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SINTA 2

Mapping Analysis of Leading Commodities Based On Food Crops in Malaka Regency

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ABSTRACT

Malaka Regency is export-oriented food storage in the border area, requiring a complete database to distribute its agricultural potential. However, problems are still found in agricultural development such as limited infrastructure, low human resources, access to farmer institutions, finance and markets. However, the development of the agricultural sector is slowly being forgotten because it is often considered a supporting element in the economy. Apart from that, the development of the agricultural sector is slowly being forgotten because it is often considered a supporting element in the economy. So this study aims to identify developments in each food crop commodity. In addition, the identification of opportunities for commodity development areas will be carried out by mapping the potential of each food crop commodity. The analysis used in this research is Location Quotient (LQ) analysis, Locational Index (LI) analysis, and Specialization index (SI) analysis. The results of this analysis indicate that the development of rice commodities is centered in the districts of Central Malaka, West Malaka, and Weliman. Corn commodity is centered in Wewiku, Weliman, Rinhat, Kobalima, East Malaka, and East Kobalima District. The cassava commodity is the basis for Rinhat, Lokufeu, Laenmanen, and Botin Leobele Districts. Sweet potato commodity base in Rinhat District, Sasitamean, Botin Leobele, East Malaka, East Kobalima. Mung bean commodity base in Central Malaka, Kobalima, East Kobalima District. The peanut commodity is essential in Wewiku, Kobalima, and East Kobalima District.

Keywords: *food crops; leading sector; mapping*

INTRODUCTION

The agricultural sector is one of the economic sectors that have great potential to increase the growth and development of the national economy in terms of income and employment. Research by (Isbah, 2016) and (Khatimah, 2022) explains that the agricultural sector plays a role in economic growth and employment opportunities. In addition, the agricultural sector is a strategic sector related to compliance with the needs of human life (Arifin Bustanul, 2005). The agricultural sector has a perfect role in the nation's economic recovery. It indicated the agricultural sector's contribution to Indonesia's GDP in 2021, which is 13.28%. During the Covid-19 pandemic, even though other sectors did not experience an increase, the agricultural sector continued to experience growth (Bank Indonesia, 2021).

The agricultural sector is related to the management and utilization of strategic results, especially those concerning food

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commodities. As an agricultural sub-sector, food crops play an important role in increasing food self-sufficiency “Swasembada Pangan” (Kementrian Pertanian Republik Indonesia, 2020). It is necessary to develop agriculture, focusing on leading commodities to improve agricultural development. So that this can increase people's income and, in aggregate, increase regional income.

Malaka Regency is one of the regencies in East Nusa Tenggara Province (NTT), which was split from Belu Regency in 2013 following the mandate of Law Number 3 of 2013 concerning the formation of Malaka Regency. Based on the geographical location, Malaka District has land or direct borders with the State of Timor Leste and sea borders with the State of Australia. The agricultural sector in Malaka Regency also plays a role in the region's economic growth (Klau, Anggelina Delviana, 2021). It means that the agricultural sector is one of the important sectors.

The Gross Regional Domestic Product (GRDP) of Malaka Regency from 2017 to 2021 (Figure 1) shows that the agricultural sector has the highest contribution and has increased yearly compared to other sectors. In 2018 it increased by Rp. 29,372.4 (million). In 2019, it increased by Rp. 27,588.51 (million). In 2020 it increased by Rp. 14,808.09 (million); in 2021, it again increased to Rp. 29,241.34 (million). It can indicate that the agricultural sector is strategic in Malaka District.

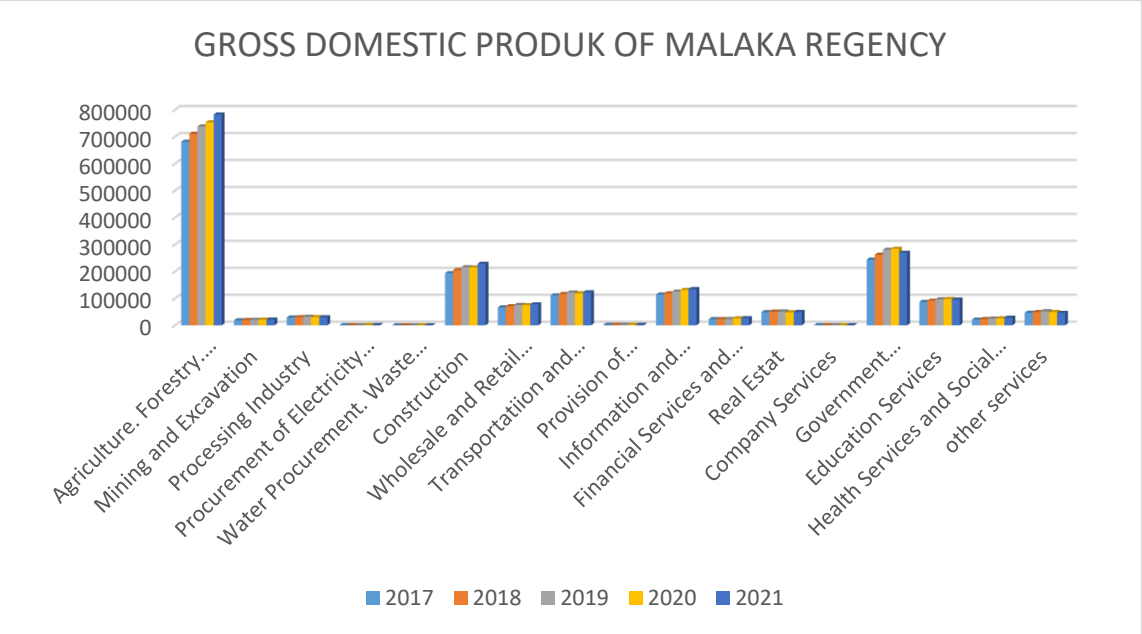

Figure 1
Gross Domestic Product in Malaka Regency
Source: Malaka Central of Statistics, 2022

In order to support the development of the agricultural sector as a leading sector, the government, through the Ministry of Agriculture, has designated Malaka Regency as one of the export-oriented food storage areas (LPBE-WP). This policy is contained in the Decree of the Minister of Agriculture No.215/Kpts/OT.050/2/2017 with the consideration that the potential for the food crop sub-sector is a potential sector. The location of Malaka Regency is strategic because it borders directly on the State of Timor Leste. In supporting the increased development of the agricultural sector, the Malaka District has issued policies such as the Malaka Agricultural Revolution and Food Self-sufficiency (Medium-Term Government Plan of Malaka District). (Klau, Rustiadi, & Siregar, 2019) explains

that Malaka Regency can develop into a food-plant-based Agropolitan area because of the potential of its food crop commodities. However, there are still challenges in developing the agricultural sector in Malacca Regency, such as the spread of small-scale agricultural land areas and the assumption that the same will have an impact on high costs, lack of quality human resources, lack of marketing and lack of innovation in agricultural cultivation

Based on the potency, optimizing the development of the food crops sub-sector in Malaka Regency as the leading sector in regional economic development is necessary. This research will identify developments in each food crop commodity. In addition, the identification of opportunities for commodity development areas will be carried out by mapping the potential of each food crop commodity. So essential information is obtained in formulating agricultural sector development policies to support regional-based food self-sufficiency (spatial).

METHODS

This research was conducted in Malaka Regency, East Nusa Tenggara Province, which consists of 12 districts. This research is quantitative, with data obtained secondary. The data used in this study were production data for the food crop agriculture sub-sector in 12 sub-districts obtained from the Department of Agriculture, Food Crops and Holculture of Malaka Regency and the Malaka Central of Statistics (BPS). Furthermore, a literature study was carried out from scientific articles and books to enrich the research. The analysis technique used is Location Question (LQ) analysis to determine which sectors are the primary sectors that can export (out of the region) in the regional economy (Muta'ali, 2015). If the LQ value ≥ 1, then the commodity is basic. If the LQ value < 1, then the commodity is non-basic. The formula of LQ is as follows:

$$LQ_{IJ} = \frac{X_{IJ}/X_{I.}}{X_{.J}/X_{..}}$$

Keterangan:

- X_{ij} : Production value of commodity j in sub-district i
- $X_{i.}$: Total value of food crop commodity production in District i
- $X_{.j}$: Production value of commodity j in Malaka Regency
- $X_{..}$: The total value of food crop commodity production in the Malaka Regency

Locational Index (LI) analysis to determine which areas have the potential to develop specific activities. If the LI value is close to 0, the activity has the opportunity for the level of development to be relatively the same in all locations. If the LI value is close to 1, the activity will tend to develop in a centralized location. LI formula is as follows:

$$LI_J = \tfrac{1}{2} \sum_{I=1}^{n} \left\{ \left| \frac{X_{ij}}{X_{.j}} - \frac{X_{i.}}{X_{..}} \right| \right\}$$

Analysis of the Specialization Index (SI) to identify the specialties of a particular sub-region. If the SI value is close to 0, it means there is no specificity If the SI value is close to 1, it means there is have specificity The analysis results for mapping prime commodities are described by mapping using the Geographic Information System (ArcGIS) application. The calculation formula is as follows:

$$SI_i = \tfrac{1}{2} \sum_{j=1}^{P} \left\{ \left| \frac{X_{ij}}{X_{i.}} - \frac{X_{.j}}{X_{..}} \right| \right\}$$

RESULT AND DISCUSSION

Production Development of The Food Crop Sub-Sector in Malaka Regency

Based on data on data of the food crops sub-sector, rice, corn, and cassava have higher production than other commodities such as sweet potatoes, peanuts, mung beans, and peanuts. The

development of production for rice commodities has fluctuated. In 2016 it was 32,140 tons; in 2017, it increased by 36,708.7 to 68,848.7;

In 2018, it increased again to 82,620.04 tons, but in 2019 it decreased by 19,142.64 tons to 63,477.4 tons, and in 2020 it increased to 59,649.06. For the corn commodity, production has increased every year from 2016 to 2020. In 2016 corn production was 103,790 and then increased by 71,531.18 tons to 175,321.1 tons in 2020. Cassava commodities, the same as rice, experienced fluctuations. In 2016, it was 69,108.8 tons, then increased by 41,844.6 tons to 110,953.4 tons in 2018, but in 2019, it decreased to 25,505 tons and again increased in 2020 to 45,826.28 tons.

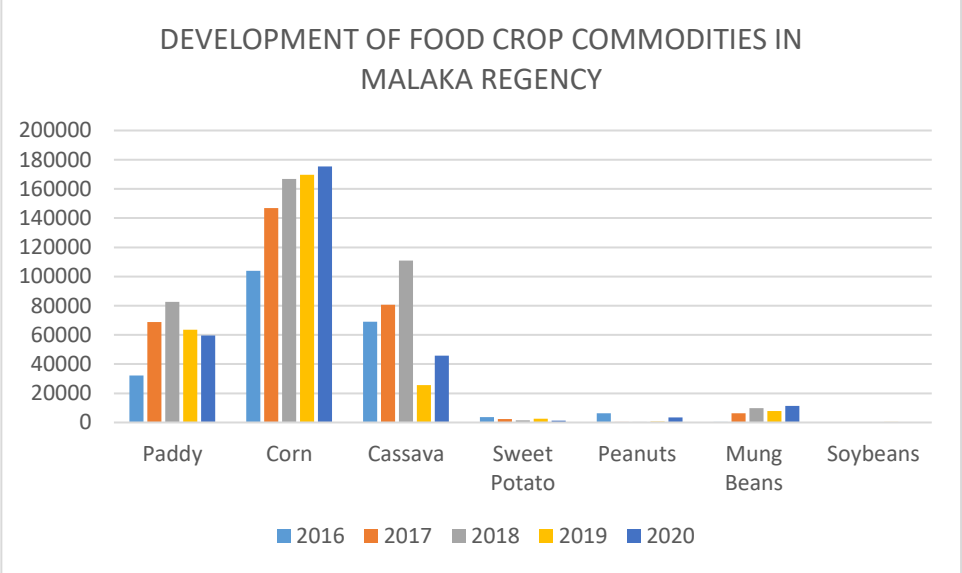

Figure 2
The Development of Food Crop Commodity Production in Malaka Regency
Source: Malaka Central of Statistics, 2021

The food crop sub-sector with the highest production is corn, which has increased yearly production. In 2020 the production of the highest corn commodity was 175,321 tons. It is supported by government policy in the Malaka Agricultural Revolution program. The program's purpose is to support the community's economic independence and realize Malaka Regency (UNDANA Research Institute, 2016). The impact of this flagship program is technological innovation, production facilities, and increased production through corn farming empowerment (Niis Matilde, 2019). In addition, the existence of Malaka Regency in the Benenai River area so that the farming system developed by "Ahukklean". It is traditional farming that utilizing river water infiltration during the dry season by planting corn in depth without getting additional irrigation either rain or irrigation. Corn farming was developed in the third growing season of the annual cropping pattern (Pah Kurniati, 2016).

Mapping of food corps leading commodities in Malaka Regency

Mapping the leading commodities of the food crops sub-sector in Malaka Regency is carried out by identifying the basic commodity sector of the food crops sub-sector through Location Quotient (LQ) analysis. To identify areas that have opportunities to develop certain food crop commodities through Locational Index (LI) analysis, then analysis of Specialization index (SI) to identify the specialization/specificity of a region.

1. Mapping of food corps basic commodities in Malaka Regency

The basic sector is a sector that has great potential in determining overall development in the region, while the non-basic sector supports this overall development. Base activities are activities oriented towards the export of goods and services outside the area concerned because this sector has met the region's needs (Saharuddin S, 2005). This basis sector indicates the existence of a comparative advantage possessed by a region due to the abundant production of raw materials supported by existing natural resources (Hardison, 2003). The LQ analysis of the food crops sub-sector shows that there are essential commodities spread across 12 sub-districts in Malaka Regency, namely rice, corn, cassava, sweet potatoes, mung beans, and peanuts. The distribution of essential commodities in the food crops sub-sector in Malaka Regency is shown in Figure 3

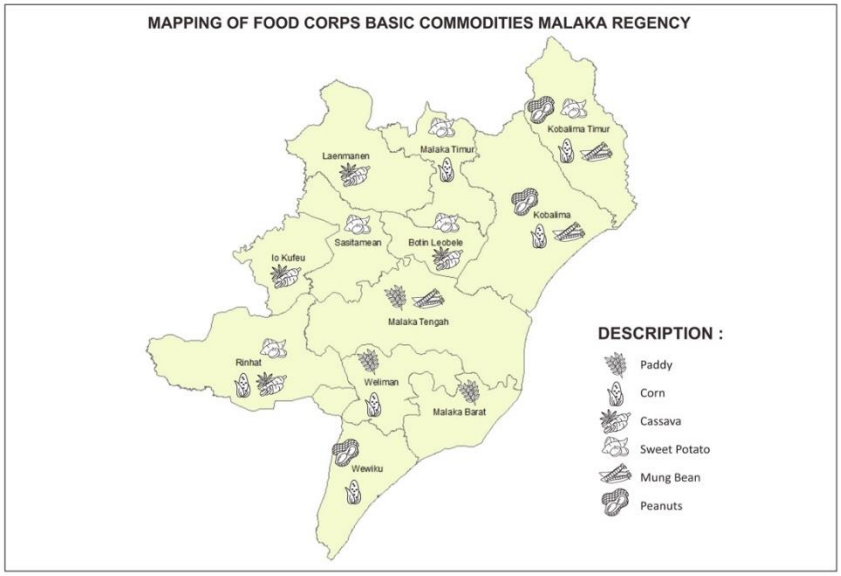

Figure 3
Mapping of food corps basic commodities Malaka Regency
Source: Hasil Analisis, 2022

a. Paddy

National food needs require increasing paddy production, especially in the central areas of food crops, including the Malaka Regency. Based on the analysis, the areas included in the rice basic commodities are the districts of Central Malaka, Weliman, and West Malaka. Paddy commodity is a staple food and a basic need for life, so the demand will continue to increase as well as in Malaka Regency. Based on data on the production of morning commodities, these three sub-districts have the highest amount of paddy production and are paddy centers in Malaka Regency (Central of Statistics Malaka 2021; RPJMD Malaka 2022-2027).

(Ali, 2019) explains that the basic sector in an area can become a driving sector of the economy which can be improved by providing business permits and investment facilities. In supporting the development of paddy commodities, the government of Malaka District has issued a policy in the form of the Malaka Agricultural Revolution, followed by food self-sufficiency. This policy requires agricultural innovation, which emphasizes the provision of agricultural production and facilities, field technical assistance and guidance, and encouraging changes in knowledge, attitudes, and skills of farmers in farming. The results of (Niis Matilde, 2019) research show an increase in agronomic performance to increase agricultural productivity and production, income, and welfare of the people of Malaka Regency.

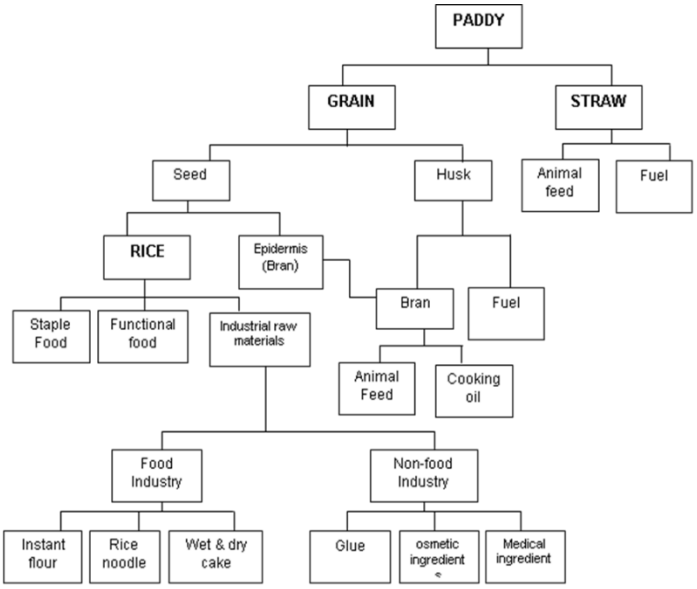

Figure 4
Paddy Industrial Tree
Source: Hasil Analisis, 2022

Paddy is a strategic commodity because it is a commodity that is consumed every day as a fulfillment of carbohydrates, so the marketing potential is high. In addition, paddy can be developed into industries and so on. Figure 4 shows that the development of this commodity has a huge opportunity to support Food Self-sufficiency programs and policies in Malaka Regency. The paddy industry developing in Malaka Regency includes the bran industry from husks for animal feed because of the excellent livestock potential in Malaka. Home industries also use it as raw material for wet and dry cakes. Home industries that are well managed, follow industry standards, and with attractive packaging are expected to achieve the expected targets, namely increasing household income, absorbing labor, and obtaining added value from paddy. However, there is still a need of developing industries from paddy in Malaka Regency, such as raw materials for the food and non-food industries, which have good prospects if developed, so policies are needed to support the utilization of this commodity.

b. **Corn**

Corn is a food crop commodity that contributes to the development of the agricultural sector because its role is not only for food but also for animal feed. (Menge, Dominika, 2016) explained that the local corn of East Nusa Tenggara Province had very different characteristics from the superior national varieties of corn, especially in terms of plant appearance and resistance to pests. Corn is the leading commodity in Malaka Regency after paddy. Based on the basic sector analysis, the areas included in the corn commodity base sector in Malaka Regency are Wewiku District, Weliman District, Rinhat District, Kobalima District, East Malaka District, and East Kobalima District. (Klau et al., 2019) found that the six sub-districts were corn centers in Malaka Regency and Wewiku Sub-District were corn commodity-based agropolitan development areas because they had supporting infrastructure. One of the NTT Provincial government's efforts in developing corn's potential is the policy of “Tanam Jagung Panen Sapi Program” (TJPS). It is a dry land development program that hopes to increase the productivity of corn farming, including in Malaka District.

The need for corn will increase every year in line with the improvement of the community's economy and the progress of the animal feed industry.

Efforts are needed to increase production through human and natural resources, land availability, yield potential, and technology. In addition, (Budiman, 2012) explained that the marketing potential of corn continues to increase due to the development of the livestock industry, which can increase demand for corn, and develop food products from corn in the form of corn flour.

The use of corn in Malaka Regency for leaves and husks of corn cobs is used for animal feed and fuel. The fruit is consumed directly or processed into snacks by small-scale home industries. Corn commodities also can be exported to other regions in Indonesia's surrounding areas, such as Timor Tengah Selatan and Belu Regencies. This commodity is the best prospect exported to other countries, namely Timor Leste, because it is directly adjacent to Malaka Regency. However, corn commodities are exported in shelled form, lacking added value. To meet the demand for the corn industry, such as flour, starch, institutions, grits, etc., must be imported from other regions, even though Malaka Regency has considerable potential for corn commodities. The occurrence of economic leakage in an area can have an impact on the small multiplier resulting from economic development in a region. There still needs to be a developed corn industry in Malaka Regency due to the limited understanding of the community for the diversification of corn commodities. Even though the prospects for industrial development are as varied as in the analysis of industrial trees from the following corn commodities:

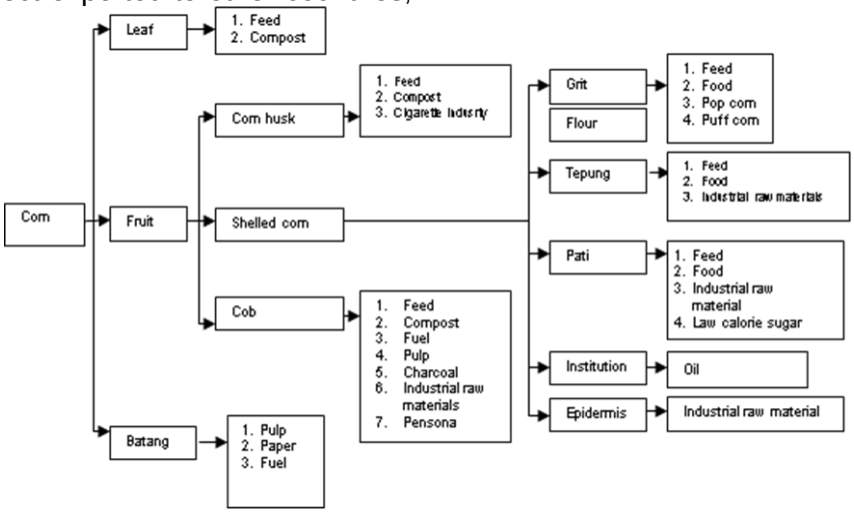

Figure 5
Corn Industrial Tree
Source: Hasil Analisis, 2022

c. Cassava

Cassava commodity is a source of carbohydrates for humans. In Malaka Regency, areas with basic cassava commodities are Rinhat District, Iokufeu District, Laenmanen District, and Botin Leobele District. It means that in these areas, the demand for cassava commodities has been fulfilled and has the potential to be exported to other regions. The development of cassava commodity production fluctuated from 2016 to 2020. In 2016 of 69,108.8 tons, then it increased by 41,844.6 tons to 110,953.4 tons in 2018. However, in 2019 it decreased to 25,505 tons and again increased in 2020 to 45,826.28 tons.

The cassava commodity needs further development to diversify products through the increased industry. In general, cassava is used only for consumption and animal feed, which shows that there still needs to be development of the commodity. In fact, with the application of cassava commodity

industry technology, it can be developed into several derivative products for the food industry, paper industry, and chemical industry. Even in the future, there is an opportunity for the plastic industry to develop (Rozi and Pudjiastuti, 2020). Some industries that can be developed from cassava are flour, mocav, paper industry materials, chemical compounds, and animal feed. The development of the cassava commodity industry in Malaka Regency, apart from being used for direct consumption, animal feed is also used as raw material for making snacks, such as chips managed by small-scale home industries. It is necessary to encourage increased utilization of cassava commodities for both small and medium-scale industries in Malaka Regency. However, the problem in agro-industry development is that collaboration, and business ties have yet to be established between these businesses. It will have implications for not achieving goals because business actors need to get good benefits.

d. Sweet Potato

Sweet potato is a potential source of carbohydrates and can be used as an alternative food source, feed ingredient, and industrial material. Suharyon (2020) explains that generally, farmers develop sweet potato farming to the extent that the understanding is mastered from generation to generation so that the productivity is much lower. Based on LQ analysis, it is known that in Malaka Regency, the areas included as a base for sweet potato commodities are Rinhat District, Sasitamean District, Botin Leobele District, East Malaka District, and East Kobalima District.

Sweet potato has many benefits, not only as a secondary food source but also be processed into various other forms supporting industrial development in Malaka Regency, such as food processing, yogurt, flour, textile dyes, and the chemical industry. At present, the sweet potato industry developing in Malaka Regency is used for processed food raw materials in the form of sweet potato chips and some processed cakes by small to medium-scale household industries. In contrast, processed drinks, flour, and chemical cosmetics industries have yet to develop in the Malaka Regency. Even though it has excellent potential if developed, it will impact the welfare of its people. Availability of land that is still wide, production technology, and markets that are still open are potentials for sweet potato development in Malaka Regency. Sweet potato development can be done through training, mentoring, sustainability, capital facilities, provision of production facilities, and partnerships.

e. **Mung bean**

Mung bean is a legume plant that is an essential source of protein besides soybeans and peanuts and has a strategic role because of its superior agronomic and economic properties (Holidi et al. 2016). The strategic value of mung bean is further strengthened by its ability to be a savior plant in the event of crop failure in previous crops such as paddy and corn (Hastuti et.al, 2018). The results of the LQ analysis show that the areas included in the green bean commodity base are the Central Malaka District, the Kobalima District, and the East Kobalima District. To support the development of the mung bean commodity, the Malaka Regency government issued a "fore lakateu" policy. It provides assistance starting from land preparation and processing, seeds, planting, weeding, fertilizing, harvesting and post-harvesting to farmers to increase further the production and productivity of the green bean commodity so that it is increasingly being exported outside the region.

Tetik (2016) explains that the cultivation of mung bean farming in Malaka Regency is economically profitable, so farming has better prospects for development. However, it is necessary to develop product diversification from this commodity. Derivative products from

green bean commodities include processed pulp products, flour/paid products, beverage products, processed cake products, processed vegetable products such as bean sprouts, processed shampoo products, and those used as animal feed. The development of the mung bean agro-industry in Malaka Regency is in the form of processed vegetables by farmers, used for cake processed products by home industries on a small scale, medium to large scale. Industries have yet to develop in Malaka Regency, even though it has good potential and prospects. Research by Elisabeth, (2021) explains that several efforts can be made to develop the industry, including increasing farmer capacity in land management, using high-yielding varieties, and applying technology in mung bean cultivation.

f. Peanuts

Peanuts are a multi-functional commodity and have become a bio-industry because they can be consumed directly and act as industrial raw materials for various types of processed foods, vegetable oils, and animal feed ingredients (Swastika, 2016). The analysis results show that in Malaka District, the areas included in the peanut commodity base are Wewiku District, Kobalima District, and East Kobalima District. Kobalima sub-district is a sub-district directly adjacent to the country of Timor Leste, so it has potential marketing prospects because of its strategic area. Asa's research, (2018) explains that several factors that affect peanut farming are land area, labor, formal education, experience, and cropping patterns that can affect the increase in peanut production. The demand for peanuts is increasing along with the number of food products that make peanuts a staple raw material, either preserved or other foods. Derivative products from peanuts can be developed into advanced industries in various processed food products like legumes. Then it can be processed into flour, paste, oil, milk, butter, chili sauce, or seasonings to become animal feed. However, there is no growing peanut industry in Malaka Regency, both on a small and large scale. Peanuts are only consumed directly without being processed into industries that can produce high-added value.

2. Diversification Analysis of Food Crop Sector in Malaka Regency

Localization Index (LI) analysis is an analytical technique that can complement or strengthen the results of LQ analysis. The LI analysis technique shows whether an activity develops in all regions (dispersion) or relatively develops only in certain areas (Localization concentration). If the activity is dispersed, it cannot be said that the activity is concentrated. It can be said that the activity is a base activity (Pribadi et.al 2018)

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Table 1
Localization Index Analysis

District	Paddy	Corn	Peanuts	Mung beans	Cassava	Sweet Potato
Wewiku	0.071336	0.013833	0.013952 517	0.023666	0.009605	0.071562
Malaka Barat	0.075151	0.001472	0.028353 356	0.020903	0.028353	0.028353
Weliman	0.058687	0.00043	0.038657 505	0.006904	0.028618	0.038658
Rinhat		0.00633	0.015785 823	0.05362	0.010723	0.10019
Io Kufeu	0.003858	0.000365	0.038035 58	0.037344	0.011256	0.038036

District	Paddy	Corn	Peanuts	Mung beans	Cassava	Sweet Potato
Sasita Mean		0.005421	0.038185 451	0.025506	0.045759	0.02376
Malaka Tengah	0.136167	0.01426	0.045479 761	0.005166	0.013051	0.04548
Botin Leobele		0.001682	0.016014 509	0.000847	0.009482	0.104977
Laen Manen	0.017846	0.008751	0.034849 751	0.028818	0.049594	0.03485
Malaka Timur		0.00244	0.002883 604	0.008815	0.00184	0.005243
Kobalima	1.75E-05	0.000992	0.105028 709	0.184702	0.028445	0.063198
Kobalima Timur		0.007927	0.139264 114	0.016556	0.016902	0.085966
LI Score	0.363063	0.063904	0.516490 68	0.412849	0.253628	0.640273

Source: Analysis result, 2022

The LI analysis shows that rice, corn, mung beans, and cassava have LI values close to 0 (less than 0.5). It shows that some of these commodities developed in Malaka Regency were dispersed so that specialization did not occur. In contrast, peanut and sweet potato commodities have an LI value of more than 0.5. These commodities are concentrated in Wewiku District, Kobalima District and East Kobalima District for peanuts and Rinhat District, Sasitamean District, Botin Leobele District, East Malaka District and Kobalima District. East because its commodity potential is spread unevenly. Some of these areas have land suitability suitable for cultivating sweet potatoes and peanuts (Table 1).

Specialization Index (SI) analysis is used to show whether an area tends to have diversified activities or tends to have specialized activities. If an area has diversified activities, the region does not have certain basic activities; conversely, if an area has specialized activities, the region tends to have specific basic activities (Pribadi, 2018). From the SI analysis results, all Malaka Regency areas have diversified food crop commodity activities. It can be seen from the SI values all close to 0 (less than 0.5), meaning that each sub-district in Malaka Regency does not have a specific primary activity or does not have specialization.

CONCLUSION

The analysis shows that rice commodities are basic in the districts of Central Malacca, West Malaka, and Weliman. Corn commodity development is centered on the Districts of Wewiku, Weliman, Rinhat, Kobalima, East Malaka, and East Kobalima. The cassava commodity is the basis for Rinhat, Iokufeu, Laenmanen, and Botin Leobele Districts. Sweet potato commodity base in Rinhat District, Sasitamean, Botin Leobele, East Malaka, East Kobalima. Mung bean commodity base in Central Malaka District, Kobalima, East Kobalima. The peanut commodity is essential in Wewiku District, Kobalima, East Kobalima.

Identifying the centrality of food crop commodities shows that most do not have centrality. It means that only a few of these commodities developed in all areas of Malaka Regency or were dispersed, namely peanuts and sweet potatoes. The peanut commodity with the highest production is in the East Kobalima District, while the sweet potato commodity is in the Rinhat District. The region's uniqueness shows that the sub-districts in Malaka Regency do not have specialties in terms

of food crop potential due to relatively the same soil and weather conditions. To increase the development of agricultural potential in Malacca Regency, especially for food crop commodities, the Government can determine to intensify rice and corn farming. In addition, it is necessary to develop industrial centers for managing rice and corn to provide added value to these two commodities. Meanwhile, developing other food crop commodities is carried out by processing crop yields through industrial activities on a micro, small and medium scale.

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REFERENCES

Ali, T. (2019). Analysis of Base Sector and Non-Basic Sectors on Economic Growth in Maluku Province (Case Study of City Districts. *Jurnal Cita Ekonomika*, *13*(1), 1–18.

Arifin Bustanul. (2005). *Agricultural development: policy paradigms and revitalization strategies*.

Asa, A. T. (2018). Factors Influencing Peanut Farming Production in Tapenpah Village, Insana District, North Central Timor Regency. *Agrimor*, *3*(1), 1–3.

Bank Indonesia. (2021). *Indonesian Economic Report*.

Budiman, H. (2012). *Cultivation, Corn Varieties, organic. Increasingly New Hunted. Pustaka Baru Putra.* Yogyakarta.

Dian Adi Anggraeni Elisabeth. (2021). Competitiveness Capability of Mung Beans at the Farming Level on Saline Land (Case Study in Gesik Harjo Village, Palang District, Tuban Regency). *BULETIN PALAWIJA*, *19*(2), 93–101.

Grand Design One Village One Product Jalan menuju Revolusi Pertanian Malaka. (2016). Lembaga Penelitian Universitas Nusa Cendana kerja sama dengan Pemerintah Kabupaten Malaka.

Hastuti DP, Supriyono, H. S. (2018). Growth and the yield of mung bean (Vigna radiata L.) in several doses of organic fertilizer and planting density. *Journal of Sustainable Agriculture*, *33*(2), 89–95. DOI: https://doi.org/10.20961/carakatani.v33i2.20412

Isbah Ufira, I. R. Y. (2016). ANALISIS PERAN SEKTOR PERTANIAN DI PROVINSI RIAU. *Jurnal Sosial Ekonomi Pembangunan*, *7*(19), 45–54.

Kementrian Pertanian Republik Indonesia. (2020). *Ministry of Agriculture strategic plan*.

Khatimah Khusnul, M. S. (2022). Kontribusi sektor pertanian terhadap perekonomian Kabupaten Brebes. *Jurnal Inovaasi Penelitian*, *2*(10), 3287–3296. DOI: https://doi.org/10.47492/jip.v2i10.1170

Klau, Anggelina Delviana, and U. H. (2021). Analysis of economic potential to increase competitiveness in East Nusa Tenggara Border area. *Jurnal Ekonomi Pembangunan*, *3*(3), 13–26. DOI: https://doi.org/10.32938/jep.v6i3.1340

Klau, A. D., Rustiadi, E., & Siregar, H. (2019). Analisis Pengembangan Kawasan Agropolitan Berbasis Tanaman Pangan di Kabupaten Malaka Provinsi Nusa Tenggara Timur, *3*(3), 172–179. doi: 10.51125/citaekonomika.v13i1.2647

Marinda Ranti, Sitorus Santun R, P, P. D. O. (2020). Analisis pola spasial persebaran kawasan lahan pertanian pangan berkelanjutan di Kabupaten Karawang. *Jurnal Geografi*, *12*(2). https://doi.org/DOI: 10.24114/jg.v12i02.17646

Menge, Dominika, and Y. L. S. (2016). Appearance of Local Corn and Its Role as a Main Food Source for People in the Dry Land of East Nusa Tenggara. *Balai Pengkajian Teknologi Pertanian Nusa Tenggara Timur*.

Muta'ali, L. (2015). *Teknik Analisis Regional untuk Perencanaan Wilayah dan Lingkungan*. Yogyakarta: Badan penerbit fakultas geografi (BPFG).

Niis Matilde, S. and N. (2019). Policy of Impact "Revolusi Pertanian Malaka" Toward Economy Productivity The Kabupaten Malaka Community NTT. *Jurnal Agribisnis Perikanan*, *12*(1), 43–50. DOI:10.29239/j.agrikan.12.1.43-50

Pah Kurniati. (2016). GENDER RELATIONS IN DISASTER IN MALAKA DISTRICT, EAST NUSA TENGGARA. *Jurnal Kajian Ilmu Administrasi Negara*, *4*(2), 163–180. DOI; 10.21831/jnp.v4i2.12624

Pribadi Didit Okta, Rustiadi Ernan, Panuju Dyah Retno, P. A. E. (2018). *Regional Development Planning modeling*. Bogor: Crestpent Press.

Saharuddin S. (2005). The Influence of Economic Development on APBD Revenues and People's Welfare in the South Sulawesi Region. *Program Pascasarjana UNHAS*.

Suharyon and Safri Edi. (2020). Potentials and Opportunities for Development of Sweet Potato Commodities in Kerinci Regency, Jambi Province. *Jurnal Sains Sosio Humaniora*, *4*(2). DOI:10.22437/ppd.v11i1.23631

Swastika, D. K. S. (2016). RESPONSE OF PEANUT (Arachis hypogaea L) ON GIVING OF MICRO ELEMENTS. *Monograf Balitkabi*, *13*(1).

Tetik, Adiyanti Hoar, and Y. M. F. (2016). Analysis of mung bean farming income in Wewiku District, Malacca Regency. *Agrimor*, *1*(3), 43–54. DOI ; 1032938/ag.v8i3

Yamali, F. R., & Putri, R. N. (2020). Dampak Covid-19 Terhadap Ekonomi Indonesia, *4*(September), 384–388. https://doi.org/10.33087/ekonomis.v4i2.179