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The impact of floods on the economy of the community in North Samarinda District, Samarinda City (Study in Lempake Village, Giri Rejo Village)

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ABSTRACT

This study aims to identify data on the impact of flooding on the economy of the community in North Samarinda District. This study was conducted using a qualitative descriptive method and employed observation, interviews, and documentation. Key informants were taken from the Samarinda City Regional Disaster Management Agency, and residents affected by flooding in Giri Rejo Belimau Village, Lempake Subdistrict, were the data sources. The results of this study show that the impact of flood disasters on the community's economy has caused damage and losses to the irrigation infrastructure sector and economic sectors such as community stalls, cafes, traders, livestock farmers, and farmers. The role of the Regional Disaster Management Agency as the command, coordinator, and implementer in flood disaster management has been carried out well. Various efforts have been made, such as establishing policies, coordinating, and providing facilities for flood disaster management and flood impact mitigation. Although flooding still occurs when rainfall intensity is very high, the government has tried its best to carry out its duties and responsibilities. In addition, the community plays an active role in working together to clean up trash around rice fields, irrigation/ditches, and planting trees to prevent flooding.

Keywords: Flood Impact, Economic Loss, Community Economy, North Samarinda District, Lempake Village, Flood Disaster



1. INTRODUCTION

Naturally, Samarinda City consists of around 20 sub-watersheds (Sub-DAS). Samarinda City is also part of the Mahakam River Basin, which is the main river that crosses Samarinda City. Samarinda City has various physiographic characteristics, one of which is a fault zone (Mislan et al., 2024). Samarinda City has various regional physiographic characteristics, one of which is having a fault area (Ismunandar et al., 2022). In addition, it also has tidal swamp areas, alluvial plains, undulating areas, hilly areas and river areas that have the potential to cause disasters (Kusumaningsih et al., 2023).

The potential for disasters in Samarinda City requires careful disaster management planning and coordination so that disasters can be handled in a focused and integrated manner. Disaster management efforts to date have not been based on systematic and planned measures, often resulting in overlapping and uncoordinated responses to critical issues (Adnan et al., 2024). Throughout its history, Samarinda City has frequently experienced floods. There have been six types of disasters recorded in Samarinda City, with floods, forest and land fires, and landslides being the most frequent.

Floods often impact the economic sector, which can cause financial losses to businesses (Abidaini et al., 2024; Anwar et al., 2022; Rosyidah, 2022). The economic impact of flooding is most severe in urban and industrial areas (Hidayatullah & Muktiali, 2021).

The economic losses from these floods are the result of damage caused by flooding and disruption to economic activity (Anwar et al., 2022). Such impacts are also possible in the North Samarinda District, which is a flood-prone area in the city of Samarinda. Floods cause significant economic losses, both due to direct damage and disruption to economic activity (Sarifah et al., 2024).

Activities such as mining and housing expansion reduce absorption areas, exacerbating the risk of flooding. In the context of the flooding we are discussing, uncontrolled mining exploitation contributes to economic losses in several ways, including large-scale environmental damage, disruption of economic chains, health and social costs, and a decline in long-term asset values (Ridwan & Sarjito, 2024).

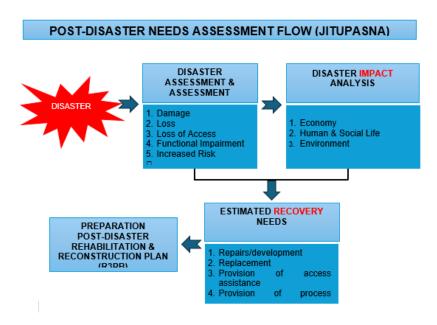


Figure 1 Post-Disaster Needs Assessment Flow (Jitupasna)

Source: National Distater Management Agency (2017)



Theoretically, this phenomenon can be explained through economic vulnerability theory, which emphasizes that communities with low economic capacity will experience more severe economic impacts from disasters. Furthermore, community resilience theory explains the ability of communities to recover through social solidarity, local adaptation, and institutional support. These two theories serve as a conceptual basis for understanding how flooding in North Samarinda affected household economic dynamics and local economic activity.

The research gap lies in the limited number of studies that specifically examine the relationship between the economic impacts of flooding and institutional mechanisms for disaster management at the village level. Most previous research has focused on the physical or technical aspects of flood management, rather than the socio-economic dimensions and community participation.

The novelty of this research lies in the integrative approach used—combining analysis of microeconomic impacts (such as lost income for residents and disruption to small businesses) with an evaluation of the Regional Disaster Management Agency (BPBD)'s institutional role in mitigation and community economic recovery. The research focuses on two sub-districts, Lempake and Giri Rejo, providing a strong empirical context for how local social and economic characteristics influence flood resilience in urban Samarinda.

This research is expected to enrich the literature on disaster economics at the local level and provide strategic recommendations for local governments in designing more inclusive and community-based flood mitigation policies.

2. METHOD

This research was conducted in a flood-affected community in Giri Rejo Belimau Village, encompassing neighborhood units (RT) 23, 24, 25, and 26 in Lempake District, North Samarinda District. According to data from the Samarinda City Regional Disaster Management Agency (BPBD) in 2025, approximately 78 families, or approximately 270 people, were directly affected by the flooding in the area. This community was selected as the research location because it is an annual flood-prone area with diverse socioeconomic characteristics, including farmers, livestock breeders, small traders, and food service providers. This research also involved relevant government agencies, particularly the Samarinda City BPBD, to obtain supporting data on policies, response, and flood mitigation efforts in the local area.

This research used a qualitative descriptive method to provide an in-depth description of the impact of flooding on the community's economy and post-disaster recovery efforts. According to Taylor and Bogdan (Dewi, 2021), a qualitative approach produces descriptive data in the form of written or spoken words from individuals observed and interviewed, allowing researchers to understand the social setting holistically. Meanwhile, according to Spradley in Sugiyono (2019), the focus of qualitative research lies in one or more interrelated domains within a social situation that have specific meaning for the participants. Therefore, this study seeks to contextually understand the social and economic phenomena arising from flooding in the community.

Respondents were selected purposively, considering the representation of the affected economic groups. The number of respondents in this study was 15, consisting of 6 farmers, 2 livestock breeders, 1 cafe owner, 5 food stall owners, and 1 traveling meatball vendor. In addition, additional informants came from village officials and representatives of the Samarinda City Regional Disaster Management Agency (BPBD), who play important roles in disaster management and flood impact mitigation. Research data was obtained through three main techniques: field observations to observe environmental conditions and community economic activities after the flood, in-depth interviews with key respondents to obtain information on economic losses, adaptation strategies, and forms of assistance received, and documentation in the form of reports, archives, and secondary data from relevant agencies.



Data analysis was conducted using the interactive model of Miles and Huberman (2018), which includes three stages: data reduction, data presentation, and conclusion drawing and verification. The data reduction process involved selecting and simplifying important information from interviews and observations. The data was then presented in the form of thematic descriptions to identify patterns and relationships between the variables studied. Conclusions were then drawn gradually while verification was conducted to ensure the consistency of the data obtained. To ensure data validity, data triangulation was used, comparing interview results with field observations and official documents to test the consistency and validity of the information (Santos et al., 2020).

3. RESULTS AND DISCUSSION

3.1 RESULT

Based on data from the National Distater Management Agency (BNPB) through the website https://gis.bnpb.go.id/ and Regional Distater Management Agency (BPBD) of Samarinda City, in 2024, Samarinda City experienced 261 disasters, with 7 types of disasters recorded. The types of disasters can be seen in the table below:

Table 1 History of Disasters in Samarinda City in 2024

Event	A Lot of Things	Die	Disappear	Wouded	Suffer	Flee	Submerged House	Pubfacare Damaged
Flood	17	0	0	0	0	0	466	9
Fores & Land Fires	84	0	0	0	0	0	0	0
Drought	0	0	0	0	0	0	0	0
Extreme Weather	104	0	0	1	0	0	0	4
Landslide	56	0	0	1	0	0	0	3
Social Conflict	0	0	0	0	0	0	0	0
Amount	261	0	0	2	0	0	466	16

Source: Samarinda City Disaster Management Agency, 2024

In 2024, Samarinda City recorded 17 flood disasters that had a significant impact, especially on the residential sector. This reflects that flooding is one of the most frequent disasters in Samarinda City, in line with the characteristics of the area, which is prone to flooding. In terms of human impact, there were no fatalities, missing persons, injuries, suffering, or displacement. In terms of the impact on the residential sector, 466 houses were recorded and reported to be submerged, indicating that these floods directly affected people's homes and daily activities. In addition, 9 public facilities were damaged by the floods.

Flooding in Samarinda City has become a recurring problem, influenced by various factors, such as rainfall, geographical conditions, drainage management, and land use change. Overall, although the floods in 2024 did not cause any casualties or displacement, their impact on homes and public facilities was significant, indicating the need for a more planned flood management strategy (Asrul, 2025).

Based on the table above showing the history of disasters in Samarinda City in 2024, the author is interested in conducting a more in-depth study of the impact of flooding on the economy of the community in North Samarinda District, Samarinda City.

Table 2 Number of Flood Disasters in Samarinda City from 2020 to 2024

Year	Number of Events	
2020	20	
2021	30	
2022	24	
2023	22	



Year	Number of Events
2024	17
Total	113

Source: Pusdalops BPBD Samarinda City in 2024

Based on the data presented in this table, there have been 113 recorded floods. The number of floods fluctuated each year, starting with 20 incidents in 2020, increasing to 30 incidents in 2021, then decreasing to 24 incidents in 2022, 22 incidents in 2023, and 17 incidents in 2024. Floods can have negative impacts, including damage to infrastructure, loss of shelter, economic losses, and health risks in the form of disease spread through contaminated water. Flood prevention is often carried out through drainage system improvements, reservoir and embankment construction, and reforestation in upstream areas. Public awareness of disposing of waste in its proper place is also key to reducing the risk of flooding (Fransiska, 2022).

With the results of interviews and observations in the field, in the Economic Sector, the hope of the people affected by the flood disaster is that the government can provide assistance in the form of business capital such as the provision of seeds (rice, hortics, and fish), fertilizers, agricultural equipment and so on. Then for the Infrastructure Sector so that the government can repair irrigation/drainage channels that are severely damaged and deadlocked due to mud.

Tabel 3 Economic Damage and Losses Caused by Floods

Impact	Sub-Impact	Estimated Economic Losses
Categories		
Physical Damage	Building and Infrastructure Damage	Losses range from IDR 500,000 to IDR
, o		200,000,000
Physical Damage	Farm Damage	Losses range from IDR 1,000,000 to IDR
, o		150,000,000
Physical Damage	Environmental Damage	Losses range from IDR 1,000,000 to IDR
		100,000,000
Physical Damage	Damage to Vehicles and Goods	Losses range from IDR 250,000 to IDR
		100,000,000
Economic Losses	Decrease in Income, People Cannot	Losses ranged from IDR 150,000 to IDR
	Work and Eventually Stop	500,000
Economic Losses	Rising Cost of Living, Increasing Staples	Losses ranged from IDR 150,000 to IDR
		500,000
Economic Losses	Business Losses, Shops Close Many and	Losses range from IDR 500,000 to IDR
	Business Goods Damaged	10,000,000
Social Impact	Diseases and Health Problems, People	Losses ranged from IDR 100,000 to IDR
	Affected by Skin Diseases	500,000
Social Impact	Evacuation, Not all people can be	Losses range from IDR 250,000 to IDR
	evacuated	2,000,000
Social Impact	Inhibited Daily Activities, People	Losses ranged from IDR 100,000 to IDR
	Cannot Work for Several Days	500,000

Source: BPBD Samarinda City, (2024)

Observation of Interviews with Communities Affected by the Flood Disaster in Giri Rejo Belimau Village, Lempake Village, North Samarinda

Informant I

The informant named Fitri is 23 years old who has a business place on Jl. Usaha Tanı Giri Rejo Belimau RT. 24 Lempake Village, North Samarinda District, with the last education of a high school informant, Fitri's informant status is unmarried and has a "Mama Ayu" food stall owned by her parents. After completing interviews with flood-affected informants, this data shows the need for intervention for the economic recovery of flood-affected communities. From the results of interviews with informants affected by the floods, the main hope they conveyed to the government or related parties to recover economic conditions after the flood disaster, the need for follow-up and acceleration of recovery and improving the community's economy against future disasters.



Informant II

The informant named Rusniah is 35 years old who has a place of business on Jl. Usaha Tanı Giri Rejo Belimau RT. 24 Lempake Village, North Samarinda District, with the last Junior High School education, Informant Rusniah is married and has a "Mama Kayla" food stall. Based on the results of the informant's interviews, people affected by the flood by providing important information related to the identity data of key informants and other details have been collected. Before the flood occurred in Giri Rejo Belimau Village, RT. 24 Lempake Village, has been answered well and provides a clear picture of the pre-disaster conditions in the village. This data will be used for further analysis. From the results of interviews with informants affected by the floods, the main hope they conveyed to the government or related parties to recover economic conditions after the flood disaster, the need for follow-up and acceleration of recovery and improving the community's economy against future disasters.

Informant III

The informant named Sriyati is 50 years old who has a place of business on Jl. Usaha Tanı Giri Rejo Belimau RT. 24 Lempake Village, North Samarinda District, with the last education of Elementary School Informant, Informant Sriyati is married and has a food stall "Busri Kapurung". After completing interviews with flood-affected informants, this data shows the need for intervention for the economic recovery of flood-affected communities. From the results of interviews with informants affected by the floods, the main hope they conveyed to the government or related parties to recover economic conditions after the flood disaster, the need for follow-up and acceleration of recovery and improving the community's economy against future disasters.

Informant IV

The informant named Khairiyah is 22 years old who has a business place on Jl. Usaha Tanı Giri Rejo Belimau RT. 24 Lempake Village, North Samarinda District, with the last education of Elementary School Informants, Khairiyah Informants have unmarried status and have a "Zahrah" food stall owned by their parents. After completing interviews with flood-affected informants, this data shows the need for intervention for the economic recovery of flood-affected communities. From the results of interviews with informants affected by the floods, the main hope they conveyed to the government or related parties to recover economic conditions after the flood disaster, the need for follow-up and acceleration of recovery and improving the community's economy against future disasters.

Informant V

The informant named Della is 24 years old who has a business place on Jl. Usaha Tanı Giri Rejo Belimau RT. 24 Lempake Village, North Samarinda District, with the last education of High School Informants, Della Informants have unmarried status and have a food stall "Beta Baru Tent". From the results of interviews with informants affected by the floods, the main hope they conveyed to the government or related parties to recover economic conditions after the flood disaster, the need for follow-up and acceleration of recovery and improving the community's economy against future disasters.

Informant VI

The informant named Damar Samad is 38 years old who has a place of business on Jl. Usaha Tanı Giri Rejo Belimau RT. 24 Lempake Village, North Samarinda District, with the last education of Undergraduate Informant (S.1), Informant Damar Samad has unmarried status and has a KATA Cafe". From the results of interviews with informants affected by the floods, the main hope they conveyed to the government or related parties to recover economic conditions after the flood disaster, the need for follow-up and acceleration of recovery and improving the community's economy against future disasters.



Informant VII

The informant named Yanto is 32 years old who has his place of business on Jl. Usaha Tanı Giri Rejo Belimau RT. 24 Lempake Village, North Samarinda District, with the last education of High School Informant, Informant Yanto is married and has a wife and 2 (two) children". From the results of interviews with informants affected by the floods, the main hope they conveyed to the government to restore economic conditions after the flood disaster, the need for follow-up and acceleration of recovery and improving the community's economy against future disasters.

Informant VIII

The informant named Marwan is 50 years old who has a business place on Jl. Usaha Tanı Giri Rejo Belimau Gang Bungur RT. 24 Lempake Village, North Samarinda District, with the last education of Undergraduate Informant (S.1), Informant Marwan is married and has a wife and 4 (four) children, where some have families and some are in school". From the results of interviews with informants affected by the floods, the main hope they conveyed to the government or related parties to recover economic conditions after the flood disaster, the need for follow-up and acceleration of recovery and improving the community's economy against future disasters.

Informant IX

The informant named Tusino is 38 years old who has a business place on Jl. Giri Rejo Belimau No. 02 RT. 24 Lempake Village, North Samarinda District, with the last education of Junior High School Informant, Informant Tusino is married and has a wife and 2 (two) children, my child is still in school". From the results of interviews with informants affected by the floods, the main hope they conveyed to the government or related parties to recover economic conditions after the flood disaster, the need for follow-up and acceleration of recovery and improving the community's economy against future disasters.

Informant X

The informant named Ngatiran is 46 years old who has a business place on Jl. Giri Rejo Belimau RT. 23 Lempake Village, North Samarinda District, with the last education of Junior High School Informant, Informant Srimulatsih is married and has a wife and 3 (three) children, my first child is married and the second and third are still in school". From the results of interviews with informants affected by the floods, the main hope they conveyed to the government or related parties to recover economic conditions after the flood disaster, the need for follow-up and acceleration of recovery and improving the community's economy against future disasters.

Informant XI

The informant named Karjani is 65 years old who has a business on Jl. Giri Rejo Belimau RT. 23 Lempake Village, North Samarinda District, with the last education of Elementary School Informant, Informant Karjani is married and has a wife and 2 (two) children, my first child is married and one is still in school". From the results of interviews with informants affected by the floods, the main hope they conveyed to the government or related parties to recover economic conditions after the flood disaster, the need for follow-up and acceleration of recovery and improving the community's economy against future disasters.

Informant XII

The informant named Ngatiran is 53 years old who has a business place on Jl. Giri Rejo Belimau RT. 23 Lempake Village, North Samarinda District, with the last education of Junior High School Informant, Ngatiran Informant is married and has a wife and 3 (three) children, my first child is married and the second and third are still in school". From the results of interviews with informants affected by the floods, the main hope they conveyed to the



government or related parties to recover economic conditions after the flood disaster, the need for follow-up and acceleration of recovery and improving the community's economy against future disasters.

Informant XIII

The informant named Hairullah is 47 years old who has a business place on Jl. Usaha Tani Belimau RT. 24 Lempake Village, North Samarinda District, with the last education of the High School Informant, Informant Hairullah is married and has a wife and 1 (one) child, my child is still in school". From the results of interviews with informants affected by the floods, the main hope they conveyed to the government or related parties to recover economic conditions after the flood disaster, the need for follow-up and acceleration of recovery and improving the community's economy against future disasters.

Informant XIV

The informant named Paidi is 48 years old who has a business place on Jl. Giri Rejo Belimau RT. 25 Lempake Village, North Samarinda District, with the last education of Junior High School Informant, Paidi Informant is married and has a wife and 1 (one) child, my child is still in school". From the results of interviews with informants affected by the floods, the main hope they conveyed to the government or related parties to recover economic conditions after the flood disaster, the need for follow-up and acceleration of recovery and improving the community's economy against future disasters.

Informant XV

The informant named Khoiri is 53 years old who has a business place on Jl. Sukorejo RT. 39 Lempake Village, North Samarinda District, with the last education of Junior High School Informant, Informant Khoiri is married and has a wife and 2 (two) children, my child is still in school".

From the results of interviews with informants affected by the floods, the main hope they conveyed to the government or related parties was to restore economic conditions after the flood disaster. The data mentioned above will be further analyzed to comprehensively understand the impact of the flood disaster in Lempake Village, North Samarinda. The problem in Giri Rejo Belimau Village, Jalan Usaha Tani, Lempake Village, in North Samarinda District, is that floods often occur, especially during the rainy season with high intensity. These floods had a major impact on rice fields in the area, causing crop failure, damage and significant economic losses for farmers. In addition, several natural attractions in the area that had been an attraction, are now not managed properly (Abidaini et al., 2024).

To make it easier to analyze the results of interviews with flood-affected communities, the author presents a matrix table in figure 2.



Criterion	Informant				
	1. Fitri (Shop)	2. Rusniah (Shop)	3. Sriyati (Shop)	4. Khairiyah (Shop)	5. Della (Shop)
Gender	Female	Female	Female	Female	Female
Age	23 Years Old	35 Years Old	50 Years Old	22 Years Old	24 Years Old
Education	SLTA	SLTP	SD	SD	SLTA
Capital	IDR 300.000,- U.T 1.000.000,- /Day	IDR 500.000,- U.T 1.000.000,- /Day	IDR 500.000,- U.T 1.000.000,- /Day	IDR 300.000,- U.T 1.000.000/Day	IDR 300.000,- U.T 1.000.000,-/Day
Pendapatan Normal	IDR 400.000,- U.T 1.500.000,- /Day	IDR 400.000,- U.T 1.500.000,- /Day	IDR 500.000,- U.T 1.000.000,- /Day	IDR 300.000,- U.T 1.000.000,-/Day	IDR 300.000,- U.T 1.000.000,-/Day
Flood Revenue	IDR 75.000,- U.T 100.000,-/Day	IDR 1.200.000,- U.T 1.500.000,- /Day	IDR 200.000,- U.T 300.000,-/Day	IDR 300.000,- U.T 1.000.000,-/Day	IDR 300.000,- U.T 1.000.000,-/Day
Flood Duration	4	4	4	4	4
Estimated Damage	-	-	IDR 500.000		
Estimated Losses	IDR 3.600.000,	IDR 2.960.000	IDR 3.300.000	IDR 3.850.000	IDR 4.000.000
Salary/Wage/Employee	-	IDR 240.000,-/Day	-	IDR 150.000,-/Day	-
Rent a place	-	IDR 1.300.000,-/Month	IDR 300.000/Month	IDR 800.000,-/Month	IDR 300.000,-/Month
Норе	Ask for help such as stove Please help with electricity	Please make a prayer soom Please help with electricity	Need the help of a wooden board The Need for Business Capital	Please help with electricity Please make a toilet Please make a parking space Please make PDAM water	Please help with electricity

Criterion		Informant						
	6. Damar (Cafe)	7. Yanto (Small Meatball Trader)	8. Marwan (Goat Livestock)	9. Tusino (Cattle)	10. Srimulatsih (Farmer)			
Gender	Male	Male	Male	Male	Male			
Age	38 Years Old	32 Years Old	50 Years Old	38 Years Old	46 Years Old			
Education	S-1	SLTA	S-1	SLTP	SLTP			
Capital	IDR 2.000.000 U.T 5.000.000,-/Day	IDR 2.00.000 U.T 3.00.000,- /Day	IDR 250.000.000,-/Years	IDR 500.000.000,-/Years	IDR 13.000.000,-/Plant			
Pendapatan Normal	IDR 5.000.000 U.T 10.000.000,-/Day	IDR 350.000 U.T 450.000,- /Day	IDR 340.000.000,-/Years	IDR 600.000.000,-/Years	IDR 57.750.000,-/Harvest			
Flood Revenue	IDR 1.500.000 U.T 2.500.000,-/Day	IDR 50.000 U.T 75.000,-/Day	-		IDR 1.250.000,-/Harvest			
Flood Duration	4	4	4	1	6			
Estimated Damage	-	-	-	-	-			
Estimated Losses	IDR 10.000.000	IDR 900.000	IDR 1.800.000	IDR 1.800.000	IDR 11.820.000			
Salary/Wage/Employee	IDR 21.600.000,-/Month	-	IDR 7.500.000,-/Month	IDR 7.500.000,-/Month	-			
Rent a place	-			-	-			
Норе	- Please help with electricity	- Please help with electricity	Need to dredge the trench	- Need help from a shredder	The Need for Irrigation Water Jl. Usaha Tani cement			

Figure 2 Matrix of Interview Results for Flood-Affected Communities

Criterion		Informant				
	11. Karjani (Farmer)	12. Ngatiran (Farmer)	Hairullah (Farmer)	14. Paidi (Farmer)	15. Khoiri (Farmer)	
Gender	Male	Male	Male	Male	Male	
Age	65 Years Old	53 Years Old	47 Years Old	48 Years Old	53 Years Old	
Education	SD	SLTP	SLTA	SLTP	SLTP	
Capital	IDR 3.000.000,-/Plant	IDR 14.000.000,-/Plant	IDR 7.000.000,-/Plant	IDR 8.000.000,-/Plant	IDR 13.120.000,-/Plant	
Pendapatan Normal	IDR 14.000.000,-/Harverst	IDR 66.250.000,-/Harvest	IDR 35.000.000,-/Harvest	IDR 49.000.000,-/Harvest	IDR 74.550.000,-/Harvest	
Flood Revenue	IDR 700.000	IDR 1.500.000	IDR 1.050.000	IDR 1.225.000	IDR 1.710.000	
Flood Duration	6	6	6	6	6	
Estimated Damage	-	-	-	-	-	
Estimated Losses	IDR 2.300.000/Plant	IDR 14.500.000/Plant	IDR5.950.000,-/Plant	IDR 8000.000,-/Plant	IDR 11.410.000	
Salary/Wage/Employee	0	0	0	0	0	
Rent a place	-	-		-	-	
Норе	The ditches need to be normalized Please provide seeds and fertilizer	Need normalization of the main ditch	Please provide seeds and fertilizer	The ditches need to be normalized	Please provide seeds and fertilizer	

Figure 3 Matrix of Interview Results for Flood-Affected Communities

Observation of Interviews with the Government in Flood Disaster Management in Lempake Village, North Samarinda

Informant I

The informant named Irfan, SH, M.Si 53 years old he served as the Head of the Rehabilitation and Reconstruction Division of the Samarinda City Regional Disaster Management Agency, and the informant served for approximately 20 years. The results of the interviews show that disasters are not only the responsibility of the government but also the responsibility of common affairs, therefore the Pentahelix concept that makes disaster management a joint affair involves the collaboration of the Government, Academics, Business (Business World), Community (Community), and Media. This collaboration aims to integrate the strengths and resources of these five elements to achieve the common goal of reducing risk and increasing resilience to disasters. Efforts have been made such as coordinating with relevant agencies, handling emergency evacuation of victims, setting up refugee tents, providing public kitchens, collecting data on damage and losses after the flood disaster.



Informant II

The informant named Haryanto, S.Sos, M.Si 57 years old he served as the Secretary of the North Samarinda Sub-district Head, Samarinda City and the informant served for approximately 30 years. The results of an interview with an informant named Haryanto, S.Sos, M.Si, 57 years old, Secretary of North Samarinda Sub-district, Samarinda City, in North Samarinda District is one of the districts most often affected by floods, both due to flooding and after heavy rains. Efforts that have been made such as coordinating with related agencies, collecting data on both casualties, agricultural rice fields, plantations, MSMEs, and other public facilities affected by floods.

Informant III

The informant named Musliadi, S.Sos, is 57 years old, he serves as the Village Head of Lempake North Samarinda, Samarinda City and the informant has served for approximately 30 years. The results of an interview with an informant named Musliadi, S.Sos, 57 years old, as the Village Head in Lempake Village, North Samarinda District, Samarinda City, in North Samarinda District, especially in Lempake Village, is one of the most frequently affected by floods, both due to flooding and after heavy rains. Efforts that have been made such as coordinating with related agencies, collecting data on both casualties, agricultural rice fields, plantations, MSMEs, and other public facilities affected by floods.

Informant IV

The informant named Singgih Budi Raharjo, A.Md, is 49 years old, he serves as Rt. 23 in Lempake Village, North Samarinda, Samarinda City and the informant has served for approximately 2 years. The results of an interview with an informant named Singgih, as the Chairman of RT.23 in Lempake Village. In this area, one of the areas affected by flooding, both due to the overflow of the Karang Mumus River and after heavy rains. Efforts that have been made such as coordinating with related agencies, collecting data on agricultural rice fields, livestock, MSMEs, and other public facilities affected by floods.

Criterion	Informant					
	Irfan, S.H.,M.Si	Haryanto, S.Sos, M.Si	Musliadi, S.Sos	Singgih Budi Raharjo		
Gender	Male	Male	Male	Male		
Age	56 Years Old	57 Years Old	57 Years Old	49 Years Old		
Education	S-2	S-2	S-1 Head of Lempake Village	D-3		
Position	Head of Rehabilitation and Reconstruction Division, Samarinda City	Secretary of North Samarinda Subdistrict	Lurah Lempake	Ketua RT 23 Kelurahan Lempake		
Main Duties and Functions	Mengkoordinasikan dan melaksanakan kebijakan di bidang penanggulangan bencana pada pasca bencana, mencakup penyusunan rencana, program, dan kegiatan, serta koordinasi pelaksanaan kebijakan, hubungan kerja dengan pihak terkait, dan pemantauan, evaluasi, serta pelaporan terkait rehabilitasi dan rekomendasi.	Assisting the sub-district head in carrying out government duties and administrative services at the sub- district level, including general affairs, personnel, finance, and planning. The sub-district secretary is also responsible for program development, financial management, and general affairs and personnel matters within the sub-district.	n the sub-district, as well as carrying out government affairs delegated by the Mayor/Regent. The sub-district head is also responsible for community services, maintaining peace and order, and empowering the community in their area.	Assisting in the smooth running of government tasks at the neighborhood association (RT) level, maintaining harmony among residents, and acting as a liaison between residents and the village/sub-district government. The RT chairperson also plays a role in encouraging community participation in development and maintaining security and order in the neighborhood.		
Efforts made	Setting up evacuation tents Compiling disaster documents Facilitating public kitchens Providing post-disaster assistance	- Conduct data collection - Coordinate with relevant technical agencies	Conduct data collection Coordinate with relevant technical agencies	- Collecting data - Working together		

Figure 4 Matrix of Interview Results for the Government

3.2 DISCUSSION

The research results show that the flooding in North Samarinda District had a significant economic impact on the community, both in the form of direct losses such as damage to assets and infrastructure, and indirect losses such as loss of income and disruption to economic activity. This finding aligns with research by Reluy et al. (2025), which stated that the economic impact of flooding in urban areas tends to be more severe due to the community's high dependence on service-based economic activities and daily trade. However, this study shows that some small businesses, such as food stalls and street vendors, were able to adapt and maintain operations during the flooding. This indicates the adaptive capacity of the local economy, not fully explained in previous studies.



This difference can be explained through community resilience theory, which emphasizes that community resilience to disasters is determined not only by physical conditions but also by social capital, skills, and local economic networks. Communities in Lempake and Giri Rejo Belimau Subdistricts demonstrated spontaneous adaptations, such as adjusting business operating hours, strengthening social networks to share resources, and using vehicles that still allow mobility despite flooding. This phenomenon differs from the findings of Sriyana (2025), who stated that floods generally drastically reduce economic productivity. The social context of North Samarinda, which still maintains high communal solidarity, is a key factor explaining this difference.

Meanwhile, for farmers and livestock breeders, the results of this study reinforce the findings of Balgah et al. (2023) that floods can cause significant economic losses due to crop failure and damage to productive land. However, this study adds value by showing that the impact of flooding on the agricultural sector stems not only from crop losses but also from damage to irrigation and drainage systems, which require high repair costs. This situation illustrates the link between physical damage to infrastructure and economic instability in rural communities. In the context of economic vulnerability theory, this suggests that communities with a high dependence on natural resources and public infrastructure are more vulnerable to disasters.

From an institutional perspective, the role of the local government and the Samarinda Regional Disaster Management Agency (BPBD) in flood management demonstrates good cross-sectoral coordination, particularly in providing emergency assistance and initial rehabilitation. However, its effectiveness remains limited because the response is more reactive than preventive. This aligns with Khaerah & Nur (2022) findings, which state that disaster management systems in many regions in Indonesia are still focused on post-disaster management, rather than strengthening community economic resilience before a disaster occurs. Therefore, an important implication of this research is the need for a paradigm shift from disaster response to disaster preparedness, integrated with regional economic development policies.

Practically, these findings suggest that post-flood economic recovery strategies should focus not only on material assistance but also on strengthening local economic capacity. The government can provide capital assistance to affected micro-enterprises, sustainably repair irrigation infrastructure, and develop early warning systems and public education regarding flood mitigation. This approach not only reduces the direct economic impact but also strengthens the community's socio-economic resilience to future disasters.

However, this study has several limitations. First, it focused only on a single flood period spanning three months, thus not fully representing the variation in impacts across different seasons. Second, the relatively small number of respondents limits the generalizability of the results to the North Samarinda region as a whole. Third, this study did not examine in-depth aspects of fiscal policy or formal economic support from the local government. Therefore, further research can be directed toward longitudinal studies that analyze changes in the community's economy before and after the flood over a longer period. Furthermore, further research should include quantitative analysis of the level of income loss and the effectiveness of government economic assistance programs. A multidisciplinary approach that combines social, economic, and public policy aspects will provide a more comprehensive understanding of the mechanisms of post-flood community economic recovery in urban areas.

4. CONCLUSION

Based on the results of observation and analysis, the flood disaster in Giri Rejo Belimau Village, Lempake Village, North Samarinda District had a significant impact on the community's economy. Material losses totaled IDR 874,155,000 due to infrastructure damage and disruption of community economic activities. Access to transportation leads to a decrease in income, while the cost of living increases and the psychological condition of the community is also affected. The main factors affecting the post-flood economy include damage to business



and irrigation facilities, loss of livelihoods in the agricultural and trade sectors, and increased social vulnerability due to gaps in access to public aid and services.

The government needs to strengthen cross-sector coordination with BNPB, TNI, Polri, and volunteers, repair damaged infrastructure, and provide capital assistance for impactful small business actors. In addition, emotional support for victims, the development of flood early warning systems, and disaster mitigation education are needed. The government is also advised to install Early Warning System tools, provide business assistance for farmers and traders, and increase public street lighting in flood-prone areas to improve public safety and comfort.

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