

*Development Economics*

# Development Strategy of Commodity-Based Minapolitan Areas in Situbondo District

<sup>1</sup>Kharisma Mauliarumpaka, <sup>2</sup>Endah Kurnia Lestari, <sup>3</sup>Edy Santoso

<sup>1,2,3</sup>Department of Development Economics, University of Jember, East Java, Indonesia.

Received Date: 06 April 2025

Revised Date: 25 April 2025

Accepted Date: 30 April 2025

Published Date: 12 May 2025

**Abstract:** Situbondo Regency is one of the regencies designated as a minapolitan area in East Java Province. Situbondo Regency has high fisheries potential due to its rich marine resources. However, the capture fisheries and aquaculture production in Situbondo Regency is still far behind other districts included in the minapolitan area in East Java. For this reason, the importance of strategies in developing minapolitan areas in Situbondo Regency. Therefore, this research aims to analyse the leading commodities and determine the center of minapolitan activities and develop regional development strategies in the minapolitan area in Situbondo Regency. Data were collected through questionnaires and obtained from pre-existing sources. Respondents were taken by purposive sampling. The analysis methods were LQ (Location Quotient), Scalogram and Strength, Weakness, Opportunities, and Threats (SWOT). The results showed that the leading commodities in Situbondo Regency in capture fisheries are Vannmei Shrimp and Snapper, while in aquaculture, are Layang, Mackerel, Grouper, Tengiri, Bambang, Selar, Anchovy, Layur, Snapper, White Bawal, Mullet and Mackerel. Two sub-districts are the center of minapolitan activities, namely Bungatan and Banyuputih sub-districts. In addition, the ST strategy is the right strategy for developing minapolitan areas in Situbondo Regency.

**Keywords:** Minapolitan area, Location Quotient, Scalogram, SWOT.

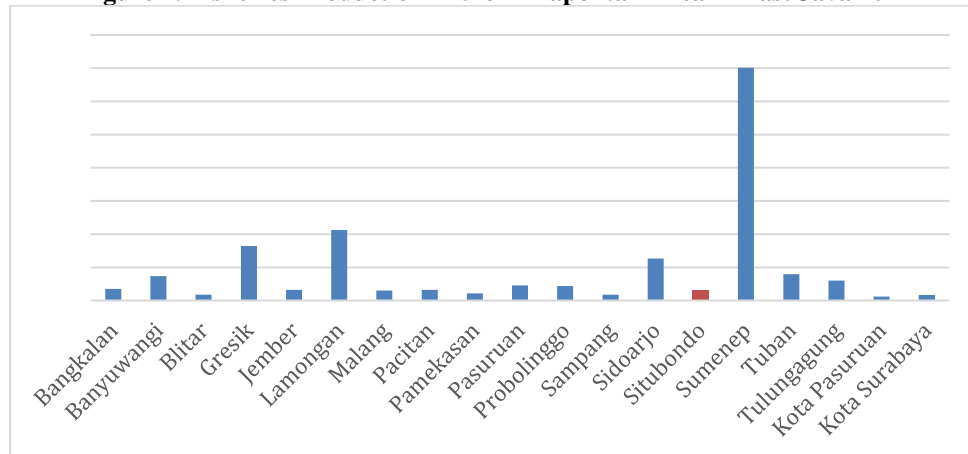
## I. INTRODUCTION

The Minapolitan area is a part of the region that has the main economic function consisting of production centers, processing, marketing of fishery commodities, services, and other supporting activities (Ministry of Maritime Affairs and Fisheries of the Republic of Indonesia, 2010). The concept of minapolitan aims to encourage the acceleration of regional development with fisheries as the main activity to improve the welfare and standard of living of the community, which is developed both on-farm and off-farm, such as fisheries facilities and other supporting services (Sahaduta et al., 2024). The development of the Minapolitan Area aims to improve the ability of micro and small-scale economies, increase the quantity and quality of medium-to-high-scale businesses so that they are highly competitive, and increase the marine and fisheries sectors to become the drivers of the regional and national economy (Aminulloh et al., 2024).

Friedmann (1975) introduced the concept of agricultural area development, namely the agropolitan/minapolitan concept, which offers a spatial framework for rural development based on the idea of rural development and the acceleration of rural economic growth based on the agricultural industry that is oriented to the needs of the community and the development process based on the local community (Hasanuddin et al., 2022). Friedmann inspired the development of small towns as centers, supported by various surrounding rural areas, with agriculture as the driving sector of the economy in the mid-1970s (Idajati & Umilia, 2023). This study focuses on fisheries as the driving sector of the economy.



**Figure 1. Fisheries Production in the Minapolitan Area in East Java 2022**



**Source:** BPS 2024

Situbondo Regency is one of the districts chosen to be the Minapolitan area because most of its territory is by the sea. Situbondo Regency has a special location where almost the entire northern part is bordered by the Madura Strait. It has a coastline length of about 150 km, making Situbondo Regency one of the districts with high fisheries potential because of its wealth of marine resources. However, the production of capture fisheries and aquaculture in Situbondo Regency is still far behind other districts, including the minapolitan area in East Java. When viewed from its geographical location, Situbondo Regency has privileges and should be able to become the area that produces the most production.

For this reason, the importance of strategy in the development of minapolitan areas in Situbondo Regency in accordance with the Vision and Mission of the Regent and Deputy Regent of Situbondo Regency as stated in the Situbondo Regency Regional Regulation on the Situbondo Regency Regional Spatial Plan for 2011 – 2031, considering the potential possessed by the fisheries sector which is very abundant.

## II. LITERATURE REVIEW

### A) *Theoretical Framework*

#### a. Synergized Fast Track Growth

The turnpike theory was introduced by Samuelson in 1955. This theory emphasizes that each region needs to know what sectors or commodities have great potential and can be developed quickly, both because of natural potential and because the sector has a competitive advantage to be developed. This means that with the same capital needs, the sector can provide greater added value, can produce in a relatively short time and contribute to the economy is also quite large. For the market to be guaranteed, the product must be able to be exported (out of the region or abroad). The development of these sectors will encourage other sectors to develop so that the economy as a whole is interrelated and competitively supported. Combining fast-track policies and synergizing with other related sectors will be able to make the economy grow rapidly.

#### b. Growth Center Theory

The concept of growth centers is based on the concept of *economic space* proposed by Francois Perroux. Perroux stated that growth does not appear in different regions simultaneously; growth will appear at the poles of growth with different intensities and consequences (Perroux in Tarigan, 2004). Perroux's theory, known as the *growth of the pole*, is a theory that is the basis for regional industrial development policy strategies that are widely applied in various countries today. The development of areas in growth centers will stimulate economic growth, which the development of the surrounding areas will also follow because growth centers can cause a *spread effect* from the activity area of the growth center to the surrounding area so that the surrounding area will also be able to grow and develop (Emalia & Farida, 2018)

#### c. Basic Theory

According to Jhon Glasson (1987), the regional economy is divided into two sectors, namely base and non-base activities. Base activities are economic activities that include the production process to sales or marketing outside the region. Meanwhile, non-base activities are economic activities that produce goods and services for the benefit of the region concerned.

#### d. Previous Studies

Research that has been conducted previously to underpin the author's thoughts and be considered in this study, such as research by (Nur Fitri Ramadhani et al., 2022), (N R Purnama et al., 2023), (Siaosi et al., 2012), (Sahaduta et al., 2024), (Mawarsari et al., 2017).

### III. RESULTS AND DISCUSSION

#### A) Determination of Superior Commodity

This study analyzes the *Location Quotient* (LQ) used to find superior commodities owned in the fisheries sector in Situbondo Regency using Production data by Fish Type expressed in tons in Situbondo Regency from 2020 to 2022.

**Table 2. Results of Location Quotient Analysis of Aquaculture Fisheries in Situbondo Regency**

Aquaculture					
Commodities	LQ			Rata2	Information
	2020	2021	2022		
Jump	0,18577	0,21015	0,17317	0,19	NonBasis
Bandeng	0,00680	0,01459	0,00192	0,01	NonBasis
Gurami	0,00683	0,00483	0,00699	0,01	NonBasis
Nila Gift	0,00706	0,00511	0,00592	0,01	NonBasis
Udang Vannamei	11,55165	10,43085	10,40226	10,79	Basis
Seaweed	0,00413	0,00878	0,02482	0,01	NonBasis
Snapper	8,71180	0,20740	0,28255	3,07	Basis

Source: Data processed 2025

**Table 3. Results of Location Quotient Analysis of Capture Fisheries in Situbondo Regency**

Capture Fisheries					
Commodities	LQ			Rata2	Information
	2020	2021	2022		
Layang	1,61486	1,29437	2,44069	1,78	Basis
Bloating	3,47775	3,83311	3,93808	3,75	Basis
Grouper	2,04130	2,46250	2,12692	2,21	Basis
Connector	1,25467	4,73507	1,26985	2,42	Basis
Bambangan	2,05379	3,31447	8,39037	4,59	Basis
Seal	2,01033	2,06552	1,52431	1,87	Basis
Teri	2,42930	5,56874	4,04112	4,01	Basis
Lemuru	0,09756	0,24956	0,29553	0,21	NonBasis
Layur	1,55262	1,70624	1,61277	1,62	Basis
Eggs/peppers	0,34267	0,93958	1,20944	0,83	NonBasis
Manyung	0,26850	0,14742	0,27282	0,23	NonBasis
Same	0,22900	0,27607	0,22557	0,24	NonBasis
Snapper	45,09998	48,23129	60,83342	51,39	Basis
Kurisi	0,38635	0,47526	0,37398	0,41	NonBasis
Squid	0,36440	0,41624	0,67850	0,49	NonBasis
White Pom-Wire	65,85824	310,40899	1,19763	125,82	Basis
Belanak	6,67375	4,36476	4,56275	5,20	Basis
Rajungan	5,41666	10,12842	5,58495	7,04	Basis

Source: Data processed, 2025

In the aquaculture subsector, the commodities included in the base category are Vannmei Shrimp and Snapper. Where the production of these two commodities has exceeded local needs, it has a great opportunity to be developed as an export commodity, likewise in the capture fisheries subsector, where commodities that fall into the basic category include Kite fish, Mackerel fish, Grouper fish, Tengiri fish, Bambang fish, Selar fish, anchovies, Layur fish, Snapper fish, White Pom-pom-pom, Mulanak fish and Crab fish.

This is in line with the theory described by John Glasson (1987), that base activities that produce goods and services for markets outside the region will increase regional income. This is relevant to the situation in Situbondo Regency, where the leading commodities in capture fisheries and aquaculture in this study are the main drivers of regional economic growth.

### B) Determination of the center of Minapolitam activity

Scalogram analysis determines the hierarchy or level of growth and service centers from the highest to the lowest. The existence of facilities and infrastructure or facilities owned in an area is important in promoting regional development. By conducting a scalogram analysis, the hierarchy or level of growth and service centers can be known from the highest to the lowest. The following are the results of the scalogram analysis in Situbondo Regency.

**Table 4. Hierarchy of the Situbondo Regency Service Center**

District	IPD	Number of Types of Facilities	Service Center Hierarchy
Besuki	27,77075	22	Hierarchy3
Stuttgart	44,79234	21	Hierarchy1
Panarukan	25,66747	22	Hierarchy3
Mangaran	23,50004	20	Hierarchy3
Kapongan	26,24557	21	Hierarchy3
Banyuputih	34,84517	22	Hierarchy1

*Source: Data processed (2025)*

Based on the results of the Scalogram Analysis, two sub-districts occupy hierarchy I as the highest service center, namely Bungatan District and Banyuputih District. Looking at these results, Bungatan and Banyuputih Districts deserve to be prioritized as the center of the Minapolitan area in Situbondo Regency. This research is in line with the theory by Francois Perroux, who explains that economic growth does not occur evenly but is focused on certain points that have a concentration of economic activities and facilities, thereby creating attraction and *multiplier effect* as well as spread effect that can encourage the growth of the surrounding area.

### C) Development Strategy of the Minapolitan Area, Situbondo Regency

The Development Strategy of the Minapolitan Area in Situbondo Regency is as follows.

**Table 5. Strategy Matrix**

<div style="text-align: center;"> <p>IFAS</p> <p>EFAS</p> </div>	<p><b>Strength</b></p> <ol style="list-style-type: none"> <li>1. The topographic and climatological conditions of Situbondo Regency support the development of the fisheries sector.</li> <li>2. Has a variety of superior commodities</li> <li>3. Public and fisheries facilities and infrastructure (education, health, worship, trade and services, ports and fish farming companies)</li> <li>4. Vast coastal potential</li> <li>5. Has adequate carrying capacity for marine waters</li> </ol>	<p><b>Weakness</b></p> <ol style="list-style-type: none"> <li>1. Natural Resources Development Is Not Optimal</li> <li>2. Limited quality and quantity of Human Resources</li> <li>3. Fishermen's low knowledge of technology</li> <li>4. Low access of fishermen to the capital</li> <li>5. The provision of fisheries-supporting infrastructure is inadequate</li> </ol>
	<p><b>Peluang (Opportunities)</b></p> <ol style="list-style-type: none"> <li>1. High demand for fishery products</li> <li>2. Fishery product processing innovation</li> <li>3. The existence of a capital or financial institution with low interest rates</li> <li>4. The existence of certification of fishery products that guarantees the quality of fishery products</li> <li>5. The existence of government support in the processing of superior commodities</li> </ol>	<p><b>S-O Strategy</b></p> <ol style="list-style-type: none"> <li>1. Developing the fishery product processing industry based on superior commodities</li> <li>2. Increase the promotion and marketing of quality-certified fishery products</li> <li>3. Utilizing capital institutions for the expansion of fisheries and fish farming businesses</li> <li>4. Government collaboration with educational and research institutions for fisheries innovation</li> <li>5. Development of coastal areas as an integrated maritime economic center</li> </ol>
		<p><b>W-O Strategy</b></p> <ol style="list-style-type: none"> <li>1. Improving the quality of human resources of fishermen and cultivators through technology training and processing innovations</li> <li>2. Facilitating fishermen's access to low-interest capital and financial institutions</li> <li>3. Optimizing the management of fishery Natural Resources (SDA) with the support of quality certification programs</li> <li>4. Improving the development and provision of fisheries supporting infrastructure</li> <li>5. Collaboration with research institutions and the government for sustainable natural resource development</li> </ol>

Threats	S-T Strategy	W-T Strategy
1. The fisheries sector is less attractive to the younger generation	1. Encouraging innovation and diversification of fisheries businesses to attract the interest of the younger generation	1. Improving the quality and quantity of fisheries' human resources, especially the younger generation, through technology-based education and training programs
2. Volatile market price fluctuations	2. Optimization of aquatic and coastal potential for more stable aquaculture development in the face of price and seasonal fluctuations	2. Institutional strengthening of fishermen and cultivators to increase access to capital and resilience to market price fluctuations
3. Unpredictable seasonal phenomena affect the quality and quantity of fishery products.	3. Utilizing port and trade facilities to expand marketing networks and increase the competitiveness of local products	3. Encouraging the development and improvement of fisheries infrastructure resilient to climate change and disasters
4. Competition for similar products with other regions (procurement/import of food from other regions)	4. Strengthening community-based coastal and marine conservation programs to maintain fisheries ecosystems	4. Optimizing the sustainable management of fishery Natural Resources (SDA) to minimize the impact of environmental damage
5. Coral reef damage, pollution, and natural disasters affect fishing	5. Capacity building of fisheries infrastructure and technology to minimize the impact of extreme weather and disasters	5. Diversify fisheries businesses to reduce dependence on catches and face competition from regional products.

Based on the SWOT analysis results, the strategy forecasting will be more directed towards the S-T (*Strength – Threats*) strategy, where five strategic recommendations have been formulated for the development of the minapolitan area in Situbondo Regency.

#### IV. CONCLUSION

This study aims to find out and analyze the development strategy of the minapolitan area in Situbondo Regency. Based on the analysis that has been carried out, it can be concluded as follows:

1. There are superior commodities in the fisheries sector in Situbondo Regency in each capture and aquaculture fisheries. These leading commodities include Vannmei Shrimp and Snapper in capture and kite fisheries, Puffer, Grouper, Tengiri, Bambang, Selar, Teri, Layur, Snapper, White Pom-pom, Mulanak and Crab in aquaculture fisheries.
2. The center of minapolitan activities in Situbondo Regency is in Bungatan District and Banyuputih District, which occupy Hierarchy I as the center of minapolitan activities. This shows that the two sub-districts have the highest level of facility completeness and meet the criteria as the center of growth in the minapolitan area in this area.
3. The S-T strategy is the right strategy for developing the minapolitan area in Situbondo Regency. This strategy focuses on utilizing the strength it has to face and overcome various existing threats.

#### Interest Conflicts

The author states that there is no conflict of interest regarding the publication of this paper.

#### Funding Statement

This research was conducted with self-funding and did not receive financial support from outside parties.

#### Acknowledgements

The author would like to thank the people of Situbondo Regency, especially the fishermen. Thank you to the Situbondo Regency Fisheries and Marine Service and the Situbondo Regency Development Planning Agency for their insights, cooperation, and support. Special appreciation was given to academic supervisors and fellow researchers who provided constructive feedback during the research.

#### V. REFERENCES

- [1] Aminulloh, M. J., Sholahuddin, A., & Suharnoko, D. (2024). *Increasing Regional Economic Growth through the Development of Minapolitan Area*. 7250, 319–330.
- [2] Emalia, Z., & Farida, I. (2018). Identifikasi Pusat Pertumbuhan Dan Interaksi Spasial Di Provinsi Lampung. *Jurnal Ekonomi & Studi Pembangunan*, 19(1). <https://doi.org/10.18196/jesp.19.1.4100>
- [3] Hasanuddin, U., Affairs, M., Hasanuddin, U., Hasanuddin, U., & Hasanuddin, U. (2022). *Regional Development Strategy Based on Commodities, Masalle District, Enrekang Regency*. 4(April), 62–74.
- [4] Idajati, H., & Umilia, E. (2023). Analysis DPSIR for the Strategic Environment Assessment in Planning Development in Agropolitan and Minapolitan Areas in East Java. *IOP Conference Series: Earth and Environmental Science*, 1186(1). <https://doi.org/10.1088/1755-1315/1186/1/012008>
- [5] Kementerian Kelautan dan Perikanan Republik Indonesia. (2010). *Keputusan Menteri Kelautan dan Perikanan Republik Indonesia Nomor PER.12/MEN/2010 tentang Minapolitan*. 1–10.

- [6] Mawarsari, P. M., Dewanti, A. N., & Nurrahman, F. (2017). Minapolitan region development analysis at Penajam Paser Utara using the blue economy concept. *IOP Conference Series: Earth and Environmental Science*, 70(1). <https://doi.org/10.1088/1755-1315/70/1/012043>
- [7] Sahaduta, Y., Kalampung, H., & Koswara, A. Y. (2024). Development of Sustainable Minapolitan Area in Tamako District, Kepulauan Sangihe Regency. *Syntax Literate ; Jurnal Ilmiah Indonesia*, 9(4), 2413–2426. <https://doi.org/10.36418/syntax-literate.v9i4.15139>
- [8] Science, E. (2023). *Analysis of capture fisheries commodities in Pidie district Aceh, Indonesia Analysis of leading capture fisheries commodities in Pidie district, Aceh, Indonesia*. <https://doi.org/10.1088/1755-1315/1221/1/012042>
- [9] Siaosi, F., Huang, H. W., & Chuang, C. T. (2012). Fisheries development strategy for developing Pacific Island Countries: A case study of Tuvalu. *Ocean and Coastal Management*, 66, 28–35. <https://doi.org/10.1016/j.ocecoaman.2012.04.021>