

ANALYSIS OF THE IMPACT OF INFRASTRUCTURE DEVELOPMENT ON MICRO, SMALL AND MEDIUM ENTERPRISES IN SEMPAKATA VILLAGE, MEDAN SELAYANG DISTRICT, MEDAN CITY

Royganda Siregar^{1a}, Humaizi^{2b}, Zulkifli^{3c}

^{1,2,3} Magister Studi Pembangunan, Fakultas Ilmu Sosial dan Ilmu Politik,
Universitas Sumatera Utara, Indonesia

^a roygandasiregar@gmail.com

^b humaizi@usu.ac.id

^c zulkifli1@usu.ac.id

(*) Corresponding Author

roygandasiregar@gmail.com

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ABSTRACT

Infrastructure development has become a national priority aimed at strengthening the foundation of Indonesia's economic growth. At the local level, particularly in Sempakata Village, Medan Selayang District, the 2023 road and drainage improvement projects were expected to enhance regional connectivity and stimulate economic activities among Micro, Small, and Medium Enterprises (MSMEs). However, such physical transformations also generate various social and economic challenges that require in-depth analysis. This study aims to analyze the social and economic impacts of road and drainage infrastructure development on MSME actors in Sempakata Village, as well as to identify the adaptation strategies they adopted in response to the new infrastructure. The analysis employs Jean-Paul Rodrigue's Accessibility Theory and Hanson and Pratt's Social Access Theory, emphasizing that accessibility encompasses not only physical connectivity but also social capability—the ability of economic actors to utilize emerging opportunities. The research applies a qualitative descriptive approach, using in-depth interviews, participatory observation, documentation, and literature review as data collection techniques. Informants include MSME owners from various sectors—trade, services, culinary, and workshops—as well as community leaders who represent the local socio-economic context. The findings reveal that infrastructure development has generated positive impacts, such as improved accessibility, enhanced distribution efficiency, and the emergence of new business opportunities. Nonetheless, during the construction phase, some MSMEs experienced income decline and operational disruptions due to limited customer access. After project completion, most MSME actors managed to adapt through service innovation, business restructuring, and product quality enhancement. The role of the local government in providing assistance and information dissemination proved essential in facilitating MSME adaptation.

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INTRODUCTIONS

Infrastructure development in Indonesia has become one of the top priorities in the national development strategy. As a developing country with a large geographical area and a large population, the need for adequate infrastructure is urgent. Infrastructure is not only the foundation for supporting economic and social activities, but it is also a prerequisite for accelerating sustainable and inclusive economic growth. In recent decades, the Indonesian government has significantly increased investment in various types of infrastructure, ranging from transportation, energy, clean water, to telecommunications. (Saidah et al., 2022)

According to data from the Ministry of Public Works and Public Housing (2022), since the era of President Joko Widodo, infrastructure development has achieved significant acceleration, marked by the construction of toll roads along more than 2,000 km from 2014 to 2022, the construction of large dams for irrigation and water management, and the revitalization of public transportation routes in various major cities. This step is in line with the government's big agenda to improve Indonesia's global competitiveness, as indicated by a World Economic Forum (WEF) report which shows that the quality of infrastructure is one of the main factors in determining a country's competitiveness. (Rural Road Infrastructure Evaluation 2022–2023, 2023)

Infrastructure is the basic physical facilities needed to support the running of economic and social functions in society. This infrastructure includes various essential elements such as highways, bridges, transportation systems, communication networks, as well as clean water and sanitation facilities. In Todaro's view, infrastructure functions as the main support in maintaining the continuity of various economic activities, including micro, small, and medium enterprises. (Ihuoma et al., 2021)

According to Kuncoro (2012), infrastructure is one of the important pillars in economic and social development, especially in the context of regional development. Kuncoro emphasized that infrastructure functions as a catalyst that accelerates the development process by providing the connectivity and facilities needed to support economic and social activities in an area. Infrastructure includes various forms, such as transportation (roads, bridges, ports), energy networks, clean water, sanitation systems, and other public facilities that support people's daily lives. Kuncoro sees infrastructure as a basic prerequisite for attracting investment, both from the domestic and foreign sectors. In theory, regions with good infrastructure will be better able to attract investors due to easier access to resources, markets, and labor. With adequate infrastructure, the cost of distributing goods and services can be reduced, efficiency increases, and business productivity, including MSMEs, becomes more optimal. (Kuncoro et al., 2024; Prapti et al., 2015)

Adequate infrastructure is essential to support business growth, both in terms of access to raw materials, product distribution, and the ability to connect small businesses with the wider market. Poor road infrastructure or ineffective drainage can hinder MSME operations, reduce productivity, and even be financially detrimental. On the contrary, a good infrastructure creates growth opportunities and increases the competitiveness of small businesses in both local and global markets. (Romadhonni et al., 2022)

The city of Medan, one of the regions in Indonesia, participates in implementing development. Under the leadership of Mayor Muhammad Bobby Afif Nasution, infrastructure development is being accelerated with the aim of stimulating economic growth, improving environmental quality, and improving the overall welfare of the community. (*Infrastructure Development Achievements 2023* , 2023)

In Sempakata Village, Medan Selayang District, road and drainage repairs have been carried out. These improvements are expected to improve regional connectivity, support economic activities, and reduce the risk of flooding, which has been a major problem in the region. However, the implementation of this project is inseparable from significant social and economic challenges. During the repair process, various obstacles appeared in the field.

Infrastructure development in Sempakata Village has received special attention through the road maintenance program implemented by the Medan City Government in the 2023 fiscal year. Based on data from the Medan City

Water Resources and Construction Agency, road maintenance work in this sub-district includes nine main sections, including Jalan Bunga Sedap Malam VI A, Jalan Sembada XVI, Jalan Pasar II, Jalan Sembada XI Ujung, Jalan Rahmad, Jalan Bunga Sedap Malam III, Jalan Sei Silau Gg. Mesjid, Jalan Sei Batu Gingging, and Jalan Bunga Sedap Malam XVIII. (Annual Report on National Road and Drainage Infrastructure Development 2022, 2022)

The project was carried out by PT. Awiga because of the power and PT. Duta Angkasa Allisione (KSO) with a contract value of IDR 538,651,000.00. The total length of the repaired road reaches more than 2,900 meters with the overall repair area exceeding 11,000 square meters. The scope of work includes the repair of the aggregate foundation layer, the application of binding and adhesive seepage layers, and resurfacing using asphalt lastons (AC-WC and AC-BC) with an average thickness of 4 to 5 centimeters. We can see in the data in the following image:

RENCANA ANGGARAN BIAYA (RAB)									
PROGRAM KEGIATAN	: PROGRAM PONYIHLINGGAJARAN JALAN : PEMELIHARAAN BERPADA JALAN DI KECAMATAN MEDAN SELAYANG								
KONTRAKTOR	: PT. AWIGA SATRIA WIBAWA DAN PT. DUTA ANGKASA ALLISIONE (KSO)								
No.	URAIAN PEKERJAAN	SATUAN	HARGA SATUAN (Rp.)	VOLUME JL. BUNGA SEDAP MALAM I	JUMLAH HARGA (Rp.)	VOLUME JL. BUNGA SEDAP MALAM VIIII	JUMLAH HARGA (Rp.)	VOLUME JL. PASAR II	JUMLAH HARGA (Rp.)
	DIVISI I. UMUM Papan Projek	l	190,000.00	1.00	190,000.00	-	-	-	-
				Jumlah I	190,000.00				
	DIVISI V. PERKERASAN BERPUTIR DAN PERKERASAN BETON SEMEN Lapis Pondasi Agregat Kelas A	m ³	660,000.00	24.08	15,892,800.00	138.77	91,584,900.00	-	-
				Jumlah V	15,892,800.00		91,584,900.00		
	DIVISI VI. PERKERASAN ASPAL Lapis Reap: Pengilat - Aspal Cair	Liter	18,000.00	240.80	4,334,400.00	1,387.65	24,977,700.00	-	-
				Jumlah VI	32,312,100.00				
5.1.(1)	Lapis Peresk - Aspal Cair	Liter	17,000.00	429.18	7,295,992.00	109.96	1,069,269.00	721.95	12,273,116.00
6.1.(2)	Lapis Lapis Asu (AC-WC)	Ton	1,790,000.00	176.18	315,355,040.00	164.48	294,410,250.00	258.90	465,222,790.00
6.3.(5a)				Jumlah VI	326,985,432.00		321,257,219.00		477,495,906.00
REKAPITULASI									
1	DIVISI I. UMUM		Rp.		190,000.00	-	-	-	-
2	DIVISI V. PERKERASAN BERPUTIR DAN PERKERASAN BETON SEMEN		Rp.		15,892,800.00	91,584,900.00	-	-	-
3	DIVISI VI. PERKERASAN ASPAL		Rp.		326,985,432.00	321,257,219.00	477,495,906.00	477,495,906.00	477,495,906.00
JUMLAH :									
JUMLAH SELURUHNYA :									
					343,668,232.00	412,642,119.00	477,495,906.00		
					1,233,406,257.00				

Figure 1. Backup Data of the Public Works Office of the Medan City Government related to the RAB for road construction

Prior to this program, several roads in Sempakata Village were in a light to moderate damaged condition, so they needed repairs to improve the comfort and safety of community mobility. This infrastructure improvement is expected to have a positive impact not only on the aspect of connectivity between neighborhoods, but also in encouraging local economic growth, including the micro, small, and medium enterprises (MSMEs) sector which is the main focus of this study.

After being traced, in Sempakata Village there are 32 MSMEs of various types and fields that are actively trading (Sempakata Village data) the products produced are divided into several types such as selling home food, grocery stalls, laundry, printing businesses to, selling traditional clothes such as kebaya. Of course, with various types of MSMEs present, there is a difference in the impact of infrastructure development activities. So, this study will thoroughly explore the impact felt by MSME owners directly.

This development also reflects the active and passive influence of infrastructure on the local economy. Actively, infrastructure such as roads and improved drainage allows for increased production output and operational efficiency. Passively, infrastructure improvements support economic activity by increasing capital investment from the private and government sectors and creating new job opportunities. Furthermore, infrastructure improvements also accelerate the adoption of new technologies that enable MSMEs to increase their efficiency and innovative capacity. (Chaganti & Greene, 2002)

Basically, it is important to know that not every infrastructure project produces a positive impact directly. Previous studies have shown that in some cases, infrastructure development can actually have a negative impact on communities and small businesses. It found that infrastructure designed without the participation of local communities often failed to meet their needs, leading to sustained rejection or resistance. In some cases, infrastructure development also presents challenges, including population relocation, environmental damage, and disruption to local economic activities during construction. For example, research by By revealed that infrastructure projects often face overestimation of benefits and underestimation of risks, which can lead to social and economic inequalities. Mastuti et al. (2021) Flyvbjerg (2012)

This study aims to explore in depth the impact of road and drainage infrastructure improvements in Sempakata Village on the economic and social dynamics of the local community, with a special focus on MSMEs as one of the most affected sectors. This research will explore both positive and negative impacts felt by MSME actors during and after the infrastructure improvement process. In addition, this study will examine the extent to which social resistance to this project is influenced by economic and social factors, as well as how mediation carried out by local policy makers can be a solution in overcoming these challenges.

Based on the description of the background of the problem, the formulation of the problem in this study focuses on two main things. First, this study wants to find out how the socio-economic impact of road and drainage infrastructure development is felt by MSME actors in Sempakata Village, both in the pre and post-project stages of development. An understanding of changes in business conditions, accessibility, and dynamics of economic activities is needed to see the extent to which infrastructure development provides benefits or actually creates obstacles for business actors. Second, this study aims to examine the strategies developed by MSME actors in adapting and utilizing infrastructure improvements to face various business development challenges. In addition, this study also examines the role of the government in supporting the adaptation and strengthening of MSME businesses so that infrastructure development really has a positive and sustainable impact on the local economy.

METHOD

The approach chosen in this study is a qualitative approach, which is descriptive and analytical. This study aims to explain in depth the impact felt by MSME actors in Sempakata Village, Medan, due to the development of road and drainage infrastructure. In this context, the data collected is not in the form of quantitative figures, but comes from in-depth qualitative narratives collected through in-depth interviews, field observations, report notes, and relevant documents related to MSME activities and the influence of new infrastructure. (Hart, 1998) (Creswell, 2015; Rubin & Rubin, 2005)

Using this approach, researchers can dig deeper into how new road and drainage infrastructure affects the operations and economic growth of MSMEs. This includes how accessibility to markets, logistics costs, and operational efficiency are changing as infrastructure improves. Qualitative data will be analyzed to draw conclusions about changes in the quality of life and sustainability of MSME businesses in the region.

According to the context of infrastructure improvement, "Infrastructure improvements often directly contribute to higher operational efficiency among small and medium-sized enterprises. This not only increases profitability, but also competitiveness in the broader market." The implementation of good infrastructure, as explained by Robertson, provides opportunities for MSMEs to increase their capacity to compete and innovate. Aschauer (1989)

This research will provide evidence-based recommendations to the Medan city government on ways to increase the economic impact of infrastructure projects on the MSME sector, as well as offer insights into how infrastructure can be designed and implemented to support inclusive economic growth in urban areas.

RESULT AND DISCUSSIONS

Impact of Road and Drainage Infrastructure Development

The construction of road and drainage infrastructure in Sempakata Village, Medan Selayang District, is part of the Medan City government's program to improve the quality of accessibility and strengthen connectivity between regions. Socially, this project has brought about real changes to people's activities and interactions. Before the development, the people in this area faced various obstacles that were quite heavy. The main road that is severely damaged, potholes, and uneven hinders the mobility of residents. Poor drainage leads to flooding and waterlogging at some point whenever the rainy season arrives, while minimal street lighting lowers the level of comfort and safety of the environment.



Figure 8 Road leveling on the night owl

This condition makes people tend to limit activities outside the home. MSME actors along the main road also felt the impact, because customers were reluctant to come due to the difficult road conditions. The social mobility of the community is reduced, and interaction between residents becomes less frequent because the environment is not supportive. However, once the development project was completed, social changes were very evident. People began to actively engage in activities outside the home, children played on the side of the road which is now smooth and clean, and interaction between residents increased in stalls, restaurants, and other business places. (Rodrigue, 2020)

During field observations conducted in early July 2025, researchers noted significant changes in the environmental atmosphere. The once damaged main road has now been well paved and widened. New drainage was built on both sides of the road, smoothing the flow of rainwater and preventing inundation. Community activities are seen to increase compared to before: vehicles pass smoothly, more customers come to stalls, and some businesses seem to have started to extend operating hours to night due to improved lighting. However, the researcher also noted that there are still some shortcomings such as limited parking areas and several road points that are not adequately lit.

In interviews, a number of key informants gave their views on the social changes that occurred. One of them is Mrs. Siti, the owner of a grocery stall, said:

"When the project was done, it was indeed quiet, because the road was partially closed and dust entered the stall. But after it was finished, thank God there were more and more buyers. People now pass by my stall more often. For us who are small businesses like this, changes like this have a real impact" (Interview with Mrs. Siti, 2025).

The statement shows that although the community and business actors had experienced social disturbances during the development period, the final result of the project actually had a positive impact on their social dynamics. Customers who previously rarely passed by now come more often, and the activities of residents around the business location have become more crowded.

From the general public's side, this change is also felt directly. One of the residents who was met by the researcher around Mr. Rizal's coffee shop said:

"Now it's nice to pass through here, it's not muddy, it's not flooded anymore. The night has also started to get crowded because the streets are brighter. In the past, when it rained, people rarely wanted to leave the house" (Interview with Mr. Rizal, 2025).

This word shows an increase in the sense of comfort and security felt by the community after development. In addition to improving mobility, the new infrastructure also opens up new social spaces for people to interact with each other and do activities outside the home. Thus, it can be concluded that the construction of roads and drainage in Sempakata Village has given rise to positive social impacts, in the form of increasing social interaction, environmental comfort, and a sense of community optimism about changes in the area.

In addition to bringing social change, road and drainage construction also have a significant economic impact on the sustainability of MSMEs in Sempakata Village. Before the project was implemented, business actors faced various operational obstacles. Damaged roads make it difficult to distribute goods and raw materials, as well as reduce the number of customers because vehicles are difficult to pass. This directly increases operational costs and lowers turnover. During the rainy season, floods often damage merchandise and work equipment, especially for business actors such as workshops and grocery stores located on the side of the main road.

One of the MSME actors, Mr. Fauzan, the owner of the laundry business, explained his business experience before and after the construction of the road:

"In the past, before the road was repaired, customers often canceled their visits because they said the road was muddy and there were many holes. In the rainy season, it is difficult to drive a motorcycle, especially a car. But now that it is paved and the drainage is good, customers are starting to crowd again. In fact, there are new customers from outside the environment who pass through here because the access is smooth" (Interview with Mr. Fauzan, 2025).

This statement describes an increase in the attractiveness of business locations after infrastructure improvements are carried out. Better accessibility opens up opportunities for new customers, as well as helps MSME players expand their market reach. The same thing was also conveyed by Mr. Ali, the owner of the motorcycle repair shop, who experienced serious problems before the repair was carried out:

"Before the repair, many customers complained that their tires were leaking due to potholes. But for me, it was also a hassle, because stagnant water often entered the workshop, making the tools rust. Now it's much better. Smooth drainage, smooth roads, customers are also easier to come. Business becomes more stable" (Interview with Mr. Ai, 2025).

From the statement, it can be seen that drainage improvements not only reduce the risk of damage to business goods and equipment, but also increase operational efficiency and productivity of MSME actors. This positive impact is strengthened by the researcher's observation which recorded an increase in economic activity along the main road of Sempakata Village. Food stalls, grocery stores, and other small businesses show an increase in the number of customers, especially in the afternoon to evening.

However, some business actors revealed that during the construction period, they had experienced a decrease in turnover because access to the business premises was disrupted. However, these negative impacts are temporary and recover soon after the project is completed. In general, the public considers this development as a profitable long-term investment. In addition to increasing turnover, several MSME actors have also begun to adjust their business strategies. Some have extended their opening hours to night, improved the appearance of the store to make it more

attractive, and even used social media for promotion because now road access allows customers from outside the area to come more easily. (Victor, 2024)

From the results of interviews and observations, it can be concluded that this infrastructure development contributes directly to local economic growth. Increasing accessibility smoothens the flow of goods and services, reduces logistics costs, and strengthens the competitiveness of MSMEs in Sempakata Village. This is in line with the accessibility theory put forward by Rodriguez, that easy access between regions can open up new economic opportunities and increase the efficiency of people's economic activities. (Rana et al., 2025)

The construction of roads and drainage in Sempakata Village not only improves the physical condition of the area, but also grows the economic potential of the local community in a sustainable manner. Through a combination of interviews and field observations, this study confirms that improving infrastructure plays an important role in encouraging socio-economic activities, strengthening community interaction, and creating a more stable and productive business climate for local MSME actors. (Ssenyonga, 2021)

The theory put forward by Rodriguez regarding accessibility can be understood and analyzed in the phenomenon that has occurred in Sempakata Village. On a regular basis, researchers will try to explain in this article. Access is very important to connect 1 location to another location, not limited only to that, accessibility can have a wider impact. The research carried out by the author will depart from this theory of accessibility. Regarding MSMEs, access will open up new opportunities and challenges. This research will provide an in-depth understanding of various aspects; social aspects; economic aspects; and the strategies of business actors in responding to the changes that occur. (Akbar et al., 2023)

Social Impact of Infrastructure Development

The road and drainage construction project in Sempakata Village, Medan Selayang District, has caused various responses among the community. In the early stages, most residents welcomed the plan because they had long faced various problems due to the condition of damaged and unsuitable infrastructure. Potholes, dysfunctional drainage systems, and lack of street lighting cause residents' mobility to be disrupted, especially for Micro, Small, and Medium Enterprises (MSMEs) who depend on road access for the smooth running of their businesses. (Pellu, 2024; Tambaiap et al., 2023)

Many people have high hopes for this project because it is considered to bring real changes to economic and social activities in their environment. This was revealed by Mrs. Siti, one of the MSME actors who has a food stall along the main road of Sempakata:

"When I heard the news that the road wanted to be repaired, I was very happy, because it had been damaged for a long time. But frankly, I was also worried that later when the project worked, the stall would be quiet because of the dust and the road was closed. But if it's for the long term, it's definitely good, because customers can come more easily" (Interview with Mrs. Siti, July 13, 2025).

The above quote illustrates two sides of people's feelings, namely enthusiasm for long-term benefits, but also concern about the temporary impact that will disrupt daily economic activities. For MSME actors like Mrs. Siti, the existence of smooth road access is an important factor for their business continuity.

However, not all residents immediately showed the same enthusiasm. Some community groups responded to the project with skepticism and caution. They are worried that during the construction process, business activities and daily life will be disrupted. As revealed by Mr. Rizal, the owner of a coffee shop in the RW 02 area:

"At first I thought this project was even more troublesome. When work started, the road was partially closed, customers found it difficult to come. The dust is also extraordinary during the day, the coffee gets dirty quickly. But now that the results are starting to be seen, I understand why I have to be patient. If it's finished later, it will be better" (Interview with Mr. Rizal, 2025).

The statement shows that the initial response of the community is dynamic, changing along with the development process. Initially, there were concerns about the disruption to economic activity, but after seeing the real progress of the project, most residents began to understand that the long-term benefits would outweigh the temporary losses.

In addition to practical concerns, there are also some residents who express dissatisfaction with the project planning process. They feel that they are not actively involved in the public consultation stage. As expressed by Mrs. Lina, Head of Ward (Kepling) 3:

"Some residents had protested when the heavy equipment arrived, because they felt that they did not know when the project would start. Even though the village has given a notification, but indeed the socialization is not optimal. There are also those who are worried that later their houses will be affected by drainage excavation" (Interview with Mrs. Lina, 2025).

This quote shows that there is a communication gap between the community and the project implementer. Less effective socialization causes some residents to feel that they do not have the space to express their opinions or concerns. In the observation of researchers in the field, this condition was evident at the beginning of the project work period, where several residents were seen discussing on the side of the road while expressing complaints related to dust and limited access. Some MSME actors even temporarily closed their businesses during the drainage excavation stage.

The researcher also found a typical social phenomenon in the local context of Medan City, where a number of individuals or groups try to take advantage of the momentum of the project for personal gain. As is known, the practice of "illegal levies" (pungli) still often occurs at the environmental level. In the researchers' observation notes, information had emerged that some people on behalf of community leaders asked for "security money" from project workers so that development activities would not be disrupted. Nevertheless, the village immediately ordered the practice through coordination with the environmental apparatus, so that the work could continue smoothly. (Hidayati, 2022)

From direct observation in the second week of the project, the researcher noted that most of the residents began to adapt and showed more positive acceptance. Community activities continue even though road access is partially closed. Residents were seen helping each other manage simple traffic to make it easier for vehicles to pass around the construction area. At some points, especially around Yanti's restaurant, the community even began to provide water to flush the project's dust, showing spontaneous participation in maintaining common comfort.

Over time, the community's response has changed to be more supportive. Residents began to see the initial results of the work carried out, such as neater drainage excavations and road pavements that began to form. In an informal conversation conducted by researchers at the project site, a resident named Ibu Ratna, whose house is near the work area, revealed:

"At first I thought it would be long and difficult. But it turned out to be fast, the workers were diligent every day. If the result is like this, yes, we are happy. Now the water is no longer stagnant in front of the house" (Interview with Mrs. Ratna, September 16, 2025).

The quote reinforces the finding that while the initial response of the community tends to be mixed — from supportive, worried, and rejected, most of them eventually realize that the project brings real benefits to the environment.

Overall, the researcher assessed that the initial response of the community to the road and drainage construction project in Sempakata Village showed a pattern that is common to local-scale infrastructure projects: the euphoria of hope on the one hand, and temporary resistance on the other. The resistance is largely due to a lack of effective communication and socialization. However, after the community witnessed concrete results in the field, their attitude changed to be more positive and participatory.

The Impact of Development on Public Safety and Comfort

The safety and comfort of the community are important aspects that have also changed after the development of infrastructure in Sempakata Village. New infrastructure development can cause a positive *multiplier effect* in various sectors of people's lives. Before this project was implemented, poor road conditions were often the cause of accidents, especially for motorcyclists. Large potholes in the road increase the risk of accidents, especially during the rainy season when puddles cover the potholes. In addition, a poorly functioning drainage system makes the region often flooded, which not only hinders mobility but also increases the risk of diseases due to dirty waterlogging. (Hamzah, 2025; Rafiki, 2020) (Galiani et al., 2005; Istiandari, 2022)

Before the project started, the community often complained about the condition of the damaged and slippery roads, especially at night when there was little lighting. Researchers noted that some residents even installed simple lighting in front of their houses or stalls to help road users avoid falling. However, during the construction process, the risk of new security disturbances appeared. Some roads are temporarily closed for project work, resulting in more frequent congestion, especially during peak hours. In the observation of researchers in the field, some motorists seem to have difficulty crossing due to lane changes that are not always accompanied by information boards or traffic control officers. (Ismawati et al., 2025; Kambu et al., 2022)

It turns out that construction activities that last until night also raise concerns about environmental safety, especially for residents who live around the project area. As revealed by Mrs. Ratna, residents whose houses are adjacent to the road construction site:

"Sometimes when there is still heavy work equipment at night, I am also a bit afraid because of the noise and many passers-by that we don't know. But after there were environmental youth who took care of it, it was quite safe, we became calm" (*Interview with Mrs. Ratna, July 16, 2025*).

Findings in the field show that in the implementation of this project there is the involvement of Local Youth (PS) who play a role in maintaining the security of the project area, as well as supervising heavy equipment at the site. These young men are paid informally around Rp300,000 per day, with the aim of preventing theft or interference with work tools. However, this unofficial mechanism gives rise to the assumption of the practice of illegal levies (pungli) by certain parties. However, from the researchers' observations, the existence of the PS also gives a positive side because it helps maintain the security of the project site and minimizes the potential for minor riots between residents. This situation reflects the typical social dynamics in the city of Medan, which is known for the active involvement of youth groups in community activities, although it often raises a dilemma between social solidarity and informality practices.

After the construction was completed, the security and comfort conditions of the community in Sempakata Village experienced a significant increase. The roads that are now flatter and wider reduce the risk of traffic accidents, especially for motorcyclists and four-wheeled vehicles. Properly functioning drainage also reduces the potential for flooding in the rainy season, so that people no longer worry about their homes or businesses being flooded.

The researcher noted that in the afternoon, the traffic flow in this area runs more smoothly and orderly. Some residents were seen doing activities outside the house without worry, while children played on the side of the road with parental supervision. MSME actors also admitted that they are more comfortable operating, because they no longer have to face logistical challenges such as potholes, muddy, or hampered by floods. As conveyed by Mr. Ali, the owner of a motorcycle workshop in Sempakata Village:

"Now it's much easier to work. In the past, when it rained, water could enter the workshop, making rusty tools. Now it's dry and the road is also smooth. Customers are coming more and more, and I don't worry anymore at night, because the road is already lighted" (*Interview with Mr. Ali, July 18, 2025*).

The quote shows that improving the quality of infrastructure also provides a sense of security and psychological comfort for business actors, especially in maintaining their work assets and equipment. In addition, the increase in community activities in public spaces also contributes to an increase in a sense of security. With more people doing

activities outside the home, the level of social *surveillance increases* naturally. The streets that were previously quiet and dark are now more crowded and lively, especially at night. In the researchers' observation in the second week after construction in July 2025, it can be seen that people are starting to take advantage of the space around the road to trade small, hang out at warkops, and carry out social activities together.

This is in line with the statement of Ari, the owner of a coffee shop in the RW 01 neighborhood:

"In the past, at night, it was very quiet. People are lazy to go out because the road is damaged, especially if it rains, it must be muddy and dark. Now it's different, many people hang out, my customers also increase. So it's more crowded and feels safe." (Interview with Ari, July 20, 2025)

This statement shows the close relationship between environmental comfort, social activities, and the economy of the community. The improvement in the physical condition of the road encourages residents to return to using public spaces, which indirectly strengthens social relations and community solidarity. In addition to increasing the sense of security, the convenience of MSME customers has also increased significantly. Before the project was carried out, many customers were reluctant to visit the Sempakata area due to poor road conditions and uncomfortable environment. However, after infrastructure improvements, access to the place of business becomes easier and more enjoyable. This condition has a direct impact on increasing the number of customers and the turnover of business actors.

In the researchers' observation in July 2025, it can be seen that several new businesses have emerged, such as small grocery stalls, snack kiosks, and Pertamini businesses along the main road. This phenomenon shows the dual effect of infrastructure development on the emergence of new economic opportunities. The researcher also noted that the pattern of social activity of the community has shifted. After the project is completed, residents will gather outdoors more often to interact, trade, or simply relax around the main road, which is now cleaner and brighter. Public spaces such as small parks and sidewalk areas that were previously rarely used now seem more crowded. So, I interpret that the construction of roads and drainage in Sempakata Village not only increases the safety and comfort of the community physically, but also strengthens social cohesion and opens up new economic opportunities. These findings support the view that infrastructure development has a positive chain effect on the social and economic dynamics of society. Angelakis & Manioudis (2024)

CONCLUSION

The research conducted shows that the development of road and drainage infrastructure in Sempakata Village has a significant impact on the social and economic activities of the community, especially for MSME actors operating in the environment. Before construction began, damaged road conditions and poor drainage systems caused low accessibility, high operational costs, reduced number of customers, and disruption of the distribution of raw materials and finished goods. This situation makes it difficult for MSMEs to maintain business stability, while people tend to limit social and economic mobility. During the development process, MSME actors experienced a decrease in turnover due to access barriers, congestion, and inconvenience that gave rise to social resistance. However, some residents are beginning to understand that this development brings long-term benefits. After the project is completed, infrastructure improvements have a positive impact by improving the comfort, safety, and operational efficiency of MSMEs. The distribution of goods has become smoother, the number of customers has increased, and social interaction in public spaces has become more active.

To adapt and take advantage of these changes, MSME actors are developing various strategies. They adjust business models, such as extending operating hours, providing delivery services, and adding product variety. In addition, the use of digital technology through social media and online ordering applications is an important effort in expanding market reach and strengthening branding. Service quality improvement is also carried out, both in terms of cleanliness of the place of business, service efficiency, and the provision of customer loyalty programs. On the other

hand, collaboration between business actors—including cross-promotion and supplier sharing—is a strategy to deal with increasing competition. MSME actors also adapt to external pressures, such as rising rental costs, by considering relocation or product innovation to maintain profit margins. This overall strategy shows the ability of MSMEs to respond to changes in the physical environment and take advantage of opportunities arising from infrastructure development.

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