

Community Behavior in Responding to Seasonal Flooding in Jantur Village, Kutai Kartanegara Regency

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Abstract

Seasonal flooding is a recurring disaster that affects riverbank communities, particularly settlements located in lowland areas along major river and lake systems. Jantur Village, Muara Muntai District, Kutai Kartanegara Regency, is one of the areas that experiences seasonal flooding almost every year because of its geographical position near the Mahakam River and Lake Jempang. This condition has shaped how local communities prepare for, respond to, and recover from flood events. This study aims to analyze community behavior in responding to seasonal flooding in Jantur Village by focusing on three phases: before, during, and after flooding, while also considering demographic characteristics, livelihood dependence, and Banjar river culture. This research used a descriptive qualitative approach. Data were collected through in-depth interviews, field observations, and documentation. Respondents were selected using purposive sampling, involving 30 residents who had lived in the area for at least ten years and had direct experience with seasonal flooding. The data were analyzed using the Miles and Huberman model through data reduction, data display, and conclusion drawing, supported by source and technique triangulation. The results show that before flooding, residents carried out preparedness actions by monitoring rainfall and river water levels, securing valuables in higher places, preparing reusable wood to build temporary elevated floors, and preparing boats for mobility. During flooding, residents demonstrated emergency response behavior by evacuating vulnerable family members, using boats as transportation, protecting household assets, sharing mobility access through kinship and neighbor networks, and strengthening mutual assistance. After the flood receded, residents conducted recovery activities by cleaning houses and surroundings, repairing damaged facilities, dismantling and storing wooden platforms, and strengthening house structures as long-term adaptation. These findings indicate that the behavior of the Jantur community reflects social, economic, cultural, and physical adaptation patterns formed through repeated flood experience, local knowledge, Banjar river-based practices, and collective resilience.

Keywords: Community Behavior, Seasonal Flooding, Adaptation, Disaster Preparedness, Jantur Village

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1. Introduction

Flooding is one of the most frequent hydrometeorological disasters in Indonesia, particularly in areas located near river basins and lowland settlements. In East Kalimantan, the presence of large river systems, including the Mahakam River, increases the vulnerability of riverside communities to seasonal flooding. This condition is also experienced by Jantur Village, Muara Muntai District, Kutai Kartanegara Regency, where the geographical position of the settlement along the river and its relatively low topography make flooding a recurring environmental problem for local residents (Yuri, 2025).

Seasonal flooding is not only a physical phenomenon caused by excessive rainfall and river overflow, but also a social problem that affects the continuity of community life. Flood events can disrupt transportation, reduce access to economic activities, damage houses and public facilities, and create health risks due to contaminated water. In this context, flood management cannot be understood solely through infrastructure development, but must also consider the behavior, preparedness, and adaptation patterns of communities that repeatedly face flood hazards (Novarita et al., 2023).

Disaster management in Indonesia is generally divided into three main stages, namely pre-disaster, emergency response, and post-disaster recovery. These stages emphasize the importance of mitigation, preparedness, evacuation, rehabilitation, and reconstruction as integrated efforts to reduce disaster risks. However, in flood-prone rural areas, the effectiveness of disaster management is strongly influenced by the ability of local communities to recognize risks, make decisions, and develop adaptive actions based on their experiences (Syafa'atul et al., 2025).

Community behavior in disaster-prone areas is shaped by knowledge, experience, social values, environmental conditions, and socio-demographic characteristics. Age influences physical mobility and evacuation roles; education affects access to disaster information and the ability to interpret warnings; gender shapes domestic responsibilities and vulnerability; occupation determines the degree of exposure to river-based activities; and length of residence strengthens local knowledge about rainfall, river currents, and safe places. People who repeatedly experience floods tend to develop practical knowledge about signs of rising water levels, safe places to store valuables, evacuation priorities, and daily survival strategies during inundation (Susilawat et al., 2024).

Riverbank communities such as those in Jantur are therefore not homogeneous social units. Their adaptation is influenced by population dynamics, livelihood structure, household roles, and cultural familiarity with rivers. In communities dominated by fishing households, boats, wooden houses, elevated storage, and kinship-based assistance are not only daily-life resources but also important disaster-response assets. This socio-demographic perspective is important because it explains why flood response differs across age groups, education levels, occupations, and settlement locations.

Previous studies show that communities living in flood-prone areas often develop adaptation strategies through structural and non-structural actions. Structural adaptation may include raising house floors, building stilt houses, preparing wooden platforms, or modifying house foundations to reduce flood impacts. Non-structural adaptation may include monitoring rainfall, maintaining social cooperation, preparing boats, and

strengthening collective awareness among residents (Arisanty et al., 2022).

In several flood-affected communities, adaptation is also closely related to local wisdom and cultural habits. Residents who live near rivers may maintain boats as daily transportation, adjust household activities during floods, and use elevated spaces inside houses to protect goods and family members. Such behavior reflects how community adaptation is not only a temporary response, but also part of a long-term survival pattern shaped by repeated flood experiences (Nababan & Susanti, 2023).

Social solidarity is another important aspect in community responses to flooding. During flood events, residents often depend on mutual assistance to evacuate vulnerable family members, distribute basic needs, repair damaged facilities, and maintain social functions despite environmental disruption. This indicates that community resilience is not only built through individual preparedness, but also through collective capacity and social cooperation (Kurniawati & Kurniajati, 2025).

The case of Jantur Village shows that seasonal flooding has become a recurring event that influences the social, economic, cultural, and physical behavior of the community. Initial observations indicate that residents have developed various adaptive practices, such as monitoring rainfall and river water levels, securing valuables in higher places, using boats for mobility, preparing wooden platforms, and repairing or elevating parts of their houses after floods. These practices demonstrate that the community has formed a practical system of adaptation based on lived experience, environmental familiarity, and Banjar river culture (Saragih & Siregar, 2024; Sari et al., 2022).

Compared with previous studies that mostly discuss flood adaptation in general, this research offers three specific advantages. First, it analyzes community behavior as a sequential cycle before, during, and after seasonal flooding. Second, it links household-level adaptation with socio-demographic characteristics, fishing livelihoods, and Banjar cultural practices in a riverbank settlement. Third, it identifies both the strengths and limitations of informal adaptation, including the effectiveness of temporary wooden platforms, unequal access to boats, gender-representation limits, and the need for institutional support. This focus provides a more contextual contribution to community-based flood mitigation studies in riverine settlements. Community education is also emphasized by Karim (2024), Qurrotaini et al. (2022), and Sutiah et al. (2024).

Despite these adaptive behaviors, flood risks in Jantur Village remain significant because community responses are still largely based on survival strategies rather than systematic mitigation planning. Damage to houses, disruption of livelihoods, and dependence on emergency mobility indicate that local adaptation needs to be understood more deeply as part of disaster risk reduction. Therefore, research on community behavior is important to identify how residents prepare for floods, respond during floods, and recover after floods (Pratiwi et al., 2025).

Based on this background, this study aims to analyze community behavior in responding to seasonal flooding in Jantur Village, Muara Muntai District, Kutai Kartanegara Regency. The analysis is directed toward three main phases of behavior: preparedness before flooding, emergency response during flooding, and recovery or adaptation after flooding. In addition, the study examines how demographic characteristics, Banjar river culture, livelihood dependence, and local resilience influence these behaviors. By examining these aspects, the study is expected to provide empirical input for disaster geography, social geography, and community-based flood mitigation planning (Indrasari & Iwan, 2020).

2. Method

This research employed a descriptive qualitative approach to examine community behavior in responding to seasonal flooding in Jantur Village, Muara Muntai District, Kutai Kartanegara Regency. This approach was selected because the study focused on describing social phenomena, local experiences, cultural practices, and household adaptation strategies before, during, and after seasonal flooding. The qualitative design allowed the research to explore how residents interpret flood risks, make decisions, mobilize household resources, and recover after floodwaters recede. The behavioral perspective is consistent with Effendi et al. (2017) and Tamarin (2024).

The research was conducted in the Jantur riverbank area of Muara Muntai District, Kutai Kartanegara Regency, East Kalimantan, covering Jantur, South Jantur, and New Jantur settlements around Lake Jempang. These locations were selected because they are geographically connected to river and lake systems and experience seasonal flooding almost every year. The main coordinate of the research area is approximately 0°25'0.66" South Latitude and 116°17'23.42" East Longitude. The research focused on residents who had direct experience with seasonal floods and were considered capable of explaining community responses to recurring flood events (Direktorat Pengendalian Kerusakan Perairan Darat, 2021).

The data used in this study consisted of primary and secondary data. Primary data were obtained through in-depth interviews, field observations, and documentation. Interviews explored residents' knowledge, experiences, preparedness, emergency responses, recovery practices, demographic characteristics, and socio-economic conditions related to flood adaptation. Field observations identified settlement conditions, flood-prone zones, housing structures, temporary platforms, mobility patterns, and visible forms of adaptation. Documentation supported the findings through photographs, village records, population data, occupational data, and relevant literature on community behavior, disaster management, preparedness, and flood adaptation.

The sampling technique used in this study was purposive sampling. Respondents were selected based on the following criteria: residents of the Jantur riverbank area who had lived in the location for at least ten years, had direct experience with seasonal flooding, were directly involved in household or livelihood decisions during floods, and were willing to provide detailed information about preparedness, response, and recovery behavior. The study involved 30 respondents, with 10 respondents from Jantur, 10 from South Jantur, and 10 from New Jantur. This number was considered adequate for qualitative description because the interviews reached recurring themes related to preparedness, mobility, asset protection, mutual assistance, and post-flood recovery. The respondents were all male because the field interviews mainly reached fishermen and household heads; therefore, the findings strongly represent livelihood and mobility perspectives, while women's domestic adaptation experiences are acknowledged as an important limitation and a recommendation for future research.

Data collection was carried out using interview guidelines, observation sheets, and documentation instruments. The variables and indicators were adapted from disaster management stages, community-based flood mitigation, and local adaptation studies, including preparedness, emergency response, recovery, settlement adaptation, livelihood adjustment, and social solidarity (Adiyoso, 2018; Arisanty et al., 2022; Indrasari & Iwan, 2020; Sari et al., 2022). The interview guideline was arranged based on the main focus of the study: community knowledge and experience of flooding, behavior before flooding, behavior during flooding, behavior after flooding, demographic background, and socio-economic conditions related to flood adaptation. Observation recorded environmental conditions, housing adaptation, transportation patterns, and community activities during

flood-prone conditions.

Table 1. Research Data Collection Techniques

No.	Data Collection Technique	Research Focus	Data Source
1	In-depth interview	Community knowledge, experience, preparedness, emergency response, and recovery behavior	Residents of Jantur, South Jantur, and New Jantur settlements
2	Field observation	Settlement conditions, housing adaptation, mobility, and environmental conditions	Research location and flood-prone settlement areas
3	Documentation	Supporting visual and administrative data	Photographs, village records, population and occupational data, and relevant literature

The data were analyzed using the Miles and Huberman interactive model, which consists of data reduction, data display, and conclusion drawing/verification (Miles et al., 2014). Data reduction was carried out by selecting and organizing information from interviews, observations, and documentation according to the phases of flood behavior and the socio-demographic factors influencing adaptation. Data display was conducted by presenting findings in descriptive narratives and tables based on behavior before, during, and after flooding. Conclusion drawing was conducted by interpreting patterns of social, economic, cultural, and physical adaptation developed by residents in response to recurring seasonal floods. To ensure credibility, this study used triangulation by comparing interview statements, field observations, documentation, and relevant literature.

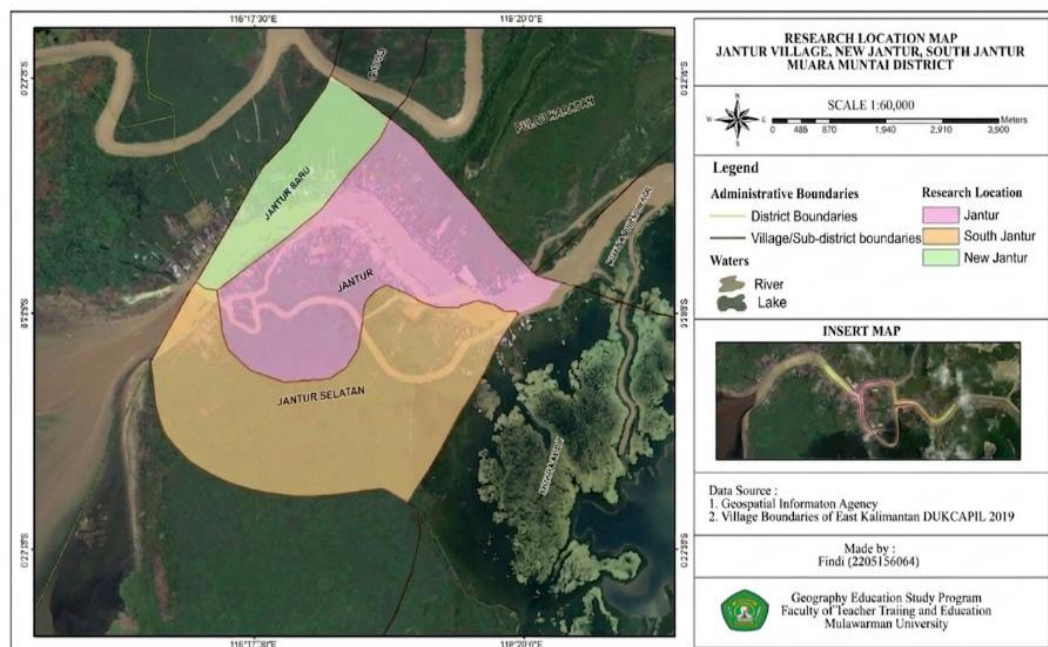


Figure 1. Research location

3. Result and Discussion

A. Result

1. Description of Respondents

The respondents in this study were residents of the Jantur riverbank area who had direct experience in facing seasonal flooding. Respondents were selected purposively because they met the criteria of long-term residence, direct exposure to floods, and involvement in household or livelihood decisions during flood events. The distribution of respondents across Jantur, South Jantur, and New Jantur was designed to capture variation within the riverbank settlement area while maintaining balanced representation among the three locations.

Table 2. Characteristics and Distribution of Respondents in the Jantur Riverbank Area

Characteristic	Category	Frequency	Percentage
Age	25–29 years	1	3%
	30–39 years	2	7%
	40–49 years	10	33%
	>50 years	16	52%
Gender	Male	17	56%
	Female	13	42%
Education	No formal education	5	17%
	Elementary school	16	53%
	Junior high school	1	3%
	Senior high school/equivalent	8	27%
	Diploma/Bachelor	0	0%
Ethnicity	Banjar	30	100%
Occupation	Fisherman	17	56%
	Fisherman and employee	13	42%
Settlement	Jantur	10	33%
Settlement	South Jantur	10	33%
Settlement	New Jantur	10	33%
Length of residence	≥ 10 years	30	100%

The demographic profile shows that most respondents were in the productive age group and worked as fishermen. This condition is important because productive-age respondents were generally involved in physically demanding activities during floods, such as lifting goods, installing wooden platforms, moving boats, and assisting neighbors. The dominance of fishermen also explains the community's strong dependence on rivers and boats. For fishermen, flooding affects not only housing conditions but also access to fishing areas, working schedules, income stability, and mobility routes. Boats therefore function as both livelihood assets and emergency transportation tools (Sari et al., 2022).

The finding that all respondents were Banjar indicates the importance of river culture in explaining adaptation behavior. Banjar river-based practices are reflected in the use of boats, familiarity with seasonal water fluctuations, settlement patterns near water, elevated household spaces, and mutual assistance among neighbors. Thus, adaptation in Jantur is

not only a technical response to flooding but also a culturally embedded way of living with water.

Education level also influenced preparedness behavior. Respondents with elementary or no formal education tended to rely more on experiential knowledge, observation of rainfall, river-water changes, and advice from older residents. Respondents with higher education were more likely to describe preparedness in terms of risk reduction, document protection, electricity safety, and coordination with external assistance. Although all respondents were male, this does not mean that women were not involved in household adaptation. Rather, the respondent profile limits the interpretation of this study mainly to livelihood, mobility, and household-head perspectives. Women's domestic experiences, caregiving roles, and flood vulnerability need to be examined in further research.

2. Community Knowledge and Experience of Seasonal Flooding

The findings show that community knowledge about seasonal flooding in Jantur was formed through repeated experience and long-term residence. Residents recognized early signs of flooding by observing rainfall intensity, river water levels, water color, and water flow from upstream areas. This knowledge was not obtained through formal disaster education alone, but mainly through everyday interaction with the river-lake environment. Age and length of residence strengthened this knowledge because older residents and long-term inhabitants were more familiar with seasonal water patterns and informal warning signs (Susilawat et al., 2024).

Community experience also influenced how residents interpreted floods. Flooding was not viewed merely as an unexpected disaster, but as a recurring seasonal event that required preparation. This interpretation encouraged adaptive habits such as preparing reusable wood, elevating household items, monitoring water levels, preparing boats, and organizing mutual assistance. In this sense, community behavior reflected local knowledge that had been internalized through continuous exposure to flood events and strengthened by occupation, culture, and daily dependence on water-based spaces (Nababan & Susanti, 2023; Sari et al., 2022).

3. Community Behavior Before Seasonal Flooding

Before flooding occurred, residents carried out several preparedness actions. The most common behavior was preparing reusable wood to build temporary elevated floors or platforms inside houses. These platforms were used to protect furniture, household appliances, documents, work tools, and other valuable items from floodwater. Residents obtained wood through stored materials from previous floods, purchases from nearby areas, borrowing from neighbors, or collecting available wood around the settlement. Because wood collection can increase pressure on the surrounding environment, the practice of storing and reusing boards after floods became an important economic and ecological adaptation.

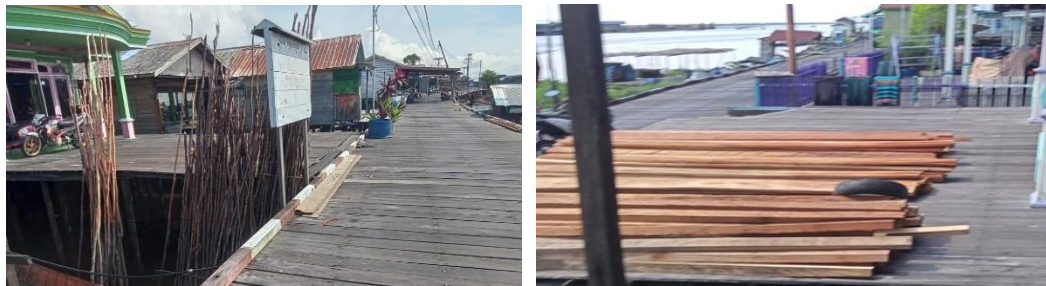


Figure 2. Wood Prepared by Residents to Build Temporary Elevated Floors During Flooding
Source: Personal documentation, 2025.

The preparation of wooden platforms indicates that community preparedness was not spontaneous, but had become a repeated and culturally embedded practice. Based on interviews and field observations, residents consistently explained that these platforms helped protect household goods, furniture, electronic appliances, important documents, and work equipment from floodwater while providing temporary living space during inundation. Residents also reported that the platforms enabled daily household activities to continue when floodwater remained below the platform level. However, their effectiveness declined during deeper or prolonged flooding, as water could exceed the platform height and some households lacked sufficient wood or labor to construct them. These findings indicate that wooden platforms function as an effective household-level adaptation measure for reducing the impacts of seasonal flooding, although they remain a practical coping strategy rather than a complete solution to flood risk (Arisanty et al., 2022).

The socio-economic cost of this adaptation includes purchasing wood, transporting materials, storing boards, and allocating household labor for installation and dismantling. Households with more economic resources could prepare stronger platforms, while poorer households tended to borrow materials or depend on relatives and neighbors. This difference shows that even simple adaptation strategies contain unequal capacities among households.

In addition to preparing wood, residents also built small bridges or connecting paths inside and around houses. These structures helped family members move safely when the lower parts of houses were inundated. Residents also secured important documents, electronics, furniture, and work equipment in higher places. This behavior shows that preparedness was directed not only at protecting life, but also at minimizing economic losses and maintaining household functions during floods (Nurhasanah et al., 2019).

Another important behavior before flooding was monitoring rainfall and river conditions. Residents used their experience to read environmental signs, especially prolonged rainfall and rising water levels. When these signs appeared, the community began to prepare for possible inundation. This behavior shows that local environmental observation functioned as an informal early warning system for the community (Indrasari & Iwan, 2020).

Table 3. Community Behavior Before Seasonal Flooding

No.	Preparedness Behavior	Description
1	Monitoring rainfall and river water levels	Residents observed rainfall intensity and rising water levels as early flood indicators.
2	Preparing wood	Wood was prepared to build temporary elevated floors inside houses.
3	Building elevated floors or platforms	Platforms were used to protect goods and provide temporary living space, although their effectiveness depended on flood depth and duration.
4	Securing valuables	Documents, electronics, furniture, and work tools were moved to higher places.
5	Preparing boats and mobility tools	Boats were prepared as the main means of transportation during flooding.
6	Turning off electricity	Electricity was turned off to prevent electrical hazards during inundation.
7	Reusing stored wood	Previously used boards were stored and reused to reduce household expenses and minimize repeated timber extraction.

4. *Community Behavior During Seasonal Flooding*

During floods, community behavior shifted from preparedness to emergency response. Residents prioritized the safety of family members, especially children, the elderly, and other vulnerable groups. Some families moved vulnerable members to safer houses or relatives' homes. Boats became essential because roads and footpaths were often inundated. However, access to boats was not equal among households; families with boats had greater mobility, while poorer households or those without working boats depended on relatives, neighbors, or shared transportation.

The use of boats during floods shows that the community had adapted its mobility system to local hydrological conditions. Boats were not only used for fishing activities, but also for accessing basic needs, visiting relatives, evacuating family members, transporting goods, and maintaining economic activities. This indicates that livelihood assets functioned as disaster response tools in Jantur. At the same time, unequal boat ownership reveals a potential social vulnerability because mobility during floods depends on access to assets and the strength of kinship or neighbor networks (Saragih & Siregar, 2024; Sari et al., 2022).

Social solidarity was also visible during flood events. Residents helped each other move goods, evacuate family members, and provide support to neighbors who were more severely affected. This collective behavior strengthened community resilience because disaster response did not depend only on individual households, but also on social cooperation among residents (Kurniawati & Kurniajati, 2025).

Flooding also disrupted daily activities. Some residents temporarily stopped working, children experienced difficulties in learning due to power outages, and household expenses increased because of emergency needs. However, the community continued to maintain daily life by adjusting movement patterns, using emergency lighting, limiting expenses, and relying on social networks. This shows that flood response in Jantur Village was shaped by both emergency action and economic adjustment (Mauleky & Lasaiba, 2025).

Table 4. Community Behavior During Seasonal Flooding

No.	Emergency Response Behavior	Description
1	Evacuating vulnerable family members	Children and elderly family members were moved to safer locations.
2	Using boats for mobility	Boats were used to move people, goods, and basic needs; households without boats relied on relatives and neighbors.
3	Protecting household assets	Goods were kept on elevated platforms inside houses.
4	Using emergency lighting	Residents used lamps or generators when electricity was turned off.
5	Helping neighbors	Residents assisted each other in evacuation and moving goods.
6	Adjusting daily activities	Work, school, and household activities were adjusted to flood conditions.
7	Sharing mobility access	Residents shared or borrowed boats to reduce mobility inequality during inundation.

5. *Community Behavior After Seasonal Flooding*

After the floodwater receded, residents began recovery activities by dismantling temporary

platforms and returning household items to their original places. They cleaned mud, washed household equipment, dried damaged items, and reorganized the interior of their houses. The thesis findings also show that the wood used for temporary platforms was not discarded, but cleaned and stored for future flood events .

This post-flood behavior indicates that recovery was carried out with an economic adaptation strategy. Reusing wood and other materials helped reduce household expenses because residents understood that flooding would likely occur again. This practice shows that recovery in Jantur Village was not limited to cleaning and repairing, but also included preparation for future flood cycles (Pratiwi et al., 2025).

Some residents also modified house structures after major flood events. The modifications included strengthening wooden foundations and posts, replacing damaged floorboards, raising parts of the interior floor, adding temporary or semi-permanent elevated storage areas, and improving connecting paths between rooms or neighboring houses. The materials used were generally local timber, reused boards, nails, and simple household construction tools. These modifications were considered effective for reducing asset damage and speeding up recovery during moderate recurring floods, although they were less effective when inundation was unusually deep or prolonged (Nada & Saputra, 2025).

Post-flood adaptation therefore moved beyond cleaning activities. By storing boards, repairing floors, and reinforcing wooden structures, households transformed recovery into preparation for the next flood cycle. This pattern shows incremental adaptation: residents did not replace the whole settlement system, but gradually adjusted house design, household storage, and mobility practices to repeated seasonal flooding.

Post-flood recovery also involved social and economic adjustments. Residents cleaned their houses and surroundings, repaired damaged facilities, reopened small businesses, returned to fishing activities, and managed additional expenses caused by flood impacts. Assistance from the government, such as basic food support, was also mentioned by respondents, but community recovery still relied heavily on household initiative and mutual assistance .

Table 5. Community Behavior After Seasonal Flooding

No.	Recovery and Adaptation Behavior	Description
1	Cleaning houses and yards	Residents removed mud, washed floors, and cleaned household areas.
2	Washing and drying equipment	Household and work equipment were cleaned and dried.
3	Dismantling temporary platforms	Elevated floors were removed after water receded.
4	Storing wood for future floods	Wood was cleaned and saved for reuse in the next flood period.
5	Repairing house structures	Floors, wooden posts, foundations, connecting paths, and elevated storage areas were repaired or strengthened.
6	Restoring economic activities	Residents gradually returned to fishing, trading, and daily work.
7	Evaluating adaptation effectiveness	Residents assessed which platforms, boards, and house modifications were useful for future floods.

B. Discussion

Viewed through environmental adaptation theory, the behavior of Jantur residents represents an adjustment process to a recurring environmental pressure rather than a one-time emergency response. Seasonal floods have become part of the local risk environment, so residents adapt by reorganizing household space, storing reusable materials, modifying houses, changing mobility patterns, and protecting livelihood tools. These actions show both structural adaptation, such as wooden platforms and reinforced floors, and non-structural adaptation, such as rainfall observation, kinship-based evacuation, and mutual assistance (Arisanty et al., 2022; Indrasari & Iwan, 2020).

From a community resilience perspective, the strength of Jantur residents lies in their local knowledge, repeated flood experience, Banjar river culture, and collective social networks. Mutual assistance reduces the burden on individual households, especially for those without sufficient wood, strong platforms, or private boats. However, this resilience remains informal and uneven because households differ in income, labor availability, boat ownership, education, and access to external support. Therefore, household adaptation needs to be complemented by institutional risk reduction, clearer early warning mechanisms, safer evacuation facilities, and post-flood recovery support (Firmansyah et al., 2024; Kurniawati & Kurniajati, 2025). The role of local disaster management agencies is also highlighted by Nurillah et al. (2022) and Setiawan et al. (2024), while community adaptation aligns with Happy (2022), Minza et al. (2022), and Putra (2016).

From the perspective of behavioral geography, the findings show that flood behavior is shaped by the interaction between place, perception, experience, and daily routines. Residents do not respond to floods only because of official warnings; they act based on how they read river conditions, remember previous floods, assess household resources, and coordinate with neighbors. Age influences evacuation roles, education affects interpretation of risk information, fishing livelihoods create dependence on boats and water routes, and Banjar cultural familiarity with rivers normalizes certain adaptation practices. Thus, flood mitigation in riverbank settlements should not only provide infrastructure but also strengthen local knowledge, reduce inequality in mobility access, and integrate culturally embedded practices into community-based disaster planning.

The main limitation of this study is the respondent profile, which consisted only of male respondents, mostly fishermen. As a result, the findings provide a strong explanation of livelihood, mobility, and household-head perspectives, but they do not fully represent women's caregiving roles, domestic recovery work, and specific vulnerabilities during floods. Another limitation is that flood depth, inundation duration, and household adaptation costs were described qualitatively rather than measured quantitatively. These limitations should be addressed in future studies by including female respondents, youth and elderly groups, hydrological measurements, and household economic-cost analysis.

4. Conclusion

This study concludes that the Jantur community responds to seasonal flooding through an adaptive cycle consisting of preparedness, emergency response, and recovery. Preparedness is reflected in monitoring rainfall and river-water levels, preparing reusable wood, elevating household goods, and preparing boats. Emergency response is reflected in protecting vulnerable family members, using and sharing boats for mobility, safeguarding assets, and relying on mutual assistance. Recovery is reflected in cleaning houses, repairing facilities, storing wood for reuse, and modifying wooden house structures. Scientifically, this study contributes to disaster geography by showing that flood behavior in riverbank settlements is shaped by the interaction of local knowledge, socio-demographic characteristics, fishing livelihoods, Banjar river culture, and community resilience. For

policy, local government and disaster-management institutions should strengthen community-based early warning systems, provide safe shared evacuation and boat-access arrangements, support environmentally responsible building-material management, and include women and vulnerable groups in flood mitigation planning. Future research should measure flood depth, inundation duration, household adaptation costs, and gendered adaptation experiences to evaluate the effectiveness of local strategies more precisely.

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