ISSN: 3046-4900, DOI: 10.30596/jitcse

Development Strategy of the Minapolitan Area in East Sei Kepayang District, Asahan Regency

Dedy Armansyah¹, Abdi Sugiarto²

^{1,2}Urban and Regional Planning Study Program, Universtias Pembangunan Panca Budi Email: abdi_sugiarto@dosen.pancabudi.ac.id

ABSTRACT

This study aims to examine the Development Strategy of the Minapolitan Area in East Sei Kepayang District, Asahan Regency. The qualitative approach is used because this research aims to dig deeper into the perceptions, views, and experiences of various related parties, including local communities, stakeholders, Data is collected through various relevant qualitative methods, including: In-depth Interview An in-depth interview is conducted to obtain the views, experiences, and perspectives of the main actors involved in the development of the Minapolitan area. To ensure the validity of the data, data triangulation is used, which is comparing and confirming data from various sources (interviews, observations, and documentation). Research Results The development and improvement of fisheries infrastructure, including road access, cold storage facilities, and fish processing centers, is an important step to improve distribution efficiency, maintain product quality, and add added value to fishery products. Strategies to increase access to financing and attract private investment are important elements in overcoming capital constraints. The adoption of modern fisheries technology, both in aquaculture and capture fisheries, is a strategic step that will increase productivity and preserve natural resources. Sustainable management of natural resources, including efforts to preserve aquatic ecosystems and prevent pollution, is an important foundation in ensuring the long-term availability of fish.

Keyword: Development Strategy, Minapolitan Area and East Sei Kepayang District, Asahan Regency

© 😳 This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.	
Corresponding Author:	Article history:
Abdi Sugiarto,	Received Oct 25, 2024
Urban and Regional Planning Study Program	Revised Oct 29, 2024
Universitas Pembangunan Panca Budi	Accepted Nov 02, 2024
Jl. Gatot Subroto KM. 4,5 Medan 20122, Indonesia.	_
Email: abdi sugiarto@dosen.pancabudi.ac.id	

1. INTRODUCTION

The Minapolitan area is a fishery-based economic development concept that aims to develop certain areas with fishery potential. East Sei Kepayang District, Asahan Regency has great potential in the fisheries and marine sector, but challenges in infrastructure, marketing, technology, and fisheries governance are still the main obstacles. Therefore, the right development strategy is needed to maximize this potential in order to improve the welfare of the local community. The Minapolitan program was built to improve fisheries performance according to opportunities and potentials so that it becomes a driver of the rural economy. Increasing production is the target of the program to advance the fishery business with a specific commodity base and strategic location. Each province or district/city has its own specific potential and emphasis in fisheries development, so it is necessary to build the performance of fisheries programs that are different from each other and depend on specific social, economic, cultural, political and environmental conditions, (Edrus, 2015).

Minapolitan aims to encourage community welfare by increasing productivity and added value in the fisheries sector. East Sei Kepayang District, Asahan Regency, is one of the areas with great potential in the fisheries sector, especially because of its strategic geographical location and rich in aquatic resources. However, the region still faces a number of challenges such as limited infrastructure, lack of modern technology, and suboptimal environmental management. Therefore, the development of the Minapolitan area in this area is very necessary to increase the competitiveness and welfare of the fishing community. Through the development of the Minapolitan area, it is hoped that a better and sustainable system of production, processing, and marketing of fishery products can be created. This strategy is also in line with the government's policy in supporting the development of maritime and fisheries areas as one of the main pillars of the national economy. In its implementation, the

development of a Minapolitan area is characterized by fishery-based production and marketing centers and has a high multiplier effect on economic, production, trade, services, health and social activities that are interrelated, and has adequate facilities and infrastructure to support the diversity of economic activities like a city. Minapolitan aims to improve the economic capabilities of micro and small scale communities, increase the number and quality of medium and upper-scale businesses so that they are highly competitive, and improve the marine and fisheries sectors to become regional and national economic drivers.

The development that is happening at this time, people in certain areas that were originally based on agriculture, began to shift to diversify their businesses in the fisheries sector, this condition is realized as a dynamic of thinking of people who have been able to see more prospective business opportunities based on the resources they have. It is a pity if with abundant resources, the people are reluctant to take advantage of it. The Government of East Sei Kepayang District, Asahan Regency is developing the Minapolitan area, which is expected that this Minapolitan area can be used as a special economic zone for the development of fisheries potential, and as a new driving force for the growth and development of businesses in the community, a center of economic growth for the community and as a vehicle or place of learning to improve the capacity and quality of labor in the community in East Sei Kepayang District, Asahan Regency. Minapolitan is an area-based fisheries development strategy. The area referred to here consists of production centers and fishery commodities, as well as integrated services. So, all fishery activities from upstream to downstream, all are in the area called Minapolitan. Not only cultivators are involved in the fishery process, but also provide new opportunities for housewives who previously did not work, namely with the existence of a fish processing center so that the fish is not only sold but also processed, which of course also increases the selling price of the fish.

The characteristics of the Minapolitan area are that with the existence of a processing or marketing production center based on fisheries, facilities and infrastructure as a support for economic activities, accommodating or employing human resources in the area and surrounding areas and having a positive impact on the economy in the surrounding area from previously many residents who had difficulty obtaining jobs, the Minapolitan area opens up great opportunities for the new entrepreneurs, because the government also takes part in its development and helps borrow capital for new entrepreneurs who want to pursue the aquaculture business. In some time, the production value produced by the Minapolitan Area, East Sei Kepayang District, Asahan Regency has increased and decreased due to several factors.

The following is a table showing fish production by sub-district in East Sei Kepayang District for three years:

Table 1.1 Fish Production by East Sei Kepayang District (Ton)

Year	Sum
2021	4.573
2022	5.746
2023	4.890

Source: BPS Asahan Regency

This table shows the fluctuations in fish production over the past three years. In 2022, there was a significant increase in fish production compared to 2021, but in 2023 the number decreased slightly. This can be an indication of factors that affect fishery production, such as environmental conditions, technology, and fish resource management practices.

The development of the Minapolitan area with an approach to areas and production centers is expected to be able to foster production and business units so that they can be more focused and on target. The main economic driver in the Minapolitan Region is not only in the production center but also in the capture fisheries trade, aquaculture fisheries, fish processing, or a combination of these three things. So that the capture fisheries production and trade center is the main driving force of the economy in the Minapolitan area in the form of a fishing port or Fish Auction Place (TPI). Meanwhile, the main driver of Minapolitan in the field of aquaculture is the center of fishery production and trade in productive cultivated lands. The development of the Minapolitan area can also be done by increasing the diversification of the rural economy through improvements in innovation and technology so that it will result in competitive product diversification. In addition, it is also necessary to further increase the access of fisheries actors to productive resources and capital is urgently needed in developing the economy of fisheries actors which is useful for realizing a synergistic relationship between fisheries

business actors from upstream to downstream. The development of facilities and infrastructure is also needed to support the continuation of economic activities in the Minapolitan area.

The purpose of the development of the Minapolitan area is as a driver for the acceleration of the development of regions through fisheries activities as the main activity for community economic growth and also as a driver of community welfare through activities related to the village government and the district government which have a competitive and people-based, sustainable (not damaging the environment) and decentralized fishery business system (the authority is located in the village and the district government). in the Minapolitan area. According to the results of research, the government of East Sei Kepayang District, Asahan Regency has done various ways in the development of the Minapolitan area, namely by synchronizing the program of Minapolitan development activities and increasing the socialization of Minapolitan development in East Sei Kepayang District, Asahan Regency. Based on this reality, the development of the Minapolitan area must always experience improvements from various aspects every year. In the context of local governments, what must always be a concern is how local governments must be able to improve the welfare of the community, especially those in the Minapolitan area. So that a more innovative and scientific and technological strategy is needed in managing and developing the Minapolitan area.

2. LETERATURE REVIEW

Minapolitan Concept

According to the Ministry of Maritime Affairs and Fisheries (2011), Minapolitan is a fisheries-based development concept that is integrated with other sectors, aiming to increase regional competitiveness and community welfare through a comprehensive regional development approach. In this context, the Minapolitan region is designed as a center for fisheries-based economic growth that involves all stakeholders, including the government, the community, and the private sector. Situmorang et al. (2013) define the Minapolitan region as an economic area based on fishery activities, where this area planning includes various activities, such as fish farming, processing fishery products, and distribution of fishery products.

According to Rustiadi et al. (2011), regional development is a process to improve the quality of life of the community by making optimal use of local resources. In this case, the development strategy of the Minapolitan area needs to be based on the local potential of East Sei Kepayang District which includes fisheries and marine. Friedmann (1966) through the Growth Pole Theory explained that regional economic development can begin by forming economic growth centers. The Minapolitan area can be positioned as the center of fisheries economic growth which will later have a positive impact on the surrounding area.

Regional Development Based on Local Potential

Rustiadi et al. (2011) stated that regional development must be based on local potential and strengths, such as existing natural, human, and cultural resources. In East Sei Kepayang District, fisheries potential, both capture fisheries and aquaculture, are the main assets that can be optimized. This strategy includes improving infrastructure, sustainable resource management, and developing the fishery product processing industry. According to Sachs (2015), sustainable development is a development concept that meets the needs of the present without sacrificing the ability of future generations to meet their needs. In the Minapolitan region, this concept is very relevant in the management of fishery resources that must pay attention to the sustainability of marine and aquatic ecosystems. The development of the Minapolitan area in East Sei Kepayang District must be based on an integrative approach, including local potential, sustainable management, community participation, institutional strengthening, as well as infrastructure development and market access. These theories can be an important foundation for developing sustainable and effective development strategies in the region.

METHOD APPROACH

A qualitative approach is used because this research aims to dig deeper into the perceptions, views, and experiences of various related parties, including local communities, stakeholders, and local governments regarding the development of the Minapolitan area. Qualitative research allows researchers to understand the social and cultural context that surrounds the region, as well as identify relevant potentials, problems, and needs in the development of the region. According to Creswell (2014), a qualitative approach is suitable for understanding complex problems that require detailed explanations.

Journal of Information Technology, computer science and Electrical Engineering (JITCSE) Vol. 1, No. 3, October 2024 : 256 – 262

ISSN: 3046-4900 🗖 259

With this method, research can be more flexible in understanding social dynamics, interactions between actors, and challenges faced in regional development.

This study uses a qualitative descriptive design, which aims to provide a detailed description of the actual conditions in the field, including how the development strategy of the Minapolitan area is implemented in East Sei Kepayang District. Bogdan and Biklen (2017) explain that qualitative descriptive design focuses on depicting the details of phenomena that occur naturally, without the intervention of researchers. Through this design, researchers will collect and analyze qualitative data from various sources, such as in-depth interviews, field observations, and documentation, to produce a comprehensive understanding of the development process of the Minapolitan area.

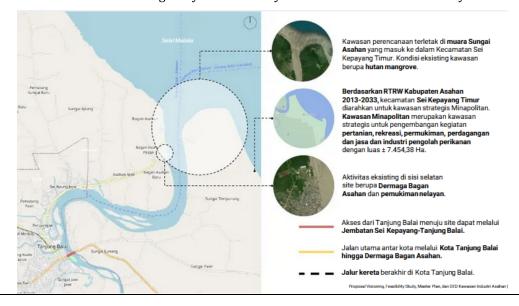
Data was collected through various relevant qualitative methods, including: In-depth Interview An indepth interview was conducted to obtain the views, experiences, and perspectives of the main actors involved in the development of the Minapolitan region. Patton (2019) states that in-depth interviews are an effective technique for exploring complex issues and for obtaining rich and detailed information from sources. The speakers in this interview included local government officials, managers of the Minapolitan area, community leaders, and fisheries industry players. The questions are structured in a semi-structured manner to allow flexibility in digging up more information. Field observation was carried out to see firsthand the physical condition, fishery activities, and infrastructure in East Sei Kepayang District. Spradley (2018) stated that observation is an important method in qualitative research to get a real picture of the situation being studied, as well as to supplement the data from the results of interviews. Observation is carried out in a participatory manner, where researchers participate in several local community activities, such as the fishing process, processing of fishery products, and other relevant economic activities.

To ensure the validity of the data, data triangulation is used, which is comparing and confirming data from various sources (interviews, observations, and documentation). Lincoln and Guba (2015) mentioned that triangulation is an effective way to increase the credibility of qualitative research. In addition, a member checking technique is also used, namely by asking the source for confirmation of the interview results to ensure that the researcher's interpretation is in accordance with what the source intended. The qualitative research method used in this study makes it possible to understand the development strategy of the Minapolitan region in depth and comprehensively. By using various data collection techniques, thematic analysis, and appropriate data validation, this research is expected to provide a comprehensive overview of the conditions and challenges of the development of the Minapolitan area in East Sei Kepayang District.

3. RESULTS AND DISCUSSION

Potential of fishery areas in East Sei Kepayang District

Geographical Conditions and Climate Geographical Location: East Sei Kepayang District has fishery potential that can be influenced by its strategic geographical location, close to waters or large rivers. Fisheries Climate Conditions are greatly influenced by local climatic conditions. Analysis of the rainy



260 □ ISSN: 3046-4900

season, dry season, water temperature, and rainfall can provide information about the availability of fish. Natural Resources and Aquatic Ecosystems Water quality analysis, including acidity (pH), dissolved oxygen levels, and nutrient content, is very important in determining the feasibility of waters for fish farming. Biological Resources of the dominant fish species in the waters of East Sei Kepayang, as well as biodiversity in the area, such as plankton and other macrofauna that support the fishery ecosystem. Potential of Capture Fisheries and Capture Fisheries Cultivation Data on the types of fish caught, the amount of capture fisheries production each year, and the techniques used by local fishermen (fishing gear, boats, etc.). Aquaculture Fisheries The potential for the development of aquaculture fisheries, such as fish ponds, floating net cages, or freshwater ponds. Also discuss the economic opportunities resulting from this cultivation. Human Resources and Institutions Profile of Fishermen and Fish Cultivators The socio-economic characteristics of the fishing community in East Sei Kepayang District, including the level of education, skills in fisheries, and participation in fisheries organizations. Fisheries Institution Involvement of fisherman groups, fisheries cooperatives, and support from local governments to improve production and community welfare.

Figure 1.1 Potential of the Minapolitan Area in East Sei Kepayang District, Asahan Regency Economic and Market Factors Availability of Infrastructure Access to markets, road quality, and transportation facilities for the distribution of fishery products. Fisheries in these regions may be affected by accessibility to large markets in urban areas or neighboring villages. Market Prices and Demand Analysis of fish prices in local, regional, and national markets, as well as demand from consumers and business actors. SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats) Strengths For example, the availability of abundant fish resources, support from the government in the form of fisheries programs. Weaknesses Infrastructure limitations, lack of fishermen's skills, or limited capital. Opportunities: Potential for fish exports, government programs to improve the fisheries sector, and advances in aquaculture technology. Threats: Climate change, water pollution, or competition from other fishing areas. Potential for Future Development Opportunities to increase production capacity through the application of new technologies in aquaculture (such as biofloc or recirculation systems). Strategic plans of the government or local investors to develop fishery supporting infrastructure, such as fish auction sites, cold storage, or fish processing plants. Government Policies and Support Policies issued by local and central governments related to the management of fishery resources in the East Sei Kepayang area. Assistance and subsidy programs for fishermen and fish farmers.

What obstacles are faced in the development of the Minapolitan area in East Sei Kepayang District Regarding the obstacles faced in the development of the Minapolitan area in East Sei Kepayang District, the main focus is usually to identify various initial obstacles that affect the development of this area. The Minapolitan area itself is a fishery-based regional development concept that integrates various aspects, such as production, processing, and distribution, in order to improve the welfare of the local community. Here are some of the main obstacles that often occur.

- Limited Road Access Infrastructure and Transportation Limited adequate road access to fishery
 production centers can hinder the distribution of fishery products to the market. Poor
 transportation infrastructure can lead to high logistics costs and reduce the competitiveness of
 fishery products. Storage and Processing Facilities Lack of cold storage facilities or adequate fish
 storage facilities can cause post-harvest losses, such as deterioration in product quality or fish
 spoilage.
- 2. Capital and Investment Lack of Access to Financing Many fishermen and fish farmers experience limited capital to develop fishery businesses. Limited access to financing sources, either from banks or other financial institutions, is one of the obstacles to Minapolitan's development. Minapolitan's Limited Investment requires a large investment in infrastructure and technology. However, the lack of interested investors, both from the private sector and the government, can slow down the development process.
- 2. Technology and Knowledge Lack of Modern Technology Many fishermen still use traditional technology to catch fish or cultivate fish. The inability to adopt more efficient technologies in capture fisheries or aquaculture can be a serious obstacle to increasing productivity. Lack of Technical Knowledge The level of education and technical knowledge of fishermen in terms of aquaculture and fisheries management is still low. Training on more modern cultivation, environmental management, and marketing techniques is still needed.
- 3. Environmental Problems Environmental Degradation Water pollution due to industrial or household waste in aquatic areas can reduce the quality of fishery habitats, thereby affecting the availability of fish. The decline in environmental quality can be a serious obstacle to the

development of the Minapolitan area. Climate Change Uncertain climate variations, such as changes in water temperatures or extreme rainfall, can affect fishery ecosystems and affect catches.

- 4. Lack of Supportive Regulations and Policy Policies Sometimes there is an overlap of policies between local and central governments, which makes the development process hampered. In addition, the lack of regulations that support market access for small fishermen is also a problem. Lack of Government Incentives may under-provide incentives, such as equipment subsidies, organic fertilizers, or technical assistance programs, that fishers and fish farmers need.
- 5. Coordination and Institutions Lack of Effective Institutions Local institutions that manage the development of the Minapolitan region may not be optimal. Lack of coordination between government agencies, the private sector, and local communities can slow down the development process of the region. Low Community Involvement Community participation, especially fishermen and fish farmers, in the planning and management of the Minapolitan area is sometimes low. This causes the programs implemented to be not always relevant or on target.
- 6. Access to Markets Difficulties in Marketing Products One of the major obstacles in the development of the Minapolitan area is the limited access of fishermen to a wider market. Selling prices at the fisherman level are often low due to limitations in direct access to the market or knowledge of the product value chain. Product Quality Fishery products often do not meet national or international market quality standards, which is caused by a lack of good processing or storage technology.
- 7. Government Support and Policy Lack of Supporting Programs Despite the intention to develop the Minapolitan area, often government programs are not fully effective on the ground. The lack of effective supervision and implementation of policies can be one of the inhibiting factors. Complicated Bureaucracy Long administrative procedures and complicated bureaucracy in terms of licensing, government assistance, or microcredit programs can hinder the development of the region.

4. CONCLUSION

This conclusion must reflect the main points about how the proposed strategy can help the development of the Minapolitan area in East Sei Kepayang District, Asahan Regency in a sustainable and effective manner. Here is an example of a conclusion framework that can be used:

Infrastructure Improvement as the Main Key to the development and improvement of fisheries infrastructure, including road access, cold storage facilities, and fish processing centers, is an important step to improve distribution efficiency, maintain product quality, and add value to fishery products. Adequate infrastructure will open up greater opportunities for fishermen and fish farmers to connect with a wider market. Access to Financing and Investment Supports Increased Productivity The strategy of increasing access to financing and attracting private investment is an important element in overcoming capital constraints. Through cooperation with financial institutions, governments, and investors, fishermen and cultivators can expand their business scale, increase production output, and obtain more modern technology to support their businesses.

The application of Modern Technology and human resource training The adoption of modern fishery technology, both in aquaculture and capture fisheries, is a strategic step that will increase productivity and maintain the preservation of natural resources. In addition, continuous training for fishermen and cultivators is urgently needed to improve their technical skills in managing more efficient and sustainable fishery businesses. Sustainable management of natural resources, including efforts to preserve aquatic ecosystems and prevent pollution, is an important foundation in ensuring the long-term availability of fish. Environmentally friendly practices and conservation of fishery ecosystems, such as mangroves and coral reefs, need to be made a priority to maintain the balance of fishery ecosystems. Overall, the development strategy of the Minapolitan area in East Sei Kepayang District, Asahan Regency must be carried out through a holistic approach, including strengthening infrastructure, technology adoption, increasing human resource capacity, sustainable environmental management, and appropriate policy support. With the integrated implementation of these strategies and involving various parties, the Minapolitan region has great potential to become an advanced, sustainable fisheries center and have a significant positive impact on the welfare of the local community.

REFERENCES

A Sugiarto, RK Ramadania (2023). <u>Economic and Spatial Regional Integration and Its Impacts on Regional Development in North Tapanuli Regency</u>. International Journal of Social Science, Education, Communication and Economics (SINOMICS JOURNAL).

- A Sugiarto, SPR Manalu, E Pakpahan (2023). <u>The Effect of the Number of Tourist Visits and Restaurant Tax on the Economic Growth of North Tapanuli Regency with PAD as an Intervening Variable</u>. Jesya (Journal of Sharia Economics and Economics) 6 (1), 221-232.
- A Sugiarto, RK Ramadania (2023). <u>Land Management on the banks of the Deli River for sustainable urban development based on Regional Regulations (RTRW/RDTR) (Case Study: Deli River Bank, Medan Maimun District).</u> Jesya (Journal of Sharia Economics and Economics) 7 (1), 618-626.
- C Nuraini, B Alamsyah, PS Novalinda, A Sugiarto (2023). <u>Planning with 'Three-World Structures': A Comparative Study of Settlement in Mountain Villages</u>. Journal of Regional and City Planning 34 (1), 55-82.
- Bogdan, R. C., & Biklen, S. K. (2007). Qualitative Research for Education: An Introduction to Theories and Methods Page 2 9.
- Creswell, J. W. (2014). Reseach Design: Approach, Qualitative, Quantitative, and Mixed. Yogyakarta: Student library.
- *Edrus, I. N. (2015*). Analysis of the Development of the Minapolitan Area, Bengkulu City. J. Policies.Permissions.Ind. Vol. 7 No. 2, 79.
- Friedmann, J. (1966). Regional Development Policy: A Case Study of Venezuela (No. HT395. V4 F7).
- Guba, E.G & Lincoln, Y.S. (1981). Effective Evaluation. San Fransisco: Jossey-. Bass.
- Ministry of Maritime Affairs and Fisheries. (2011). Processing Statistics and. Marketing of Fishery Products 2011. Jakarta: Ministry of Maritime Affairs and. Fishing.
- Patton, M. Q. (2019) Utilization-Focused Evaluation. 3rd penyunt. California: SAGE Publications.
- Rustiadi Ernan, Saefulhakim Sunsun and R. Panuju Dyah. (2011). Regional Planning and Development. Jakarta. Crestpent Press and Yayasan Pustaka Obor Indonesia.
- Sachs, J.D. (2015). The era of sustainable development . Columbia University Press. Copy citation. Chicago style quotes.
- Situmorang, N. A., L. D. Mahfudz, and U. Atmomarsono. (2013). Effect of Seaweed Flour (Gracilaria verrucosa) in Ration on the Efficiency of Broiler Chicken Protein Use. Anim. Agric. J. 2(2): 49-56. *Spradley*, James, P. (2018). Ethnographic Method. Jogjakarta: Tiara Wacana