

## Determination Analysis of Leading Commodity in the Melonguane National Border Strategic Area (NBSA)

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### Abstract

Border areas are the gateway for a country; generally, it is an underdeveloped area. This study aims to develop the economy based on only commodities in the National Strategic Activity Center (NSA) Melonguane, Kepulauan Talaud Regency, North Sulawesi Province. This study uses qualitative and quantitative approaches. The qualitative approach is based on the policy formulation of the North Sulawesi Provincial government and the Kepulauan Talaud Regency, namely the Regional Spatial Planning (RTRW) document. While the quantitative method with the Location Quotient (LQ) analysis. Based on the North Sulawesi Provincial Spatial Planning (RTRW) document shows that the leading commodities at the Melonguane National Strategic Activity Center (NSA) are Nutmeg, Coconut, Clove, and Tuna-Skipjack-cob. The Location Quotient (LQ) analysis shows that the sub-districts with potential nutmeg commodities are Kabaruan and Damau sub-districts. At the same time, the potential locations for developing Tuna-Skipjack-cob are Nanusa and Miangas Districts.

**Keywords:** Intellectual Intelligence; Communication; Employee Behavior; Employee Performance; Service Quality

## Analisis Penentuan Komoditas Unggulan di Kawasan Strategi Perbatasan Nasional (KSPN)

### Abstrak

Wilayah Perbatasan adalah pintu gerbang suatu negara, pada umumnya merepukan daerah tertinggal. Tujuan penelitian ini bagaimana mengembangkan perekonomian di Pusat Kegiatan Strategis Nasional (NSA) Melonguane Kabupaten Talaud Propinsi Sulawesi Utara yang berbasis komoditas unggulan. Penelitian ini menggunakan pendekatan kualitatif dan kuantitatif. Metode kualitatif berdasarkan rumusan kebijakan pemerintah Propinsi Sulawesi Utara dan Kabupaten Kepulauan Talaud yaitu dokumen Rencana Tata Ruang Wilayah (RTRW). Sedangkan metode kuantitatif dengan metode analisis Location Quotient (LQ). Berdasarkan dokumen Rencana Tata Ruang Wilayah (RTRW) Propinsi Sulawesi Utara menunjukkan bahwa komoditas unggulan di Pusat Kegiatan Strategis Nasional (NSA) Melonguane adalah Pala, Kelapa, Cengkeh dan Tuna-Cakalang-Tongkol. Berdasarkan Analisis Location Quotient (LQ) menunjukkan bahwa kecamatan yang potensial komoditas pala adalah Kecamatan Kabaruan dan Damau. Sementara lokasi potensial untuk pengembangan Tuna-Cakalang-Tongkol adalah Kecamatan Nanusa dan Miangas.

**Kata kunci:** Kecerdasan Intelektual; Komunikasi; Perilaku Karyawan; Kinerja karyawan; Kualitas Pelayanan

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## INTRODUCTION

Border area development is an integral part of national border area development. The border areas have considerable natural resource potential, especially fisheries, agriculture, and plantations. Based on a socio-economic perspective, people living in border areas tend to lag behind development in other areas compared to the socio-economic conditions of neighboring countries. Generally, people living in border areas have a much lower level of welfare. A higher gap will cause various social vulnerabilities (Partnership for Governance Reform, 2011). The development and management of national border areas have been one of the main agendas of President Jokowi's government, namely building from the periphery (Priyarsono, 2017). They explain that development is carried out more than in urban areas (Centralization). It must be evenly distributed throughout Indonesia (Decentralization).

The Social-economic conditions in national border areas are not only related to the territorial or geographical areas adjacent to the borders of neighboring countries but also a concern to improving the quality of human resources who have been marginalized and live at a low level of welfare. The indicators are low public access to productive infrastructures, such as education, health, and other infrastructures. These are a result of development that has only focused on urban areas, considered the center of growth (Setiawan, 2019). Another area for improvement in border areas is the disparity in the development of border areas within the country as abroad (for example, Malaysia). The facts show that the potential in border areas is excellent and diverse, including natural resources such as fisheries, agriculture, and plantations. Likewise, the quality of human resources living at the border needs to catch up and be more developed than in other areas. The limitations of infrastructure, facility, institutional capacity, and human resources inhibit regions' growth and development in border areas. There is strategic value in maintaining the state of sovereignty regarding geopolitical, social, economic, defense, and security aspects (Marif, 2016).

One of the Strategic Directions for the Management of Internal State Borders as contained in the Master Plan for the Management of State Boundaries and Border Areas for 2020-2024 is to realize increased economic activities, development of the facility, and the infrastructure as well as improve the quality of human resources. The directive aims to create the national border area as a center of growth through increasing economic activities based on Leading potential and improving the quality of Human Resources (Bappenas, 2020). The rise of border areas based on Leading sectors/commodities has been one of the strategic steps to achieve accelerated development in border areas. Therefore, developing border areas based on Leading sectors/commodities is one of the strategic steps to achieve accelerated development in border areas.

The development of the economic sector regarding the Leading sector and impacting accelerating economic growth will also affect fundamental changes in the economic structure. The Leading sector is a sector whose existence at this time has played a significant role in the region's economic development because it has advantages. The Leading sector has high toughness and capability so that it can be used as the foundation, backbone, and

driving force of the economy, so it can also be referred to as a critical sector, or sector leading the economy of the region (Hajeri et al., 2015).

Building a regional economy that utilizes the potential of local resources will create quality economic growth, namely economic growth accompanied by reducing income inequality between residents and regions and reducing poverty (Hanim, 2021). In general, people who live on state borders are economically dependent on the economy of neighboring countries (Marwasta, 2016). Maximizing available local resources will improve the standard of living of the people living within the borders of the country and reduce the lag behind residents of neighboring countries.

The theory of economic basis is one of the methods commonly used to identify the leading sectors of a region. The theory states that the determining factor for the economic growth of a region is the demand for imports and exports of goods and services. In other words, a region with a primary sector means that the region is competitively superior compared to other regions within the same sector (Hutapea et al., 2020; Maspaitella & Parinussa, 2021; Suryani, 2013; Tutupoho, 2019). In the theory of the economic basis, the economic sector consists of two sectors, namely the base sector and the non-base sector. The base sectors are the main driver of economic growth. Any change in the base sector will have a multiplier effect on the regional economy. An increase in the base sector will increase the flow of income to the region concerned. It will improve the performance of the non-base sector (Atmayanti et al., 2021). An important activity to identify base economic sectors is fundamental for determining priority economic sectors in development programs.

Melongguane is a sub-district located in the Kepulauan Talaud Regency, North Sulawesi Province. Apart from being the capital of the Kepulauan Talaud Regency, Melongguane is also the Melonguane National Strategic Activity Center (NSA) with 4 (four) supporting sub-districts, namely Kabaruan District, Damau District, Nanusa District, and Miangas District which are referred to as priority location districts. NSA Melongguane borders the Philippines country, namely Davao City. The location of the sub-district which is directly adjacent to the Philippines is The Miangas District on the island of Miangas.

As with the condition of the border area in general, the border area of North Sulawesi has the same problem. It has abundant natural resource potential, especially for fisheries and plantation commodities, but has yet to develop optimally. Based on the reason necessary to explore local potential as a source of regional economic growth. Formulating the Leading commodities as sources of economic growth that have the potential and accelerate the level of community welfare in the Melonguane National Strategic Activity Center (NSA) area, Kepulauan Talaud Regency, North Sulawesi Province. The development of the economic sector concerning the Leading sectors in addition to impacting and accelerating economic growth, will also affect fundamental changes in the economic structure, reduce backwardness with other regions and reduce poverty.

Regional economic development is a process in which local governments and their communities manage resources to increase regional economic growth. The resources available in an area are economic potential that could be developed to become a source of regional income and livelihood for the local community's economy. Identifying potential

and only commodities can be a reference for economic planners to focus on and support unique activities that will improve the regional economy (Alhowaish, 2015). The Kepulauan Talaud Regency is the gateway to the border between Indonesia and the Philippines and needs to explore the local economic potential as an engine of growth.

Several empirical studies related to potential and leading sectors have long attracted the interest of economists and policymakers because they involve empirical results and use various approaches. Adhitama (2012) uses the Location Quotient (LQ) Technique, Shift share, and Klasen typology to identify leading sectors at the sub-district level in Magelang Regency. Arafah & Matheos (2017) used static LQ and dynamic location quotient analysis to identify leading sectors in Bantaeng Regency, South Sulawesi Province. Atmayanti et al. (2021) and Maspaitella et al. (2021) use the LQ and Shift share models to identify potential sectors in Teluk Bintuni Regency. Kharisma and Ferry combined the Location Quotient, SWOT, and ANP models to analyze potential sectors and subsectors in Maluku Province. Other researchers, Niyimbanira et al. (2019), identified the main sub-industry between metropolitan cities on the coast of South Africa by applying the location quotient technique, while Alhowaish (2015) used the percentage share, multiplier effect, and location quotient models to identify critical sectors in Tabuk City, Saudi Arabia.

This potential has been developed optimally by identifying the potential of the leading sector owned by a region. This sector would grow and become the base sector in the region. The increase in economic activity in the base sector and regional potential would increase GRDP. Sectoral specialization or superior sub-sectors in each region can increase the effectiveness and efficiency of the community in carrying out economic activities. Thus, local governments might know precisely the base and non-base sectors and the potential sectors for new base sectors in the region (Kharisma & Hadiyanto, 2019).

In general, researchers identify the potential of a region in terms of sectoral aspects, where the analysis is macro and the conclusions formulated are the identification of leading regional sectors. When the regional government puts it into a policy, it still has to conduct further analysis, namely an analysis of the superior regional commodities concerned. Therefore, this study identified superior commodities in the sea border area of Kepulauan Talaud Regency and synchronized the identification of only commodities contained in local government policies. It, namely the Regional Spatial Plan (RTRW), ratified in the regional regulations of Kepulauan Talaud Regency. It is hoped that the identification results will be more implementable and make it easier for local governments to determine policies related to their development.

## **Literature Review**

### **Regional economic development**

Regional economic development is a process in which local governments and communities work together to manage available resources into an economic activity capable of creating employment opportunities for local communities to improve the economic welfare of the people in the area concerned. The community must jointly take regional development initiatives (Siwi, 2017).

The concept of regional development as a new policy approach to regional development is increasingly being used in various countries. Both developed and developing countries, including in the Talaud Islands Regency, North Sulawesi Province, especially regarding the readiness of a region to increase its competitiveness in the face of regionalization and globalization (Kharisma & Hadiyanto, 2019).

Economic growth has been an indicator of the economic progress of a region and is the main requirement for the continuity of economic development and increased welfare. The goals of economic development in the regions are similar to those of national development. However, the regional development process is much more specific (Raqib, 2018). Where the implementation is adjusted to the conditions and potential of each region (Gafur et al., 2016). One of the efforts must be made to identify an area's various potentials. If this potential is developed optimally, it will benefit the area. Optimizing economic activities in potential sectors will create a base sector in the area concerned (Kharisma & Hadiyanto, 2019).

### **Economic Base Theory**

Economic Base Theory (Economic Base Theory) is related to the main determinants of economic growth in a region. In the economic basis theory, the economic sector has been divided into 2 (two) classifications, namely the economic base sector and the non-economic basis sector. The base sector is a sector that has great potential in determining regional development as a whole, while the non-base sector is supporting regional development (Hutapea et al., 2020).

The economic base theory states that the magnitude of the increase in exports from that region to other regions determines a region's economic growth level. The base sector is the primary driver of economic growth in a region. Any changes that occur in the base sector will cause a multiplier effect on the regional economy. Increasing the main activities in an area will increase the flow of income to the area concerned. It will improve the performance of the non-base sector (Atmayanti et al., 2021).

The base sector is a source of regional economic growth. Increased economic activity in the base sector means sectoral/subsectoral specialization or superior regional commodities. So that economic activity becomes more effective and efficient. Thus, local governments might know precisely the base and non-base sectors. By analyzing the sector basis, it means that the potential of the leading regional sectors/commodities will be identified so that it would make it easier for local governments to formulate economic development policy priorities in their regions (Kharisma & Hadiyanto, 2019).

## **METHOD**

### **Data**

This research is descriptive, namely qualitative descriptive and quantitative descriptive. The data used in this study is secondary data. The data collected consists of Gross Regional Domestic Gross (GDRB) Kepulauan Talaud Regency and North Sulawesi Province 2016-2020 and commodities data of sub-district at kepulauan Talaud Regency in 2020. Government Regulation that is the Kepulauan Talaud Regency Regulation Number 1

concerning the Regional Spatial Planning (RTRW) of the Kepulauan Talaud Regency for 2014-2034.

### **Analysis Method**

The Regional Spatial Plan (RTRW) of the Kepulauan Talaud Regency is one of the policies that the Melonguane National Strategic Activity Center (NSAC) employs to formulate leading commodities. On the other hand, the Location Quotient (LQ) analysis has been used in the second method. The determination of the Leading commodity resulting from the calculation of the Location Quotient (LQ) must be under the determination of the Leading commodities in the Regional Spatial Planning (RTRW) policy of North Sulawesi Province and Kepulauan Talaud Regency.

a. The policy of the Regional Spatial Plan (RSP) of North Sulawesi Province 2014-2034. The policy formulation of North Sulawesi Province Government in the 2014-2034 Regency Spatial Plan (RTRW) is related to Leading Commodities commodities.

b. Analisis Location Quotient (LQ)

The Economic Base Theory emphasizes the role of exports as a source of growth (Gomez & Stair, 2017), along with the increase in exports, which implies a flow of income from other regions that would encourage one region's economy (Rahadiantino & Fathurrohman, 2021). One way to determine which sector is the basis of the local economy is to use Location Quotients. Location Quotient (LQ) measures the concentration of a region's economic activity by comparing its role in the regional economy with the contribution of similar economic activities in a higher regional economy, for example, provincial or national (Fikri & Fafurida, 2018; Sandra Yulia Setiawati, 2014). The Location Quotient (LQ) technique, namely, by reviewing production and productivity documents (Yos Wahyu Harinta, Joko Setyo Basuki, 2016).

The location quotient (LQ) is a very important technique, as it denotes areas where there is a concentration of workers with transferable skills, interconnected businesses, suppliers, and related industries, or areas of a growing industry where employment in the sector is weak but growing (Niyimbanira et al., 2020). The formulation of the Location Quotient (LQ) is as follows:

$$LQ = \frac{V_{is}/V_{ts}}{V_{ik}/V_{tk}}$$

Note:

Vis : Commodity value of a sector of each sub-district in the Melonguane National Strategic Activity Center (NSA)

Vts : Commodity value of a sector of all sub-districts in the Melonguane National Strategic Activity Center (NSA)

Vik : Commodity value of a sector of each sub-district in the Melonguane National Strategic Activity Center (NSA)

Vtk : Commodity value of a sector of all sub-districts in the Melonguane National Strategic Activity Center (NSA)

Criteria:

- $LQ > 1$ , Leading commodities, apart from meeting their own needs, also have the potential to be exported to other regions. The region specializes in that commodity (base).
- $LQ = 1$ , the commodity produced can only meet the needs in its area.
- $LQ < 1$ , not Leading, the area is not specialized in that commodity.

The Location Quotient (LQ) calculation is carried out twice, namely at the sectoral level at the district level, meaning to find out the base sector based on the Location Quotient (LQ) value of the economic sectors in the Kepulauan Talaud Regency. Then calculate the Location Quotient (LQ) to determine the location of the Leading commodity base at the Melonguane National Strategic Activity Center (NSAC).

## FINDING AND DISCUSSION

Based on the Spatial Planning Document for North Sulawesi Province, it is explained that the leading commodities in Kepulauan Talaud Regency are Nutmeg and Capture Fisheries, namely tuna–skipjack–cob. Furthermore, in the 2014-2034 Regional Spatial Plan (RTRW) for Kepulauan Talaud Regency, nutmeg production centers are spread across 19 (nineteen) sub-districts, while tuna–skipjack–cob production centers are spread over 11 sub-districts. The distribution of the primary commodities of nutmeg and tuna–skipjack–cob is as follows:

Table 1. *Main Commodity Location Districts in Kepulauan Talaud Regency*

No	Sub- Districts	No	Sub- Districts	No	Sub- Districts
1	Melonguane	8	Essang	15	Nanusa
2	Melonguane Timur	9	Essang Selatan	16	Miargas
3	Beo	10	Gemeh	17	Kalongan
4	Beo Selatan	11	Lirung	18	Pulutan
5	Beo Utara	12	Salibabu	19	Moronge
6	Rainis	13	Kabaruan		
7	Tampaan Amma	14	Damau		

The production centers for tuna - skipjack - cob has been spread over 11 sub-districts. It is the sub-districts of Lilinabu, East Melonguane, Pulutan, Beo, North Beo, South Beo, Tampan'Amma, Rainis, Nanusa, Kalongan, and Miargas District.

Based on the details regarding the identification of only commodities as described in the RTRW of Kepulauan Talaud Regency, it is necessary to analyze using the Location Quotient (LQ) method. The Location Quotient (LQ) size is one of the determinants of the strategic value of each sector as the main driver of economic growth. The sector has a Location Quotient (LQ)  $>1$  is called the base sector, which is a sector that has a broad economic impact in an area. The sector can serve the domestic market as well as the export market. Economic activities generated by the base sector will provide a high income and

employment multiplier. The value of  $LQ > 1$  indicates the sector's ability as a driver of economic growth and will encourage the competitiveness of a region's economic sector.

The impact multiplier has been one of the best approaches to determining the welfare change potential of a new economic activity. The basic assumption is that changes in the production sector will increase people's income. The impact of the labor indicator determines the magnitude of the opportunities for new job creation by economic activities developed in an area. Increasing investment by empowering the potential of the base sector would create economic growth and be accompanied by an increase in employment and people's income. The other impact would reduce income inequality between regions and decrease poverty. The creation of investment opportunities can be done by empowering the potential of the leading sector owned by the region concerned.

The results of the calculation, Location Quotient (LQ) of the economic sectors of the Kepulauan Talaud Regency are as follows:

Table 2. *Location Quotient (LQ) Economic Sectors of Kepulauan Talaud Regency 2016-2020*

No	Sector	2016	2017	2018	2019	2020
1	<b>Agriculture, Forestry, and Fishing</b>	<b>2.13</b>	<b>2.10</b>	<b>2.09</b>	<b>2.03</b>	<b>2.03</b>
2	Mining and Quarrying	0.35	0.34	0.33	0.32	0.32
3	Manufacturing Industry	0.20	0.20	0.20	0.20	0.20
4	<b>Electricity and Gas</b>	<b>2.31</b>	<b>2.25</b>	<b>2.23</b>	<b>2.21</b>	<b>2.25</b>
5	Water Suply, Sewerage waste mangements and Remediation Activities,	0.07	0.07	0.07	0.07	0.07
6	Construction	0.91	0.91	0.91	0.92	0.92
7	<b>Wholesale and retail Trade, Repair of Motor Vehicles and Motorcycles</b>	<b>1.07</b>	<b>1.08</b>	<b>1.09</b>	<b>1.09</b>	<b>1.09</b>
8	Transportation and Storage	0.46	0.46	0.45	0.45	0.50
9	Acommodation and Food Service Activities	0.29	0.29	0.29	0.29	0.36
10	Information and Communication	0.12	0.12	0.13	0.13	0.13
11	Financial and insurance Service	0.59	0.61	0.64	0.62	0.63
12	Real Estate Activities	0.55	0.55	0.54	0.52	0.52
13	Corporate Service	0.27	0.26	0.25	0.24	0.24
14	<b>Public Administration, and Defence, Compulsary Social Security</b>	<b>1.39</b>	<b>1.40</b>	<b>1.41</b>	<b>1.41</b>	<b>1.41</b>
15	Education	0.41	0.41	0.40	0.39	0.40
16	<b>Human Health and Social Work Activities</b>	<b>1.34</b>	<b>1.33</b>	<b>1.31</b>	<b>1.33</b>	<b>1.33</b>
17	Others Service	0.33	0.33	0.31	0.29	0.32

Data Source: North Sulawesi Province in Figures in 2021 and Kepulauan Talaud Regency in Figures in 2021, Processed (BPS, 2021)



Based calculation shows that several economic sectors that get The Location Quotient (LQ) > 1 are called the base sectors. The sectors that play a vital role in the economy of the Kepulauan Talaud Regency are Agriculture, Forestry, Fisheries, Wholesale, Retail, Car, and Motorcycle Repair Sectors. The Kepulauan Talaud Regency's economy is characterized by agriculture, forestry, and fisheries. The sector contributed 41.23%, while the Wholesale, Retail, and Repair sector contributed 14.75% (BPS, 2021a).

In addition, the infrastructure sector consists of the Electricity, Gas, and Clean Water sectors in the base sector category. In other words, the development of the agricultural, forestry, and fisheries sectors will be able to run smoothly because of infrastructure is ready to support the development of the base sector.

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The results of calculating the Location Quotient (LQ) of the economic sector are in line with the policies of the Government of North Sulawesi Province. The Spatial Planning document for North Sulawesi Province states that the leading commodities are capture fisheries commodities (Article 52 paragraph 2) and nutmeg (Article 51 paragraph 11). The main commodity of capture fisheries in the Kepulauan Talaud Regency is tuna-skipjack-cob. Kepulauan Talaud Regency is one of the centers of producers of tuna-skipjack-cob because tuna-skipjack-cob have a Location Quotient (LQ) is 1,78 or more than 1.

Determining the location for the development of the commodity at the National Strategic Activity Center (NSA) of Melonguane is based on the calculation of Location Quantity (LQ) commodity in all sub-districts of the Kepulauan Talaud Regency. The calculation results of Location Quantity (LQ) for Nutmeg, clove and coconut are as in the Table 3.

Based on the Location Quotient (LQ) calculation, a location was found which was the leading producer of nutmeg, clove and coconut. The locations for the development of the nutmeg commodity are spread over 10 (ten) sub-districts in the Melonguane national strategic area (PKSN), namely Melonguane, Kabaruan, Damau, Nanusa, and Miangas sub-districts of the 10 (ten) sub-districts, Damau and Moronge are the sub-districts with the highest productivity of nutmeg compared to other sub-districts in the Kepulauan Talaud Regency. Coconuts are spread over 10 (ten) sub-districts, namely Kabaruan, Lirung, Melonguane, North Beo, Rainis, Tampan Amma, South Essang, Gemeh, Nanusa, and Miangas. At the same time, Clove Production Centers are spread across 8 (eight) districts, namely Kalongan, Tampan Amma, Pulutan Essang, South Essang, Beo, North Beo, and

South Beo. Based on the location quotient (LQ) analysis of the National Strategic Activity Center (PKSN) Melongguane is a commodity base area for cloves, coconuts, nutmeg, and tuna–skipjack–cob. The high and increasing value and volume of tuna–skipjack–cob exports provide hope and optimism in developing the tuna–skipjack–cob commodity as a leading commodity at the National Strategic Activity Center (PKSN).

Table 3. *Location Quotient (LQ) Of Main Comodities in sub -districts in Kepulauan Talaud Regency 2020*

Sub-Districts	Coconut	Sub-Districts	Clove	Sub-Districts	Nutmeg
1. Kabaruan	1,01	1. Kalongan	1,19	1. Kabaruan	1,25
2. Lirung	1,01	2. Beo	1,06	2. Damau	1,52
3. Melonguane	1,01	3. Beo Utara	1,25	3. Lirung	1,22
4. Beo Utara	1,01	4. Beo Selatan	1,24	4. Salibabu	1,32
5. Rainis	1,11	5. Tampan' Amma	1,39	5. Kalongan	1,42
6. Tampan'Amma	1,04	6. Pulutan	1,81	6. Moronge	1,94
7. Essang selatan	1,02	7. Essang	1,19	7. Melonguane	1,12
8. Gemeh	1,11	8. Essang selatan	1,58	8. Melonguane Timur	1,16
9. Nanusa	1,34			9. Beo	1,44
10. Miangas	1,37			10. Beo Selatan	1,02

Meanwhile, the development of Indonesian nutmeg exports on the world market from 1991 - 2019 fluctuated but showed an increasing trend. The increase in the volume and value of nutmeg exports in the world market illustrates the potential of the high demand for nutmeg. Indonesia, China, and Vietnam are the largest importers of nutmeg from Indonesia. The large area will encourage Indonesia as an exporter country that ranks first in the export of nutmeg in the world market (Sekretariat Jenderal Kementerian Pertanian, 2020).

Based on data on the average production of nutmeg in Indonesia for 2014-2020, there are 5 (five) central provinces of nutmeg production in Indonesia, namely Aceh, North Maluku, North Sulawesi, West Papua, and Maluku. In 2014, Aceh Province was ranked first in nutmeg production. Then in 2020, this position will be shifted to North Sulawesi. Kepulauan Talaud Regency is in the first rank for nutmeg production, which is 3,958 tons or 34.90% of the nutmeg production in North Sulawesi Province. The Kepulauan Talaud Regency is not only the center of the largest nutmeg producer in North Sulawesi Province but also the producer of nutmeg with the highest productivity. Besides that, it has the most significant number of farmers compared to other districts in North Sulawesi Province (BPS, 2021a).

Likewise, clove is one of Indonesia's export commodities. Even in 2020, Indonesia has been named the largest clove-producing country in the world. In 2020, national clove production will reach 133,604 tons, according to data from the Food and Agriculture Organization (FAO). Not only to meet domestic needs but national clove production is also aimed at meeting export needs and become one of Indonesia's leading commodities. Export destination countries for Indonesian cloves are India, the United Arab Emirates, China, Bangladesh, and Singapore. The potential for coconut resources is enormous. It allows for

developing a solid agribusiness with an agro-industrial structure from upstream to downstream. Exports of Indonesian processed coconut products include the Netherlands, USA, China, Malaysia, South Korea, and others (Subekti et al., 2018).

The potential for the high demand for the three leading commodities is a massive opportunity for the development of the leading commodity processing industry, namely cloves, coconut, nutmeg, and tuna-skipjack-cob. The development of these three leading commodities will directly impact the regional economy. The LQ analysis clarifies the location of the production centers of each leading commodity in the Melonguane Sea Border Area. It could be used as a direction for the local government of the Kepulauan Talaud Regency in formulating policies for developing superior commodities from both the upstream and downstream sides.

## **CONCLUSION**

Based on the 2014-2034 Kepulauan Talaud Regional Spatial Plan (RTRW) document, it has been stated that the leading commodities at the Melonguane National Strategic Activity Center (NSA) are commodities from the plantation sector, namely nutmeg, coconut, cloves, and abaka, with all sub-districts in Kepulauan Talaud as a production center. Meanwhile, from the fisheries sector, capture fisheries for tuna-skipjack-cob commodities with production centers spread over 11 (eleven) sub-districts, namely Salibabu, East Melonguane, Pulutan, Beo, North Beo, South Beo, Tampan'amma, Rainis, Nanusa, Kalongan, and Miangas.

The results of identifying only commodities and the locations of their production centers were obtained. Furthermore, by calculating the location quotient (LQ) in the sub-districts in Kepulauan Talaud Regency, potential locations for nutmeg development were obtained in the National Strategic Activity Center (NSA) Melonguane, namely Kabaruan and Damau Districts. At the same time, the potential locations for the development of tuna-skipjack - cob are Nanusa and Miangas sub-districts.

Viewed from the demand aspect, tuna-skipjack-cob and nutmeg are Indonesia's mainstay export commodities. The Kepulauan Talaud Regency is one of the production centers for nutmeg and tuna-skipjack-cob, so the designation of Nutmeg, Coconut, clove and tuna-skipjack-cob as leading commodities at the Melonguane National Strategic Activity Center (NSA) shows the integration between policy and economic facts. Melonguane, as the capital of the Kepulauan Talaud Regency and Melonguane NSA with Leading commodities tuna-skipjack-cob, Nutmeg, Coconut and clove, has further implications. Namely the need to develop facilities and infrastructure and increase human resources to support regional development in the Melonguane National Strategic Activity Center (NSA). Economic development at the Commodity-based Melonguane National Strategic Activity Center (NSA) will improve the welfare of the people in Melonguane and catch up with other regions, even the border areas of neighboring countries.

## REFERENCES

- Alhawaish, A. (2015). Location Quotient Technique and Economy Analysis of Regions: Tabuk Province of Saudi Arabia as a Case Study. *International Journal of Science and Research (IJSR)*, 4(12), 1756–1761. <https://doi.org/10.21275/v4i12.nov152375>
- Atmayanti, T., Johari, M., & Sukmana, A. H. (2021). Location Quotient Analysis in Identifying Leading Sector in East Lombok Regency 2015-2020. *International Journal of Islamic and Social Sciences*, 28–35.
- Bappenas. (2020). *Kebijakan Pengembangan Wilayah Perbatasan Dalam Rencana Induk Pengelolaan Batas Wilayah Negara Dan Kawasan Perbatasan Tahun 2020-2024*.
- BPS. (2021a). *Kabupaten Kepulauan Talaud Dalam Angka 2021*.
- BPS. (2021b). *Sulawesi Utara Dalam Angka 2021*.
- Fikri, M. T., & Fafurida, F. (2018). Sektor Unggulan dan Keterkaitan Spasial Ekonomi Antar Kabupaten/Kota di Jawa Tengah. *Economics Development Analysis Journal*, 7(3), 243–250. <https://doi.org/10.15294/edaj.v7i3.25256>
- Gafur, G., Safri, M., & Hodijah, S. (2016). Analisis Sektor/Sub Sektor Unggulan di Kabupaten Bungo. *Jurnal Perspektif Pembiayaan Dan Pembangunan Daerah*, 3(3), 175–194. <https://doi.org/10.22437/ppd.v3i3.3519>
- Gomez, J. T. S., & Stair, C. (2017). Location Quotient , Coefficient of Specialization and Shift-Share Regional Research Institute West Virginia University. *Regional Research Institute*, 1–12.
- Hajeri, Yurishintae, E., & Dolorosa, E. (2015). Analisis Penentuan Sektor Unggulan Perekonomian di. *Jurnal Ekonomi Bisnis Dan Kewirausahaan*, 4(2), 253–269.
- Hanim, W. (2021). *How Does Foreign Direct Investment (FDI) Reduce Poverty? Application of the Triangular Hypothesis for the Indonesian Case*. 10(1), 400–411.
- Hutapea, A., Koleangan, R. A. M., Rorong, I. P. F., Pembangunan, J. E., Ekonomi, F., & Ratulangi, U. S. (2020). Analisis Sektor Basis Dan Non Basis Serta Daya Saing Ekonomi Dalam Peningkatan Pertumbuhan Ekonomi Kota Medan. *Jurnal Berkala Ilmiah Efisiensi*, 20(03), 1–11.
- Kharisma, B., & Hadiyanto, F. (2019). Analysis of Potential Sectors and Policy Priorities of Regional Economic Development in Maluku Province. *Etikonomi*, 18(1), 29–46. <https://doi.org/10.15408/etk.v18i1.7440>
- Marif, S. (2016). Strategi Pengembangan Perdesaan Kawasan Perbatasan, Studi Kasus: Kawasan Perbatasan Republik Indonesia-Ambenu Republik Demokratik Timor Leste. *Tataloka*, 14(1), 75–89. <https://doi.org/10.14710/tataloka.14.1.75-89>
- Marwasta, D. (2016). Pendampingan Pengelolaan Wilayah Perbatasan di Indonesia: Lesson Learned dari KKN-PPM UGM di Kawasan Perbatasan. *Jurnal Pengabdian Kepada Masyarakat (Indonesian Journal of Community Engagement)*, 1(2), 204. <https://doi.org/10.22146/jpkm.10607>
- Maspaitella, M., & Parinussa, S. M. (2021). Applying Location Quotient and Shift-Share Analysis in Determining Leading Sectors in Teluk Bintuni Regency. *Journal of Developing Economies*, 6(1), 55. <https://doi.org/10.20473/jde.v6i1.22182>
- Niyimbanira, F., Eggink, M. E., & Nishimwe-Niyimbanira, R. (2020). The identification of the key sub-industries among coastal metropolitan cities of south africa: An

- application of the location quotient technique. *International Journal of Economics and Finance Studies*, 12(1), 50–70. <https://doi.org/10.34109/ijefs.202012104>
- Partnership for Governance Reform. (2011). *Kebijakan Pengelolaan Kawasan Perbatasan Indonesia* (Issue 2).
- Priyarsono, D. S. (2017). Membangun dari Pinggiran: Tinjauan dari Perspektif Ilmu Ekonomi Regional. *Journal of Regional and Rural Development Planning*, 1(1), 42. <https://doi.org/10.29244/jp2wd.2017.1.1.42-52>
- Rahadiantino, L., & Fathurrohman, J. (2021). Location Quotient Analysis to Facing Competition in The Pandemic Era Of Covid-19 ( Case Study : East Java Province ). *Jurnal Sosial Humaniora, Special Edition Toward a Post-COVID 19: contributing to individual and social good life*, 44–51.
- Sandra Yulia Setiawati. (2014). Analisis Pengembangan Sektor Potensial Kabupaten Klaten Dalam Kawasan Subosukawonosraten. *Economics Development Analysis Journal*, 3(4), 306–317.
- Sekretariat Jenderal Kementerian Pertanian. (2020). Buku Outlook Komoditas Perkebunan Pala. In *Pusat Data dan Sistem Informasi Pertanian Sekretariat Jenderal Kementerian Pertanian*.
- Setiawan, A. (2019). *Membangun Indonesia Dari Pinggiran Desa*.
- Siwi, H. F. D. (2017). Strategi Pertumbuhan Dan Pembangunan Ekonomi Daerah. *Jurnal Pembangunan Ekonomi Dan Keuangan Daerah*, 18(6), 1–11. <https://www.mendeley.com/library/>
- Subekti, Y., Hadi, S., & Tety, E. (2018). Daya Saing Ekspor Produk Kelapa Indonesia Di Pasar Internasional. *Pekbis Jurnal*, 10(1), 39–52.
- Suryandari, D., Wahyudi, A. R., Strategis, P. K., & Umum, K. P. (2014). Working Paper Series Pengelolaan Resiko Bencana Melalui Kerjasama Lintas Batas Negara Mangapul Nababan. *Resilience Development Initiative*, 13, 1–16.
- Suryani, T. (2013). Analisis Peran Sektor Ekonomi Terhadap Pertumbuhan Ekonomi Kabupaten Pematang. *Economics Development Analysis Journal*, 2(1), 2–6.
- Tutupoho, A. (2019). Analisis Sektor Basis dan Sektor Non Basis Terhadap Pertumbuhan Ekonomi Di Provinsi Maluku. *Jurnal Ekonomi*, 8(1), 1–18.
- Yos Wahyu Harinta, Joko Setyo Basuki, S. S. (2016). Jurnal Sosial Ekonomi dan Kebijakan Pertanian. *Jurnal Sosial Ekonomi Dan Kebijakan Pertanian*, 5(2), 170–176.