

# The Influence of the Construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section on the Development of the Langkat Regency Area

Edwart Haloho<sup>1</sup>, Abdi Sugiarto<sup>2</sup>

Universitas Pembangunan Panca Budi Email:retta\_hita2017@yahoo.com, abdi\_sugiarto@dosen.pancabudi.ac.id

#### Abstract

This study aims to examine the Influence of the Construction of the Trans Sumatra Toll Road Binjai - Pangkalan Brandan Section on the Development of Langkat Regency. This research method uses a qualitative method. The data analysis that will be carried out consists of description and analysis, the content of the description of the researcher will present the data or research results through the data collection techniques above. This method aims to describe a state or phenomenon. The results of the research Toll road construction is more enjoyed by areas that are the destination of movement, while areas that are not the destination of movement tend to be less advantageous. In areas that are the destination of movement, economic activity and economic growth tend to continue to increase, while in areas that are not the destination of economic activity and economic growth tend to decrease. The construction of toll roads in Langkat Regency provides more macroeconomic benefits and the construction of toll roads is development for the common good and welfare of the community in order to provide wider benefits so that the development is urgently needed. The construction of the Trans Sumatra Toll Road provides a change in land use that results in a change in community patterns, resulting in changes in community patterns. The development of the area after the operation of the toll road still has opportunities to continue to be developed.

#### **Keywords:**

Toll Road Development, Regional Development, Economic Growth, Changes in Community Patterns, Land Use

#### **INTRODUCTION**

The Binjai – Pangkalan Brandan Toll Road carried out by PT Hutama Karya Infrastruktur (HKI) is a *pilot project* for the implementation of *green construction* in the business environment of PT Hutama Karya (Persero) Group. *Green construction* on this toll road is implemented starting from the design process to its construction. The implementation of green construction is a form of implementation of the Minister of PUPR Regulation No. 9 of 2021 concerning sustainable construction, which is expected to ensure an environmentally friendly construction process and also



have an impact on construction sustainability. On the Binjai-Pangkalan Brandan Toll Road, IPR implements fourteen sustainable construction criteria. One of the aspects is security, safety, health, and sustainability standards that are realized by identifying the initial hue of the environment around the project to map potential environmental risks and their control during the development process. This is then poured into the Construction Safety Management System Plan.

Afforestation by planting woody trees such as Mahogany is also carried out by IPR along the slopes of toll roads, *interchanges*, project offices and management offices. In addition to its leaves that function to reduce air pollution, the roots of woody trees are useful as slope protection from landslides and increase groundwater supply. Flowering shrubs such as bougainvillea, hibiscus, nusa indah are also planted along the entrance to toll gates, *interchanges*, and management offices that function to add to the beauty of the toll road. To meet the health and comfort aspects, IPR conducts periodic environmental quality tests including measuring noise and vibration levels as well as surface water quality and air quality around construction sites, providing green open areas, handling dust during the mobilization process, and using construction equipment that meets emission threshold values. In terms of environmental management, IPR provides liquid and solid waste management infrastructure both at project office locations, work areas, and handed over management offices. In addition, a temporary drainage system is also provided in the work and maintenance area as well as a drainage system on the main road and the Stabat management office.

The construction of the Binjai – Pangkalan Brandan Toll Road also considers the aspects of sources and material cycles. In the construction of the Binjai-Pangkalan Brandan Toll Road, IPR utilizes 15% local materials and uses 26% prefabricated materials to prevent waste. In material and waste management, IPR applies the principle of reuse by utilizing materials from excavated soil. Soil material that can still be used will be brought to the landfill work site. In addition, the use of leftover steel pipes for spun pile modification is also one of the implementation *of recycle* in the implementation *of green construction.* From the social side, IPR also tries to reduce social disparities by paying attention to inclusivity to the community, such as involving local workers and vendors in the development process. The participation of local workers in North Sumatra Province in the construction of the Binjai – Pangkalan Brandan Toll Road reached 49%. Not only that, 10% of the workforce that contributes to this development is women, disabled, and marginalized workers. Local MSMEs also play a role in the provision of goods and services with a percentage of 34% of the total procurement carried out. Then, in the aspect of aesthetics and cultural preservation, IPR also helps preserve local culture by adapting designs that raise the nuances of Malay customs.

Construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section along 58 km. The presence of the Binjai - Langsa Toll Road will connect North Sumatra Province and Aceh Province is expected to be an access to support connectivity between regions from Binjai to Langsa and vice versa. In addition to being a supporting access to productive areas on the island of Sumatra, the presence of this toll road will also support connectivity from Binjai to Medan about 17 Km and from Medan to Kualanamu Airport about 42 Km.



#### Edwart Haloho, Abdi Sugiarto:

The Influence of the Construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section on the Development of the Langkat Regency Area

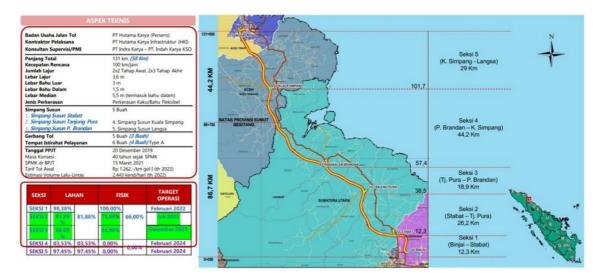


Figure 1.1 Trans Sumatra Toll Road Binjai Section - Pangkalan Brandan

The construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section has a significant influence on various aspects, both in the economic, social, and environmental fields in the surrounding area. The development of toll road infrastructure is one of the government's strategic efforts to improve connectivity between regions and accelerate economic growth. In North Sumatra, the Trans Sumatra Toll Road Binjai - Pangkalan Brandan Section which is part of this large project has an important role in supporting regional development, especially in Langkat Regency. This district has great potential in the agriculture, tourism, and industrial sectors, which can be further optimized with better access. The construction of this toll road is expected to accelerate regional economic growth, increase population mobility, and stimulate investment in the Langkat Regency area. In addition, this infrastructure has the potential to open wider access to various natural resources and tourist sites in Langkat, such as Bukit Lawang and Gunung Leuser National Park. However, behind these potential benefits, the construction of toll roads also brings a number of challenges, especially related to changes in land use, social impacts, and the environment. Therefore, a study on the influence of the construction of the Trans Sumatra Toll Road Binjai - Pangkalan Brandan Section on the development of the Langkat Regency area is important to understand the long-term impact of this project, both in terms of economy, social, and environment.

Land acquisition is a crucial stage in every major infrastructure project, including toll roads. In the Binjai – Pangkalan Brandan Section, a lot of land is used for agriculture, settlements, or conservation areas, so the land acquisition process involves various complex interests. This problem often causes friction between the government, the community, and the developer, especially in terms of determining the value of compensation that is considered unfair by some residents. In addition, many residents feel that they have lost their source of livelihood due to changes in the function of agricultural land which was previously the main livelihood. On the other hand, slow land acquisition can delay the implementation of projects, increase development costs, and reduce public trust in the government. Therefore, the issue of land acquisition is the main issue that needs serious attention in the construction project of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section. Lack of communication and the number of parties involved are the causes of complicated land acquisition.



#### Edwart Haloho, Abdi Sugiarto: The Influence of the Construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section on the Development of the Langkat Regency Area

One of the land problems is the acquisition of land owned by residents or communities for development purposes, commonly known as Revocation of Land Rights. The construction process of the Binjai – Pangkalan Brandan toll road is very important for the Binjai area, not only forcing land prices in various places to rise, but also has created an atmosphere where land has become an economic commodity that has a very high value, so it is likely that future development will experience difficulties in catching up with the growth rate of land prices.

Infrastructure has a very important role in the economic system. The better the state of infrastructure, the better the influence on the state of the economy. In addition, the construction of toll roads in large urban areas and its surroundings does affect the industries that are many around urban areas. The function of toll roads is to connect production centers with the global market, therefore to facilitate toll road business activities to be alternative to accelerate the flow of goods in and out. But in this case, the government program that focuses more on building toll roads in urban areas needs to be straightened, that is, it should pay more attention to the condition of roads in the countryside which is actually very helpful for people who are on average poor in increasing their economic activities. So that the gap between urban and rural areas can be eliminated. Therefore, the government must immediately improve the condition of roads between villages throughout Indonesia to achieve stable and pro-people economic growth. Equitable distribution of the Trans Sumatra Toll Road (JTTS) which is planned to stretch from the north of Sumatra Island to the south, connecting Nangroe Aceh Darussalam Province to Lampung Province.

The construction of the Binjai-Pangkalan Brandan Toll Road exists as a solution to community problems such as congestion, but every development must have an impact on the community. The community will feel the positive or negative impact of the development carried out by the government. There are many complaints from the community that they have lost their houses, land, rice fields and their residences, but on the other hand, many people also feel benefited by the existence of the Binjai-Pangkalan Brandan Toll Road, which has been demolished to cut travel time and reduce congestion. The purpose of this service is to find out how the influence of toll road construction on the social, environmental and economic impacts of which is the residence and livelihood of the surrounding community. Toll roads are alternative roads to accelerate transportation facilities, develop the tourism industry, support the growth and acceleration of economic processes that are often hampered due to transportation constraints, reduce congestion due to spilled markets, traditional markets, narrowing of roads, damaged bridges, potholes and others are things that hinder the economic process evenly and quickly.

With this development, there will be changes in the economic and social conditions of the community. According to Soediono (in Adisasmita 2012) that development is a change in the structure and pattern of society that will stimulate the layers of society and with technology, economic growth will be more rapid. In addition, according to Salim (1980) said that sustainable development can have both positive and negative impacts. The positive impact of development is that it can improve the quality of life which consists of improving physical quality, decreasing the mortality rate, and improving welfare. Meanwhile, the negative impact of development is reduced resources, environmental pollution, and population redistribution. According to Soemantri, the changes that occur in people's lives can be progress or perhaps a setback. In a developed society or in a developing



License

society, social and cultural changes are always closely related to the characteristics and forms of the economy. Change from the social aspect is a process of change that occurs in society which includes changes in aspects of the social life of the community. Changes in aspects of people's social life include changes in social interaction, social status and other social actions

### LITERATURE REVIEW

#### **Toll Road Construction**

The construction of toll roads is projected to be able to facilitate and accelerate the flow of goods and services between regions as one of the backbones of the nation's economy. In the context of facilitating, the construction of toll roads has been felt by various parties in facilitating and facilitating various types of economic activities carried out between regions. It can be imagined how losses will occur if the process of inter-regional distribution of goods and services in very large quantities is forced to be carried out through public roads that are almost always narrow, damaged, and congested, (Anonymous, 2013). If this continues to happen, then the occurrence of stalled and stagnant economic flows is certainly the answer. In the context of accelerating, toll roads that have been successfully built and operated have indeed been proven to be able to accelerate the process of transportation of goods and services when compared to those that have been carried out through public routes that have always been constrained by congestion. Therefore, there are many positive benefits that can be done with the existence of the toll road, (Manurung, M.M. T. 2012).

#### **Regional Development**

Regional development, when viewed from an economic point of view, is generally oriented towards increasing or decreasing regional productivity with indicators being the number of population, income, employment opportunities, and added value of the processing industry sector. Meanwhile, from a social point of view, regional development focuses on the goal of changing from underdeveloped conditions to developing or advanced conditions that occur gradually and is expected to help the development of the surrounding area. Friedman and Alonso (2018) argue that in the long term in regional development, it is more important for the community to recognize the potential of resources and the potential for local development of the region. Development is the desire to improve the situation and the ability to achieve a better quality of life (Alkadri, 2021). There are different opinions regarding the definition of development, according to Budiharsono (2022) development is a process of creating potential that gives rise to new potentials from limited potentials, and also includes looking for different potentials from various groups that have different potentials.

#### **METHOD APPROACH**

This study uses a qualitative method to analyze the influence of the construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section on the development of the Langkat Regency area. The qualitative approach was chosen because the focus of this research is to deeply understand the social, economic, and environmental impacts caused by the construction of toll roads, as well as the perception of the community and related parties to the changes that occur. Qualitative research



allows for comprehensive data mining through the experiences and views of the research subjects, thus providing richer and deeper insights.

The subject of research in the qualitative method is an individual or group that has relevance and direct involvement with the issue being researched. The subjects in this study include: Local communities in Langkat Regency who are affected by the construction of toll roads, especially those whose land has been exempted or who feel the impact of land use change. Local government officials such as officials of the Public Works Office, Bappeda, and other related agencies involved in the planning and implementation of development. Toll road project developers as well as contractors responsible for project implementation. Environmental activists and academics who are concerned about the environmental and social impacts of development in the region.

Data Collection Techniques In qualitative research, data collection is carried out directly through several main techniques:

- 1. In-depth Interview: An in-depth interview is conducted with the research subjects to gain an in-depth understanding of their experiences related to the construction of toll roads. The interviews were conducted in a semi-structured manner, with open-ended topic guidance so that respondents could provide their views and experiences broadly. The interviews will involve affected local communities, government officials, and project developers.
- 2. Field Observation: Researchers will make direct observations in the field to observe physical, social, and environmental changes that occur in the area around the construction of toll roads. This observation helps to see changes in land use, population mobility, and the development of supporting infrastructure that arises due to the construction of toll roads.
- 3. Document Study: Relevant documents such as project reports, local regulations related to land acquisition, regional economic data, as well as development planning documents will be analyzed to understand the context and data supporting this research. This document helps provide a framework of facts and official information relevant to the research.

Data Analysis Techniques The data that has been collected will be analyzed using qualitative data analysis techniques, which include the following stages:

- 1. Data Reduction: Data obtained from interviews, observations, and documents will be reduced by sorting and selecting relevant data according to the focus of the research. Irrelevant or redundant data will be set aside to facilitate the analysis process.
- 2. Data Display: Once reduced, the data will be presented in a structured narrative form, which allows researchers to see patterns and relationships between data. This presentation can be in the form of a summary, graph, or concept map that makes it easier to understand the findings.
- 3. Conclusion Drawing: The researcher then draws conclusions from the data that has been analyzed, by relating the field findings to existing theories. This process also involves critical reflection on the findings to ensure the validity and consistency of the data.



#### DISCUSSION

## The Impact of the Construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section on Environmental Development Around the Langkat Regency Area

With the existence of toll roads, locations near the entrances and exits of toll roads will develop rapidly as business areas, both industry, trade, financial services and banking and so on. There is a lot of evidence that shows that toll roads help advance the regional economy and keep business activities busy, open jobs and increase people's economic activities and even social transactions. Recently, the government's plan to build a number of toll roads has triggered regional growth, especially new housing development, This proves that toll access is able to boost the selling value of a property project. Although not all developers succeed in building residential complexes on the side of toll roads. Consumers also still need the existence of arterial roads around their housing and the availability of public transportation for other family members. Because, not all family members have private vehicles. This means that the opening of direct toll road access to residential areas without being accompanied by access to arterial roads and the availability of public transportation will also be free. Another social impact is that by making arterial roads for residents along the toll road, land prices have become high, and people have more economic and business opportunities in their neighborhoods. Meanwhile, the impact of the loss is that the lives of residents along the toll road are threatened because they cannot expect much from the sale of goods and services.

This toll road is divided into 5 sections, namely:

Rute	Ruas	Panjang
Seksi 1	Binjai-Stabat	12,3 Km
Seksi 2	Stabat-Tanjung Pura	26,2 Km
Seksi 3	Tanjung Pura-Pangkalan Brandan	18,9 Km
Seksi 4	Pangkalan Brandan–Kuala Simpang	44,2 Km
Seksi 5	Kuala Simpang-Langsa	29 Km

Table 1.1 Toll Road Space Section

For example, the impact of the construction of the Binjai-Pangkalan Brandan Toll Road has caused many problems for small people, especially the economy of the area affected by the toll road, such as gas station managers, stall and restaurant managers and small traders in the area affected by the toll road construction. The construction of toll roads is one of the solutions for distributing both goods and people in an easy and effective way in terms of time and distance. The construction of toll roads is one of the solutions offered by the government today to accelerate growth in an area and level development in each region. The construction of toll roads will make a negative contribution when the construction is carried out in a way that does not attach importance to several elements, be it from community elements or the environment. This negative impact will make growth in some



#### Edwart Haloho, Abdi Sugiarto: The Influence of the Construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section on the Development of the Langkat Regency Area

parties will be hampered, so it will more or less affect the overall development. There are two factors that affect the performance of MSMEs, namely 1. Internal factors are access to capital, entrepreneurial ability, human resources, marketing, business plan, financial knowledge and 2. External factors are government support, legality, social networks, access to information, technology, coaching. (Sudiarta: 2014).



Figure 1.1 Binjai Toll Gate Section

The Binjai - Langsa Toll Road consists of 5 sections, namely section 1 (Binjai - Stabat) along 11.8 Km, section 2 (Stabat - Tanjung Pura) along 26.71 Km, section 3 (Tanjung Pura - P. Brandan) along 18.98 Km, section 4 (Pangkalan Brandan - Kuala Simpang) along 44.24 Km and section 5 (Kuala Simpang - Langsa) along 29.18 Km. Binjai to Stabat, Stabat to Binjai, Binjai to Medan  $\pm 17$  Km and Medan to Kualanamu Airport  $\pm 42$  Km. Sumatra Island for Indonesia is the gateway on the west side. Therefore, connectivity needs to be improved so that the development of every major economic activity in Sumatra can continue. For this reason, said Budi Harto, his party continues to strive to contribute to connecting the good through toll road infrastructure so that one province in Indonesia can be connected.





### Edwart Haloho, Abdi Sugiarto:

The Influence of the Construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section on the Development of the Langkat Regency Area



Figure 1.2 Langkat Toll Gate Section



Figure 1.3 Construction of Binjai-Pangkalan Brandan Toll Road

The construction of the Binjai - Pangkalan Brandan Toll Road has an impact on changes in community land use which has consequences for the community's economy and society. In this development, community residential land that is used as a location for the construction of toll roads results in residents having to find a new location as a place to live. And as the community's need for



### Edwart Haloho, Abdi Sugiarto: The Influence of the Construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section on the Development of the Langkat Regency Area

land increases due to the construction of toll roads, agricultural lands are now used as alternative roads to meet the need for land. So that many of the community's agricultural land becomes new settlements, and this indirectly results in a decrease in the yield of community agriculture. In addition, the construction of toll roads is not only in residential areas but also in rice fields, and of course the productive land of the community becomes even less.



Figure 1.4 Gate of Tanjungpura – Pangkalan Brandan Toll Road

The construction of the Binjai - Pangkalan Brandan Toll Road is expected to have a positive impact in supporting the macroeconomy, such as the development goal itself is expected to improve the standard of living of the community for the better, can provide equitable distribution of the national economy, and provide new economic growth points in various regions which will later open up opportunities for community welfare in general so as to facilitate government services. The Binjai - Pangkalan Brandan Toll Road is an alternative road located along the island of Sumatra, to accelerate transportation facilities, industrial development, support the growth and acceleration of economic processes, increase the usefulness and usefulness of goods and services distribution services to support increased economic growth, smooth traffic between regions.

# Development of the Langkat Regency Region after the Construction of the Trans Sumatra Toll

#### Road Binjai – Pangkalan Brandan Section

The development of toll road infrastructure in Indonesia, especially the Trans Sumatra Toll Road, has a significant impact on regional development. One of the most important sections in this network is the Binjai – Pangkalan Brandan Section, which connects Langkat Regency with other areas in North Sumatra. The construction of this toll road aims to accelerate the mobility of goods

(i) (i) License

119

and people, improve connectivity, and encourage local economic growth. Langkat Regency, which has abundant natural resource potential and a strong agricultural sector, is expected to take advantage of toll road infrastructure to increase competitiveness and attract investment. This change in accessibility is also expected to improve the quality of life of the local community through the improvement of public facilities and social services.

The development that occurred when the construction of the toll road was carried out was felt the most in the Langkat Regency area was the number of road repairs in the Langkat Regency area. The distance relationship between sub-districts can be through the district road. The Langkat Regency Government continues to strive to improve facilities and infrastructure, especially those that are the link between sub-districts and villages. The following are road repairs that have a positive impact on the construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section.

Trai	ns Sumatra Toll Road	l Binjai – Pangkalan B	randan Section
Condition	Year		
	2021	2022	2023
Good	419.2	416.9	425.6
Keep	761.8	709.2	667.9
Broken	380.2	354.5	392.2

Road Length According to the Condition of Langkat Regency after the construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section

Table 1.2

80.7

75.6

Source : Langkat Regency in 2024 Figures

Heavy Damage

Roads are an important transportation infrastructure to facilitate and encourage economic activities. The increasing development efforts also demand an increase in road construction to facilitate population mobility and facilitate the flow of goods from one region to another. The construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section has brought significant changes to Lalat Regency, both in terms of economy, social, and infrastructure. The following is a discussion of the developments that occurred after the construction of the toll road.

- 1. The Economic Impact of the construction of this toll road is expected to encourage economic growth in Langkat Regency in several ways: Increasing Accessibility with the existence of toll roads, access to economic centers, markets, and industrial estates becomes faster and easier. This has the potential to increase trade volumes and attract investors to invest in the area. Business Sector Development Localbusinesses, especially in the agriculture, fisheries, and trade sectors, benefit from increased access to a wider market. Local products can be more easily distributed, increasing the income of farmers and small entrepreneurs. Job Creation Infrastructure development also has an impact on the creation of new jobs, both directly during the construction process and indirectly through the affected sectors.
- 2. Infrastructure Changes After the construction of toll roads, there are various infrastructure changes in Lalat Regency: Development of Public Facilities Supporting infrastructure, such as bridges, access roads, and terminals, has increased. This facilitates people's mobility and distribution of goods. Improved Road Quality Better road quality will facilitate transportation

and reduce logistics costs, which contributes to economic efficiency. Construction of New Facilities and Infrastructure The existence of toll roads encourages the development of new facilities and infrastructure, such as shopping centers, restaurants, and tourist attractions, which can increase the attractiveness of the area.

3. Social Changes The construction of the Trans Sumatra Toll Road also has an impact on the social aspects of the people of Langkat Regency: Improving the Quality of Life Better access to health services, education, and other public facilities improves the quality of life of the community. Changes in Community Mobility Patterns It is easier to travel to other areas, both for work, education, and recreational purposes. This has a positive impact on social interaction and cultural exchange between regions. Increasing Public Awareness With the increase in connectivity, people have become more aware of the importance of participation in development, both economically and socially.

# Positive Impact of the Construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section on the Development of the Langkat Regency Area

The existence of toll roads also encourages equitable development and regional development. The construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section is able to provide *a multiplier effect* for other sectors. This is in line with the direction of the construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section to revive the economy of the Langkat Regency areas that it passes. For example, the construction of the Trans Sumatra Toll Road section of the Binjai – Pangkalan Brandan section has an impact on the development of small and medium enterprises or SMEs by increasing the number of tourist visits. This region has experienced a significant increase in economic growth after the construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section. Susyanti & Latianingsih (2014) stated that the tourism sector is also a potential that is able to contribute to development. The real impact of the toll road infrastructure investment can be seen on various scales ranging from regional to national.

The acceleration of development in the Langkat Regency area has an impact on increasing economic growth. This is evidenced by the large number of investors in the Langkat Regency area due to the ease of mobility between regions, (A Sugiarto, RK Ramadania, 2023). The positive impact of the construction of toll roads can be felt in terms of the national economy. However, reflecting on the planning of toll road construction, there are also problems that arise such as congestion that undeniably occurs in various places. By looking at the impact of the construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section for the surrounding areas, we are faced with two choices, namely whether to lean towards the local economy or the global economy. The Trans Sumatra Toll Road Section Binjai – Pangkalan Brandan for the local community seems to still be seen as providing a lot of good reciprocity. In fact, the existence of infrastructure also aims to reach



regions so that the mobility of people and goods can be more efficient and increase economic activity in their areas. It still takes time for the community to adapt to the existing updates and for the government to accommodate the interests of the community in structuring the local economic sector. However, on the other hand, when looking at global conditions, the construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section is able to support a good investment climate because it is able to attract and bring in investors who in the future are expected to be able to help develop the region through increasing employment opportunities and increasing regional tax collection (Chi & Waugaman, 2010).

One of the positive impacts of the construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section is as follows:

1. Improved Connectivity

Facilitate access to various regions in North Sumatra and Aceh, including industrial areas, ports and tourist destinations.

- 2. Reduced travel time Cutting travel time significantly, saving time and transportation costs.
- 3. Economic improvement Supporting the economic growth of the region crossed through increased investment and trade.
- Job openings Creating new jobs during the construction and operation of toll roads.
- Increased property value Increase the value of property around the toll area due to better accessibility.
- 6. Improved security Highways are designed and high safety standards reduce the risk of traffic accidents.
- Increased tourism Facilitate access to tourist destinations along toll routes such as Lake Toba and Weh Island.
- 8. Industry support Facilitating the transportation of goods and raw materials from industrial estates.

# Challenges of the Construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section on the Development of the Langkat Regency Area

- High construction costs
   Toll road projects require large investments, which can put a strain on government finances.
- Environmental impact
   The development of toll roads can have environmental impacts such as deforestation and noise pollution.
- 3. Land acquisition



Land acquisition for toll road construction can be an obstacle, especially in densely populated areas.

4. Competition with other modes of transportation Toll roads can compete with other modes of transportation such as fire and public transportation.

# Benefits of the Construction of the Trans Sumatra Toll Road Binjai – Pangkalan Brandan Section on the Development of the Langkat Regency Region

- 1. Regional affordability. With the existence of a toll road, access to the area becomes easy. If an area is easily accessible, it will attract investors to invest there.
- 2. Accelerate vehicle travel time. In reality, there are a lot of obstacles on public roads such as congestion, many roads with potholes, many motorcycles and recklessness and others. This causes the company to lose money because the goods are delivered late, especially those whose cargo is vegetables that have a maximum time limit. It could be that the vegetables have rotted if the truck transporting them does not meet the target time in delivering them.
- 3. Increasing regional economic growth. With the existence of regional economic toll roads, it will also increase, for example Langkat Regency. Regional income in Langkat Regency increased with the existence of the Trans Sumatra Toll Road Binjai Pangkalan Section.
- 4. Creating jobs, it is clear that in its operation toll roads require operators who rotate for 24 hours, this will also help create jobs in Langkat Regency.
- 5. Providing income for the country. Toll road users will pay when passing.

From the five benefits above, it is clear that toll roads play a very important role in advancing the regional and state economy. With the existence of toll roads, the region will be more advanced, travel will become faster, the distribution of goods and services will be smooth to support economic growth, and increase the equitable distribution of development results.

## CONCLUSION

Based on the results of the research and discussion in the previous chapter, it can be concluded as follows:

- 1. The construction of toll roads is more enjoyed by areas that are the destination of movement, while areas that are not the destination of movement tend to be less advantageous. In areas that are the destination of movement, economic activity and economic growth tend to continue to increase, while in areas that are not the destination of economic activity and economic growth tend to decrease. This study also found that toll roads can affect the increase in regional development and the high toll rates that cause many trucks not to use toll roads, showing that the goal of toll road construction which will improve connectivity between regions so that logistics costs can be reduced has not been achieved.
- 2. The construction of toll roads in Langkat Regency provides more macroeconomic benefits and the construction of toll roads is development for the common good and welfare of the community in order to provide wider benefits so that the development is urgently needed. The construction of the Trans Sumatra Toll Road provides a change in land use that results in a change in community patterns, resulting in changes in community patterns. The development of the area after the operation of the toll road still has opportunities to continue to be developed. Some suggestions for



further research include further research with other areas that are passed by toll roads as research locations, further research on factors that can affect the development of areas passed by toll roads, research on the benefits of toll road construction.

#### REFERENCES

- Adisasmita, S.A. (2012). Regional Transportation Infrastructure Planning. Yogyakarta: Graha Ilmu. Alkadri, e. (2021). *Three Pillars in Regional Development: Natural Resources, Human Resources, Technology*. Jakarta: BPPT.
- Anonymous. (2013). Solo-Kertosono Toll Road, the First PPP in the *Toll Road Project*. PKPS Bappenas Magazine.
- A Sugiarto, RK Ramadania (2023). Economic and Spatial Regional Integration and Its Impacts on Regional Development in North Tapanuli Regency. International Journal of Social Science, Education, Communication and Economics (SINOMICS JOURNAL).
- A Sugiarto, SPR Manalu, E Pakpahan (2023). 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. Jesya (Journal of Sharia Economics and Economics) 6 (1), 221-232.
- A Sugiarto, RK Ramadania (2023). 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). Jesya (Journal of Sharia Economics and Economics) 7 (1), 618-626.
- Budiharsono. (2022). *Techniques for Analyzing the Development of Coastal and Ocean Areas*. Jakarta: Pradnya Paramita.
- C Nuraini, B Alamsyah, PS Novalinda, A Sugiarto (2023). Planning with 'Three-World Structures': A Comparative Study of Settlement in Mountain Villages. Journal of Regional and City Planning 34 (1), 55-82.
- Emil Salim. (1980). *Development Planning and Income Equity*. Jakarta: Idayu Foundation. 78. Page 2.
- Friedman and Alonso. (2018). Regional Development Planning : A READER. New. Zealand Geographer. Vol. 23 p. 179.
- Manurung, M.T. (2012). "Analysis of the Influence of Work Stress and Job Satisfaction on Employee Turnover Intention" (Study on STIKES Widya Husada Semarang). Thesis. Semarang: Faculty of Economics and Business, Diponegoro University.
- Sudiarta, I. P. L. (2014). Analysis of Factors Affecting Business Performance. Micro, Small and Medium Enterprises (MSMEs) in Bangli Regency. E-Journal Bisma.
- Sugiyono. (2015). Quantitative, Qualitative, and R&D Research Methods. Bandung: ALFABETA.
- Susyanti, D. W. and Latianingsih, N. (2014) 'Village Potential through Tourism. Rural', Epigram Journal, 11(1), pp. 65–70.

