

Analysis Typology of Agricultural Subsector Economic Growth in Banjar Regency, South Kalimantan Province, Indonesia

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Abstract: *This research was carried out to analyze the rate and typology of the growth of agricultural subsectors in Banjar Regency uses Klassen typology analysis. Based on Klassen typology analysis, subsectors that can be categorized as an advanced sector and growing rapidly (Quadrant I) is an annual horticulture, forestry, and fisheries, then there is no sub-sector into quadrant II (advanced but depressed). Klassen typology analysis also shows that in this regency there are many subsectors are categorized as potential sectors or they could thrive (Quadrant III). These sectors are the sectors of food crops, seasonal plantation and annual plantation. Then the results of the Klassen typology analysis showed that the seasonal horticulture and livestock sub-sectors in Banjar Regency were classified as relatively lagging sectors (Quadrant IV).*

Keywords: *Economic Growth, Agricultural Subsector, Klassen Typology Analysis.*

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I. Introduction

Banjar Regency is one of the Regency in the province of South Kalimantan, which has an important role in the economy of South Kalimantan especially in agricultural sector. The agricultural sector of Banjar Regency gives the third largest share with a contribution of 11,40 percent to the GRDP formation in South Kalimantan in 2017. Geographically, Banjar Regency also has a strategic location because it is directly bordering to capital of South Kalimantan Province. Like most regions in Indonesia where the population has a livelihood as farmers, Banjar Regency also still makes agriculture as one of the mainstay sectors. Fields of farming in Banjar Regency dominated by agricultural activities in the food crops, plantations and fisheries. This can be seen from the agricultural sector as the largest absorbent of labor in Banjar Regency. During the data in the last three years, the contribution of employment in the agricultural sector showed a decrease from the previous 55.26 percent in 2013 to 36.65 percent in 2015. On the other hand, in the period of 2011 to 2015 there was a decrease in the contribution of the agricultural sector in Banjar Regency from 20.12 percent in 2011 to 18.55 percent in 2015. Meanwhile in the same period, there was also a slowing in economic growth in the agricultural sector from 2.9 percent in 2011 to 1.74 percent in 2015. As we all know, in order to develop the region then local governments need to create a policy priority. Priority is necessary for regional development policy so that policy can be more effective and efficiently, under the constraints of limited budgets and resources that can be used. To determine these policy priorities, especially economic development policies, a comprehensive economic (economic structure) analysis is needed. Related to this, based on the problem of decreasing the contribution and growth of the agricultural sector in the Banjar regency so this research was conducted. The purpose of this research is to analyze the rate and typology of the growth of agricultural subsectors in Banjar Regency.

II. Research Methods

Data and Method of collecting data

The data used in this research is secondary data. Secondary data obtained based on institutional literature studies and related institutions in this study, such as the Statistics of South Kalimantan Province and the Statistics of Banjar Regency in period 2012-2016.

Coverage and Research Variables

There are eight agricultural subsectors covered in this study, among others Food Crop Subsector, Seasonal Horticulture Subsector, Annual Horticulture Subsector, Annual Plantation Subsector, Seasonal Plantation Subsector, Livestock Subsector, Forestry Subsector, and Fisheries Subsector. The variables analyzed in this study are the value of GRDP at Constant Prices and Value of Contributions of each agricultural subsector from the two regions namely Banjar Regency as an area of analysis and the South Kalimantan province as a reference area.

Data Analysis Method

This research is use Klassen Typology as Data analysis method which is analyzing the rate and typology of the growth of agricultural sectors and sub-sectors in Banjar Regency. This analysis classifies a sector, subsector, business or regional commodity by comparing regional economic growth with other regional economic growth that becomes a reference and compares sector, subsector, business, or commodity share of an area with an average contribution value at a higher level (reference area). The steps of processing data typology Klassen are:

1. Calculate the average economic growth rate of each subsector in Banjar Regency to the South Kalimantan province as the vertical axis during last five years period (2012-2016).
2. Calculating the average value of GRDP contributions at constant prices for each subsector in Banjar Regency towards the Province of South Kalimantan as a horizontal axis during the last five years period (2012-2016).
3. After calculating the economic growth rate of agricultural subsector and average GRDP contributions of agriculture sector, then do the grouping of economic subsectors quadrants according to the model Klassen. The classifies can be seen at this follow table:

Share of Agriculture Subsector	Growth of Agriculture Subsector	
	$G_i \geq G$	$G_i < G$
$S_i \geq S$	Quadrant I: <i>Advanced and Rapidly Subsectors</i>	Quadrant II: <i>Advanced but depressed Subsectors</i>
$S_i < S$	Quadrant III: <i>Potential and Rapidly Subsectors</i>	Quadrant IV: <i>Relatively Lagging Behind Subsectors</i>

Where:

G_i : the growth of the agricultural subsector analysis area

G : the growth of the agricultural subsector references area

S_i : the contribution of the agricultural subsector analysis area

S : the contribution of the agricultural subsector references area

Remarks: the reference area is a higher area. For example, if the analysis area is the regency/city then the reference area could use provincial level.

III. Result And Discussion

The results of the calculation of the economic growth rate of the agricultural subsector and the average agricultural subsector GRDP for Banjar Regency in 2012-2016 are shown in the following table:

Share of Agriculture Subsector	Growth of Agriculture Subsector	
	$G_i \geq G$	$G_i < G$
$S_i \geq S$	Quadrant I: Annual Horticulture Forestry Fisheries	Quadrant II: -
$S_i < S$	Quadrant III: Food Crops Annual Plantations Seasonal Plantations	Quadrant IV: Seasonal Horticulture Livestock

Source: Data Processed, 2018

Quadrant I: Advanced and rapidly growing subsectors

Subsectors that can be categorized as advanced and rapidly growing sectors (Quadrant I) are the annual horticulture, forestry and fisheries subsector. In other words, these three subsectors in Banjar Regency have a higher performance rate of economic growth and a greater share than in South Kalimantan as a whole.

- a. Annual horticultural crops include commodity groups of vegetables, fruits, biopharmaceuticals, and ornamental plants that are more than one year old and harvesting results can be done more than one harvest period for onetime planting. Agricultural Census data in 2013 showed that there are 3 (three) commodities most cultivated in Banjar Regency, namely durian with 7.583 households, banana with 7.335 households and Siam Oranges with 5.473 households.
- b. Fisheries subsector includes all fishing activities and aquaculture (including seeding) both in freshwater and sea. Of the two activities, the number of fishing business households is more than fish farming. This is shown in more detail through the results of ST2013 in, namely the number of household fish farming businesses in Banjar Regency as many as 2,807 households and 9,714 households seeking fishing

- c. Forestry subsector includes four activities, namely the cultivation of forestry, wildlife breeding / weeds, catching wild animals, and harvesting. Of the four activities according to the results of the ST2013 data collection, the most cultivated were forestry crop cultivation (44.02%) and collection of forest products (54.55%). The results of ST2013 data collection in Banjar District also show that the number of forestry business households was 3,087 households.

Quadrant II: Advanced but depressed Subsectors

According to figures from the analysis typology Klassen, no subsectors are included in the category as a subsector advanced but depressed (Quadrant II). It means there is no agricultural sector has the growth rate of GRDP is lower than GRDP growth in South Kalimantan province, but it has contributed to the GRDP Banjar is greater than the contribution of the sector's value to the GRDP of South Kalimantan Province.

Quadrant III: Potential and Grow Rapidly Subsectors

Klassen typology analysis shows that the food crops, seasonal plantations and annual plantations in Banjar Regency are potential and growing rapidly subsectors. The subsectors in Quadrant III can be interpreted also as a booming and excellent subsector in Banjar Regency despite a local market share is relatively smaller than the average of South Kalimantan province.

- a. The Food Crop Subsector covers all economic activities that produce food commodities, namely rice and secondary crops (corn, soybeans, peanuts, green beans, sweet potatoes, cassava, etc.). Performance Banjar food crops mostly supported by the production of paddy rice crops and lading. As we all know, Banjar Regency is also being one of the center rice productions in South Kalimantan Province. In Banjar Regency, the performance of food crop production is still strongly influenced by the climate. In 2013 to 2015 in some areas floods occurred while in some other areas experienced drought. This causes a lot of rice crop failure. From the results of data collection in Banjar district ST2013 57 904 households are food crop farming.
- b. Plantation crops cover all types of economic activities of plantation crops cultivated by both the people and plantation companies which are divided into two, namely annual plantation crops and annual plantations entirely in quadrant III. The annual plantation crop plant is usually more than one year can only be harvested and can be harvested repeatedly for the same plant. The performance of this subsector comes from the production of rubber and oil palm commodities which are still a mainstay in Banjar Regency. while plantation plants annuals usually less than one year of age can only be harvested and cannot be harvested repeatedly for the same plant. Commodity product such as sugar cane and tobacco.

Quadrant IV: Relatively Lagging Subsectors

Klassen typology analysis results show that the seasonal horticulture and livestock subsectors in Banjar Regency are classified as relatively lagging subsectors (Quadrant IV). This can be seen from the value of GRDP growth which is lower than the growth of GRDP in South Kalimantan Province and has a contribution to GRDP that is smaller than the value of the subsector's contribution to the GRDP of South Kalimantan Province.

- a. Livestock subsector: includes all activities of breeding and cultivation of all kinds of livestock and poultry for the purpose of bred, raised, cut, and captured the results, whether committed by the people or by the company's farms. Livestock products are among others; cows, buffaloes, goats, pigs, horses, chickens, ducks, chicken eggs, duck eggs, milk, leather, and other pet animals. Data obtained from the Department of Agriculture, shows that large livestock populations which include cattle, buffaloes and horses in the past five years have tendency to decline. The population of poultry, especially laying hens and broilers, has increased every year, while domestic chickens continue to decline over the past five years.
- b. Seasonal Horticultural Subsectors: Types of horticulture plants (vegetables, fruits, biopharma plants, and ornamental plants) that whose age is short (usually less than a year) and harvests can be done once or more in one harvest. From the results of Census Agriculture 2013 Seasonal horticultural crops that are widely cultivated in Banjar Regency are turmeric, ginger, galangale, cayenne pepper, and eggplant.

The Klassen Typology analysis tool can be used by local governments as decision makers to determine the priorities of their regional budgets, especially those related to the expenditure side to focus more on the development of the sector, subsector, business, and commodity. In other words, the allocation of government expenditure can be more focused on developing sectors, subsectors, businesses, and commodities that are included in the advanced and grow rapidly quadrants. In addition, sectors, subsectors, businesses and commodities which are included in the potential and grow rapidly (Quadrant I and Quadrant III) have proven its contribution to the economy of a region because its market share is very great due to the increase in population while paying attention to changes in population tastes. If the local government provides funding and

encouragement stimulation with supportive policies, the sector, subsector, businesses, as well as the commodity will be able to contribute more to the local economy.

IV. Conclusions And Suggestion

Based on the results of Klassen Typology Analysis, it is obtained that the annual horticultural, forestry and fisheries subsectors are included to Quadrant I (Advanced and Grow Rapidly). Then no subsectors are included in quadrant 2 (Advanced but depressed). Klassen Typology Analysis also showed that plantation (annual and seasonal) and food crops subsectors are included in quadrant 3 (Potential and Grow rapidly). Meanwhile, Seasonal Horticulture and Livestock subsectors are included in quadrant 4 (Relatively Lagging). There are several things need to be considered as suggestions based on this research especially from the description it can give an explanation that the subsectors that are lagging behind still able to thrive and contribute to the development of the region if it is supported by the infrastructure, facilities and adequate infrastructure. Therefore, policies in the development of subsectors that are still lagging behind should as far as possible consider the facilities and infrastructure, the capacity of land support capacity, human resources, market opportunities and other natural factors. These results can be beneficial for the government to undertake regional development in the short term to focus more on the agricultural subsector which is included in quadrant I, while medium and long-term development can be done in the sub-sectors that are in quadrant III and IV.

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