). This shows Bandung city has a negative growth with PP <0, so it can be concluded that the rate of growth of the fisheries sector of Bandung from year to year is slower than the province of West Java. The value of the GDP ratio of fisheries in West Java Province has a more developed value than the reference value compared to the value of the ratio of the GDP of Bandung, this also can lead to negative growth in the fisheries sector in Bandung from year to year.

Table 6. Competitive Components of the Fisheries Sector 2013-2017.

Year	PPW
2013/2014	-56.413,23
2014/2015	-58.694,60
2015/2016	-68.826,93
2016/2017	-67.777,81
Rata-rata	-62.928,14

Note :

PPW = Regional Share Growth

Table 6 shows the competitive component has an average of -62,928.14 is a value that shows that in general in the last five years development, namely 2013 to 2017 the fisheries sector in Bandung does not have a good competitiveness in the fisheries sector compared to other fisheries sectors in other regions in the Province of West Java, this is due to the growth in the amount of production in Bandung being less competitive with other regions in the province of West Java
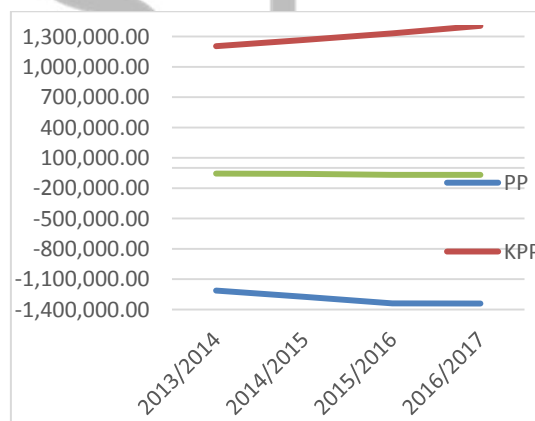

Figure 2. Trend Component Value Share, Component Mix, Competitive Components

Table 7. Net Shifts in the Bandung City Fisheries Sector

Year	Pergeseran Bersih
2013/2014	-1.269.407,61
2014/2015	-1.333.745,90
2015/2016	-1.408.443,46
2016/2017	-1.409.596,49
Rata-rata	-1.355.298,37

Table 7 shows the net shift in the fisheries sector in Bandung city with an average from 2013-2017 of -1,355,298.37. The fisheries sector shows a PB value <0, meaning that the fisheries sector in Bandung has a slow growth rate. Based on the results of interviews the development of the fisheries sector tends to decrease due to the modernization of cultivated land into housing, long distribution and lack of cultivation training. In order to analyze the structure of the economic growth of the fisheries sector in Bandung city, the fisheries sector becomes the government's priority to get special attention. The fisheries sector cannot be used as a base sector in Bandung city, so the Bandung city can be indicated as an area that is still lagging behind. In order to achieve the economic target, the local government policy must support and facilitate the fisheries sector so that the fish production results in addition to meeting the needs of the city of Bandung can also meet the needs of areas outside Bandung city.

CONCLUSION

Based on research conducted on the Analysis of the Economic Growth Structure of the Fisheries Sector in the City of Bandung, it can be concluded that the Fisheries Sector is a non-base sector in the City of Bandung with a LQ value of 0.0015. Shows the growth value of the net shift in the production of the fisheries sector in Bandung City with an average from 2013-2017 of -1.355.298,37. The fisheries sector shows a PB value <0, meaning that the fisheries sector in Bandung has a slow growth rate

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