## International Journal of Economics, Commerce, and Management Volume. 1 No. 3 July 2024





e-ISSN: 3047-9754; and p-ISSN: 3047-9746 Page. 322-332

DOI: https://doi.org/10.61132/ijecm.v1i3.125
Available online at: https://international.areai.or.id/index.php/IJECM

## Economic Development Planning Analysis Food Crops Subsectors And Horticulture Crops Subsectors East Kalimantan Province

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Abstract: The aim of this research is to analyze commodities in the food crop subsector and horticultural crop subsector which have the potential to be developed in order to support the economy in East Kalimantan Province. Analyzing food crop subsector commodities and horticultural crop subsectors that have competitiveness to be developed in order to support the economy in East Kalimantan Province. Analyzing the shift and role of commodities in the food crop subsector and horticultural crop subsector in the economy in East Kalimantan Province. Analyzing economic development planning strategies that can be carried out in order to develop potential and competitive commodities in the food crop subsector and horticultural crop subsector to support the economy in East Kalimantan Province. In this research, an analysis was carried out to determine potential economic sectors using the Klassen typology analysis tool, then an analysis was carried out to explain competitive sectors and shifts in economic structure using the Shift Share analysis tool, then a SWOT analysis was carried out. The results of this research are food crop subsector commodities and horticultural crop subsectors that have the potential to be developed in order to support the economy in East Kalimantan Province are lowland rice, shallots and large chilies. Commodities in the food crop subsector and horticultural crop subsector that have competitiveness to be developed in order to support the economy in East Kalimantan Province are lowland rice, corn, bananas, shallots and large chilies. The economic development planning strategy that can be carried out in order to develop potential and competitive sectors in the food crop sub-sector and horticultural crop sub-sector in order to support the economy in East Kalimantan Province is to implement short-term, medium-term and longterm plans.

**Keywords**: Food Crops, Horticultural Plants

## 1. INTRODUCTION

The main focus of the development process in a country or region is to achieve prosperity for the country and its population. This prosperity is often realized through achievements in the economic aspect. According to Todaro, quoted by Arsyad (2005: 5), success in economic development can be seen from three key elements, namely (1) people's ability to fulfill their basic needs, (2) increasing individual self-esteem as part of community, and (3) increasing the community's capacity to make decisions freely (freedom from servitude), which is one of the human rights. From this interpretation, development has a broad meaning, while economic development refers to efforts made by a particular country or region to encourage economic activity and the quality of life of its population.

Regional economic development is inseparable from national development efforts and is interconnected. The main goal of regional economic development is to create prosperity for all residents in the region. In achieving regional economic development goals, it is important to implement development policies that are based on regional characteristics and utilize the potential of local resources (Arsyad, 2005; 108). Priority for economic sector development must be placed on sectors that have competitive and comparative advantages based on regional

Received: May 10, 2024; Received: June 01, 2024; Accepted: July 05, 2024; Published: July 30, 2024;

potential. To increase economic development evenly, development must be focused on areas that have complete facilities and are centers of rapid economic growth (Puti Andiny et al, 2020).

Agricultural development has a strategic role in the national economy. The strategic role of agriculture is illustrated through its real contribution through capital formation, provision of food, industrial raw materials, feed and bioenergy, absorbing labor, source of foreign exchange, source of income, as well as preserving the environment through environmentally friendly farming practices. The various strategic roles of agriculture are in line with the goals of national economic development, namely improving the welfare of the Indonesian people, accelerating economic growth, reducing poverty, providing employment opportunities, and maintaining the balance of natural resources and the environment.

In the context of economic sustainability, it is important to consider the need to diversify economic sectors to anticipate the possibility of depletion of natural resources, such as what occurs in the mining and quarrying sectors. Over time, these natural resources can decline or even run out, which can have a negative impact on economic growth and social stability. Therefore, it is important to develop alternative sectors that can act as a support or replacement for the mining and quarrying sector. This economic diversification can be done through the development of sectors such as the manufacturing industry, tourism, agriculture, technology and other service sectors. By carrying out this diversification, society can reduce dependence on sectors that are vulnerable to changes in the environment and global markets, and create new opportunities for sustainable and inclusive economic growth.

The dominance of the mining and quarrying business sector is still very significant in 5 districts/cities in East Kalimantan with the lowest contribution of 45.50% by West Kutai Regency and the highest 77.74% by East Kutai Regency. However, the dominance of mining and quarrying does not occur in Mahakam Ulu Regency, where agricultural business fields dominate at 75.18%. Furthermore, in second place, the agricultural business sector appears dominant in 6 districts/cities with the lowest contribution by East Kutai Regency at 9.16% and the highest contribution by North Penajam Paser Regency at 21.96%. Finally, the 3 cities, namely: Balikpapan, Samarinda and Bontang, are known as the bases for the processing, construction and trade industries in East Kalimantan.

In the Regional Regulation of East Kalimantan Province Number 8 of 2021 concerning Amendments to Regional Regulation Number 2 of 2019 concerning the Regional Medium Term Development Plan (RPJMD) of East Kalimantan Province for 2019-2023, the long-term strategy that is gradually being implemented is the potential for renewable natural resources. continues to be developed, both from the agricultural sector in a broad sense and the

environmental services sector, so that it is hoped that it will shift the extractive economic structure towards non-renewable natural resources. The downstreaming of agricultural sector commodities through the construction and development of processing industries in East Kalimantan Province is expected to increase the added value (added value) of products, create employment and slowly shift the dominance of mining and quarrying activities to a more sustainable economic structure including an equitable and fair impact on the economy. people and have an impact on the regional economy.

The conditions for the production of food crops and horticulture above, which are strategic commodities in the context of food fulfillment in general, are linked to the establishment of the National Capital (IKN) of the Archipelago in East Kalimantan, so in the future these commodities must play a vital role in food fulfillment not only for IKN but also for East Kalimantan in general. For this reason, there is a need for comprehensive and holistic agricultural development strategies and policies in building a strong foundation for food security in East Kalimantan and in IKN.

Economic development planning is a crucial aspect in efforts to improve regional economic performance. By identifying potential and challenges through economic development planning analysis, it is hoped that it can provide guidance for regions in designing sustainable and potential development of sectors. By making maximum use of existing resources, it is hoped that it can increase per capita income and encourage equitable development and improve community welfare.

Based on the background that has been explained, research regarding the potential and competitive economic potential of the agricultural sector needs to be carried out so that the results can become a reference in preparing agricultural development policies in the future, and especially to support structural and economic transformation in East Kalimantan Province.

## 2. LITERATURE REVIEW

## **Regional Economic Development**

Economic development is a process that causes the real per capita income of the population of a society to increase in the long term (Sukirno 2006:14). Todaro (2011:75), defines economic development as a multidimensional process, which involves major changes, both changes in economic structure, social change, reducing and eliminating poverty, reducing income inequality and unemployment in the context of economic growth.

## **Planning Theory**

Planning comes from the word plan, which means a design or framework for something that will be done. Whatever is planned are future actions (for the future). Thus, planning can be understood as a response (reaction) to the future. (Abe, 2005:27). According to (Conyer and Hill in Arsyad, 2005; 19) Planning is a continuous process that includes decisions or choices for various alternative uses of resources to achieve certain goals in the future. Economic planning itself means the deliberate control and regulation of an economy by the government to achieve certain targets and objectives within a certain time period.

## **Economic Development Planning**

Regional development planning is an important process in determining future actions in efforts to implement development in the region. As a tool, planning is expected to provide direction in the implementation of development so that it can achieve the desired results. The main factor in a development plan is how the executor, in this case the local government, can decide what should be done, then when to do it, then how to do it and ultimately who does it. A good plan can be achieved by considering future conditions, this will have implications for choosing good decisions as well.

## **Potential Economic 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 economic 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).

### 3. RESEARCH METHODS

#### Research Design

This research is descriptive research using quantitative data. Descriptive research is a research method to describe existing phenomena. The descriptive research method attempts to describe the object or subject being researched objectively, and aims to systematically describe the facts and characteristics of the object and the frequency being studied accurately.

In this research, an analysis was carried out to determine potential economic sectors using the Klassen typology analysis tool, then an analysis was carried out to explain competitive sectors and shifts in economic structure using the Shift Share analysis tool, then a SWOT analysis was carried out in order to develop a Development Planning strategy. Economics of the Food Crop Subsector and Horticultural Crop Subsector in order to develop potential and competitive sectors in order to improve the regional economy and compare with the economic development planning strategy for the agricultural sector of East Kalimantan Province as stated in the 2019 Regional Medium Term Development Plan (RPJMD) Amendment document 2023.

## **Data Collection Technique**

The data used in this research is secondary data or takes data that is already available in certain agencies according to the type of research and in this research takes data from the Central Statistics Agency (BPS) of East Kalimantan Province, data from Regional Apparatus Organizations that are relevant to this research as well as from the Regional Development Planning Agency (BAPPEDA) of East Kalimantan Province.

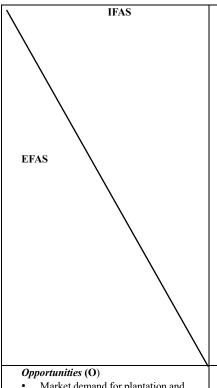
The secondary data required in this research include: East Kalimantan Province GRDP Data According to Business Fields 2018-2022, Production Data on Food Crops (Rice and Corn) and Horticultural Crops (Bananas, Cayenne Pepper, Large Chilies, Red Onions and Ginger) at the Regency/City and East Kalimantan Province level for 2018-2022, and the P-RPJMD Document for East Kalimantan Province 2019-2023.

## Data analysis technique

This research is analytical descriptive research, which provides a general overview of the subject matter being researched in the form of data or numbers which are then analyzed, classified and interpreted in the form of descriptions. There are several analytical methods used in this research. In order to achieve the goal, the first is to identify changes and shifts in the structure of the economy using Klassen typology analysis. Second, identify potential sectors that have competitive advantages and specialization using Shift Share (SS) analysis. Third, develop a strategy for Economic Development Planning for the Food Crops Subsector and Horticultural Crops Subsector in order to develop potential and competitive sectors in order to improve the regional economy of East Kalimantan Province.

#### 4. RESEARCH RESULTS AND DISCUSSION

# Table 1. SWOT Strategy Analysis of Food Agriculture and Horticulture Sub-Sectors in East Kalimantan Province



#### Strength (S)

- East Kalimantan has vast land potential for developing the plantation and agricultural sectors.
- East Kalimantan has a high diversity of plantation and agricultural commodities, such as palm oil, rubber, cocoa, rice, corn and various types of fruit.
- East Kalimantan has abundant natural resources, such as water, land and forests, which support the development of the plantation and agricultural sectors.
- The governments of Indonesia and East Kalimantan Province provide great attention and support to the development of the plantation and agricultural sectors.
- East Kalimantan has available labor for the plantation and agricultural sectors, although the quality needs to be improved.

#### Weakness (W)

- Infrastructure in plantation and agricultural areas is still limited, such as roads, bridges and irrigation.
- Farmers and planters still have difficulty accessing capital to develop their businesses.
- Farmers and planters still have low skills and knowledge about modern and sustainable agricultural techniques.
- Prices of plantation and agricultural commodities often experience high fluctuations, making it risky for farmers and planters.
- Pests and plant diseases are still the main obstacles in the development of the plantation and agricultural sectors.

- Market demand for plantation and agricultural products continues to increase, both domestically and abroad.
- Technological developments can help increase the efficiency and productivity of the plantation and agricultural sectors.
- The governments of Indonesia and East Kalimantan Province have issued various policies that support farmers, such as capital, fertilizer and seed assistance programs.
- Increasing public awareness about health drives demand for organic and healthy agricultural products.
- Demand for processed agricultural products is increasing, opening up new opportunities for farmers and planters to increase the added value of their products.

#### Strategy SO

- Utilize the potential of large areas of land for the development of superior commodities: a) Carry out mapping and zoning of land that is suitable for the development of superior commodities. b) Providing incentives and ease of licensing for farmers and planters who want to develop superior commodities. c) Increasing access to technology and information about the cultivation of superior commodities. Strengthening marketing and logistics systems for superior commodities.
- Increasing the added value of plantation and agricultural products through processing downstreaming: a) Providing capital assistance and training to farmers and planters to build agricultural product processing units. b) Building supporting infrastructure for processing and downstreaming plantation and agricultural products. c) Facilitate cooperation between farmers, planters and downstream business actors to increase the added value of products. d) Promoting processed plantation and agricultural products to domestic international markets.
- Expand market access for plantation and agricultural products: a) Increase participation in international trade exhibitions and

#### Strategy WO

- Improve infrastructure in plantation and agricultural areas: a) Construct and repair roads, bridges and irrigation in plantation and agricultural areas. b) Installing electricity and telecommunications networks in plantation and agricultural areas. c) Building other supporting infrastructure, such as warehouses, markets and processing factories.
- Increase access to capital for farmers and planters: a) Facilitate access for farmers and planters to formal and informal financial institutions. b) Providing capital assistance programs to farmers and planters. c) Develop credit schemes that are easily accessible and affordable for farmers and planters.
- Improve the skills knowledge of farmers and planters: a) Provide training and assistance to farmers and planters on modern and sustainable agricultural techniques. b) Increasing access for farmers and planters to the information and technology. c) Support the development of vocational education and training in the agricultural sector.
- Increasing price stability for

forums. b) Building a cooperation network with distributors and importers abroad. c) Utilizing e-commerce platforms to market plantation and agricultural products. d) Improve branding and promotion of plantation and agricultural products.

- Applying modern agricultural technology to increase efficiency and productivity: a) Providing training and assistance to farmers and planters on the use of modern agricultural technology. b) Facilitate access to modern agricultural tools and machinery. c) Develop information technology applications to help farmers and planters in cultivating crops and livestock. d) Carrying out research and development of agricultural technology that is appropriate to local conditions.
- Increase cooperation between stakeholders in the development of the plantation and agricultural sector: a) Establish a communication and coordination forum between stakeholders in the plantation and agricultural sector. b) Increase cooperation between government, private sector, farmers, planters, academics and research institutions. c) Carrying out mentoring and empowerment programs for farmers and planters. d) Support the development of partnerships between farmers and planters and downstream business actors.

- plantation and agricultural commodities: a) Strengthening the role of the Food Price Stabilization Agency (BSHP) in maintaining price stability for plantation and agricultural commodities. b) Develop an effective commodity stock storage and management system. c) Encourage product and market diversification to reduce dependence on one commodity.
- Improve pest and plant disease control: a) Strengthen the monitoring and detection system for plant pests and diseases. b) Increase the use of plant-based and environmentally friendly pesticides. c) Support the development of plant varieties that are resistant to pests and diseases.

#### Threats (T)

- Climate change can have a negative impact on the plantation and agricultural sectors, such as drought, floods and plant pests.
- Land conversion for infrastructure and settlement development can reduce the land available for the plantation and agricultural sectors.
- Competition from other countries in the plantation and agricultural commodity markets can suppress prices and threaten the income of farmers and planters.
- Fluctuations in currency exchange rates can have a negative impact on the income of farmers and planters who export their products.

## Strategy ST

- Increasing the efficiency and productivity of the plantation and agricultural through sector mechanization and digitalization: a) Providing capital assistance and training to farmers and planters to use modern agricultural tools and machinery. b) Building information and communication technology (ICT) infrastructure in plantation and agricultural areas. c) Develop information technology applications to help farmers and planters in cultivating crops and livestock. d) Encourage farmers and planters to use e-commerce platforms to market their products.
- Increase the resilience of the plantation and agricultural sectors to climate change: a) Develop plant varieties that are resistant to drought, floods and pests. b) Applying environmentally friendly sustainable cultivation and techniques. c) Building an efficient irrigation system to maintain water availability. d) Carrying out reforestation forest and conservation to preserve the environment.
- Increase the competitiveness of plantation and agricultural products in the global market: a) Improve the quality of plantation

## Strategy WT

- Improving the quality and diversification of plantation and agricultural products: a) Encouraging farmers and planters to produce plantation and agricultural products of high quality and in accordance with international standards. b) Support the development of new, superior varieties of crops and livestock. c) Encourage diversification of plantation and agricultural products to reduce dependence on commodity.
- Improve the efficiency and effectiveness of the logistics and distribution system for plantation and agricultural products: a) Improve logistics and distribution infrastructure, such as roads, bridges and ports. b) Build modern and efficient warehouses and storage. c) Increasing the use information of and communication technology (ICT) in logistics distribution systems. Encourage cooperation between business actors in logistics and distribution systems.

- and agricultural products accordance with international standards. b) Strengthen branding and promotion of plantation and agricultural products in the global market. c) Facilitate access for farmers and planters international markets. d) Increase participation in international trade exhibitions and forums.
- Increasing food and nutritional security in East Kalimantan Province: a) Increasing production and productivity in the plantation and agricultural sectors. b) Increase community access to safe and quality food. c) Carrying out nutritional education to the community. d) Building food and nutrition security programs.
- · Increase the competitiveness of farmers and planters in local and international markets: a) Provide training and assistance to farmers and planters on marketing and negotiation strategies. Facilitate access for farmers and planters to local and international markets. c) Encourage farmers and planters to build brands and identities for their products. d) Increasing the participation of farmers and planters in trade exhibitions and forums.
- Increase public awareness about the importance of the agricultural and plantation sectors: a) Conduct educational and promotional about campaigns importance of the agricultural and plantation sectors. b) Involving mass media and influencers in promoting the agricultural and plantation sectors. c) Support research and development activities in the agricultural and plantation sectors. d) Increasing the role of vocational education in producing competent workers in the agricultural plantation sectors.
- Strengthen coordination cooperation between stakeholders: a) Establish a communication and coordination forum between stakeholders in the agricultural and plantation sectors. b) Increase cooperation between government, private sector, farmers, planters, academics and research institutions. c) Support the development of partnerships between farmers and planters and downstream business actors. d) Increase community participation in the formulation and implementation of policies in the agricultural and plantation sectors.

Based on the analysis that has been carried out, commodities in the food crop subsector and horticultural crop subsector that have the potential to be developed in order to support the economy in East Kalimantan Province are lowland rice, shallots and large chilies. Commodities in the food crop subsector and horticultural crop subsector that have competitiveness to be developed in order to support the economy in East Kalimantan Province are lowland rice, corn, bananas, shallots and large chilies. In East Kalimantan Province, the sub-sector commodities of food crops and horticultural crops play an important role in the economy, although the shifts and dynamics of their roles can vary from time to time. Food crops such as lowland rice and corn have long been the main commodities in East Kalimantan's agricultural sector. These food crops provide a staple food source for local residents and contribute significantly to regional

food security. There is a shift in cropping patterns from traditional to modern, where more sophisticated agricultural technology and more sustainable practices are increasingly being implemented to increase productivity and efficiency. Food crop production makes a significant economic contribution through farmers' income, the food processing industry, and the distribution and trade of agricultural commodities. The economic development planning strategy that can be carried out in order to develop potential and competitive sectors in the food crop subsector and horticultural crop subsector in order to support the economy in East Kalimantan Province is to implement short term (1 year), medium term (5 year) and long term plans. (10 Years) which has been determined based on a SWOT analysis that has been carried out in a comprehensive, consistent and sustainable manner.

#### 5. CONCLUSION

East Kalimantan, a province with abundant natural wealth, has great potential in the agricultural and plantation sectors. In 2024, this sector will play a crucial role in supporting food security and improving community welfare.

The agricultural and plantation sectors in East Kalimantan (Kaltim) play an important role in the regional economy and national food security. In plantation commodities, palm oil dominates, with other commodities such as rubber, cocoa, coffee and rattan also making significant contributions. In agricultural commodities, rice, corn, cassava, vegetables and fruit are the main commodities, with great potential for product diversification.

The agricultural and plantation sector in East Kalimantan has great potential to continue to develop and contribute to national food security and the welfare of farmers. With strong synergy and collaboration between the government, farmers, business actors and various related parties, it is hoped that this sector can overcome various challenges and seize existing opportunities, thereby realizing a sustainable, resilient and prosperous agricultural and plantation sector.

Recommendations that researchers can submit to the East Kalimantan Provincial Government are as follows: Coordinate between the East Kalimantan Provincial Government and the Regency/City Governments in East Kalimantan Province to strengthen infrastructure in priority sectors, one of which is the agricultural and plantation sectors. Prepare and facilitate bureaucratic procedures for foreign investors who will invest capital in East Kalimantan Province during the priority sector period, especially the food agriculture and horticulture agriculture subsectors. Strengthening human resources (HR) through industrial vocational education and training programs to prepare Human Resources (HR) that are globally

competitive. Carry out integrated promotions through various social media and various other promotional means regarding the advantages that East Kalimantan Province has in the agricultural sector.

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