

# ANALYSIS OF COMMUNITY AND GOVERNMENT READINESS IN FLOOD DISASTER MITIGATION IN JAWIK JEKULO KUDUS

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#### Abstract:

This study aims to analyze the readiness of the community and government in flood disaster mitigation in Dukuh Jawik, Jekulo District, Kudus Regency. With the increasing intensity of rain due to climate change, the frequency of floods has also increased, causing significant impacts on people's lives, including access to education and health. The research method used was a qualitative survey, involving interviews with the community, village government, and literature studies to deepen understanding of flood patterns and their impacts. The results of the study indicate that synergy between the community and the village government is very important in disaster management. The community needs to increase awareness of flood risks and be involved in mitigation programs. On the other hand, the village government must provide adequate infrastructure and evaluate the effectiveness of existing structures, such as embankments and drainage channels. This study recommends the need for education and training for the community regarding disaster management and strengthening communication between the government and residents. With a collaborative approach, Dukuh Jawik can increase resilience to flood disasters and create a safer and more prosperous environment for all its residents.

Keywords: Flood, Jawik, Kudus, Disaster Mitigation

## **INTRODUCTION**

Climate change is a long-term change in weather patterns that has an average that has determined the local, regional and global climate (Taryana *et al.*, 2022; Wirasatriya *et al.*, 2023; Tathmainnul *et al.*, 2024). Climate change has an impact on rainfall and the frequency of disasters in Indonesia, with this climate change the intensity of rain increases so that adaptive planning is needed to changing conditions, one of the disasters that occur in climate change is flooding. Flooding is an event where the increasing volume of water caused by high rainfall (Rakuasa *et al.*, 2022; Yoani *et al.*, 2023).

Disasters are events that greatly disrupt social life, be it natural disasters, non-natural disasters, or social disasters whose causes are natural factors, non-natural factors, and human factors themselves which can result in casualties, environmental damage, property losses, and also have an impact on human psychology (Suryoputro *et al.*, 2023; Retongga *et al.*, 2024). Natural disasters are disasters caused by natural events themselves, such as earthquakes, tsunamis, volcanic eruptions, drought, hurricanes, landslides, and floods (Eka Wulan Safriani *et al.*, 2024; Alfaris & Nur, 2025).

Flooding is a certain disaster when the rainy season arrives. Flooding in a village can be caused by various interrelated factors, one of which is high





rainfall, especially in a short time, which can cause river water to overflow(Ismail et al., 2023; Samiri et al., 2024). In addition, the disposal of garbage that can obstruct river waterways, as well as the construction of infrastructure that does not pay attention to good drainage can also cause obstacles to the flow of river water. Flooding is a problem that requires special handling until now, both from the government and from the village community itself. flooding can occur due to high rainfall, broken embankments or dams, obstruction of river flow (Sunarya & Sutoyo, 2023; Setiawan et al., 2024). Flooding is one of the natural disasters that has a significant impact on people's lives, especially in the Jawik hamlet community located in Jekulo District, Kudus Regency.

Developing an effective mitigation strategy requires in-depth research and analysis to understand the pattern of flooding in Dukuh Jawik. Historical data on the frequency and intensity of flooding, as well as its impact on the community and economy (Berliani & Widowati, 2023; Alfaris, 2024). Flooding is not only physical, but can also affect the daily lives of the people of Dukuh Jawik, namely the difficulty of accessing education, health, and livelihoods. By considering all these factors, the analysis of flood disaster mitigation in Dukuh Jawik is expected to produce comprehensive and sustainable recommendations. The ultimate goal is to create an environment that is safer and more resilient to disasters, so that people can live comfortably and productively. Through planned and integrated mitigation efforts, Dukuh Jawik can reduce flood risk and improve the quality of life of its people. Therefore, this research aims to analyze the extent of flood disaster management in Dukuh Jawik. This research will explain how the role of the community and village government in handling flood disasters in Dukuh Jawik, Jekulo Subdistrict, Kudus Regency.

#### RESEARCH METHOD

This study uses a survey method with a qualitative approach, which aims to understand the relationship between sociological and psychological variables in the context of a small population (Costa, 2023; Alfaris, 2024). The researcher referred to Edward III's theory of public order implementation, then developed and tested relevant problem formulations. Data was collected through interviews with informants, such as the Head of Pladen Village, the community of Dukuh Jawik, and Lembaga Swadaya Masyarakat (LSM) involved in environmental and flood management. Information from informants was considered important because they had direct experience related to the research topic.

In addition to interviews, researchers also used the library research method to support the analysis, by reviewing materials such as books, journals, and other relevant documents. Data collection techniques were conducted indirectly (Secondary Data), then analyzed descriptively to provide a comprehensive picture of the issues studied (Thunberg & Arnell, 2022; Bijker *et al.*, 2024).

#### FINDINGS AND DISCUSSION

Based on the results of interviews with Mr. Firdaus devi Mulyono as one of the residents of Dukuh Jawik and Mr. Wardono as the village government in Dukuh Jawik, it can be concluded that in dealing with flood disasters in Dukuh Jawik, the community and the village government play a very important role, especially the challenges often faced are related to the broken embankment on the river during heavy rains. Although various efforts have been made to raise and strengthen the embankment, the fact that the river water still overflows and floods the houses of local residents and even the houses of neighboring villages shows that this problem is more complex and requires a more holistic approach. In this context, the community and village government must work together to effectively address the problem.

The first thing to do is to understand that flooding in Dukuh Jawik is not only caused by heavy rainfall, but also by other factors such as improper land management, climate change, and lack of adequate infrastructure. The people of Dukuh Jawik, who are the most affected by this disaster, need to have a high awareness of the risks they face. Flood education should be a priority, with the community taught how to recognize the early signs of flooding, as well as the steps to take to protect themselves and their property. This training can be done in collaboration with the village government and relevant institutions, so that the community has sufficient knowledge to deal with emergency situations.

On the other hand, the village government has the responsibility to provide adequate infrastructure and do good planning in the face of disasters (Robi, 2022; Rahim *et al.*, 2023). Even if the embankment has been raised and strengthened, the village government needs to conduct a thorough evaluation of the effectiveness of the structure. This includes analyzing river flow patterns and the impact of climate change that may affect the capacity of the embankment. The village government should also consider conducting river normalization, which includes dredging and repairing waterways to better convey water. This way, the village government is not only focusing on physical improvements, but also on better management of water resources.

Community participation in planning and decision-making processes is also very important. Communities involved in disaster risk reduction forums can provide valuable input on local conditions and potential risks that may not be visible to the government. By involving the community, the village government can design programs that are more targeted and in line with community needs. In addition, community involvement in gotong royong activities to improve infrastructure, such as drainage channels and embankments, can increase a sense of ownership and responsibility for their environment (Marcela & Usiono, 2023; Hapsari & Rahman, 2024; Amaliyah *et al.*, 2024). However, the challenges faced in flood disaster management in Dukuh Jawik cannot be ignored. One of the main challenges is the community's lack of awareness and understanding of disaster risk.

Many residents may not take the potential for flooding seriously, thus not participating in existing mitigation programs. Therefore, the village government needs to conduct more intensive and sustainable socialization on the importance of disaster mitigation (Suryadi, 2020; Irnawati *et al.*, 2023). In addition, limited resources, both financial and human, are also an obstacle in the implementation of disaster management programs. Village governments should seek additional resources, either through partnerships with the private sector or donor agencies, to support these efforts.

Climate change is also a major challenge that must be faced. Increased frequency and intensity of rainfall can increase the risk of flooding, requiring adjustments in disaster management strategies. Village governments and communities need to adapt to these changes through more innovative and sustainable approaches. For example, the application of environmentally friendly technologies in water resource management and infrastructure development can help reduce the impact of flooding. In addition, it is important to establish good communication networks between village governments, communities and other institutions. Good coordination will ensure that information regarding disaster management can be conveyed quickly and appropriately. In emergency situations, effective communication can save lives and reduce losses. Therefore, village governments should ensure that existing communication channels are accessible to all community members, including those in remote areas.

After a disaster occurs, the recovery process is also an important part of disaster management. Communities should be involved in rehabilitating damaged infrastructure and providing psychosocial support to victims. Village governments need to provide the necessary resources to support these recovery efforts, including logistical assistance and economic support for those who lost their livelihoods due to flooding (Permana, 2023; Hotimah *et al.*, 2024). By involving the community in the recovery process, a sense of solidarity and care between residents can be enhanced, which in turn will strengthen community resilience.

In the context of Dukuh Jawik, the synergy between the community and the village government in dealing with floods is very important to create a more resilient system. Communities that are active and involved in every stage of disaster management will be better prepared to face existing risks. Meanwhile, village governments that are responsive and proactive in planning and implementing disaster management programs will be able to reduce the negative impacts of flooding. Thus, a good collaboration between the two parties will create a safer and more prosperous environment for all residents of Dukuh Jawik.

Overall, flood disaster management in Dukuh Jawik requires a comprehensive and collaborative approach. The community and village government must work together to improve post-disaster preparedness, mitigation and recovery. By understanding the challenges and implementing appropriate strategies, Dukuh Jawik can increase its flood resilience and create a stronger and more competitive community. Through joint efforts, it is hoped that frequent floods can minimize their impact, and people can live more safely

and comfortably in their neighborhoods.

In the face of these complex challenges, it is important for all parties to remain optimistic and committed to disaster management efforts. By raising awareness, strengthening infrastructure and building good communication networks, Dukuh Jawik can serve as an example for other areas in dealing with flood disasters. Synergy between the community and village government will not only reduce disaster risk, but will also strengthen social ties and improve the overall quality of life. Thus, a safer and more prosperous future for Dukuh Jawik is not impossible to achieve.

### **CONCLUSION**

In dealing with flood disasters in Dukuh Jawik, it can be concluded that synergy between the community and the village government is essential to create effective resilience. The community must play an active role in improving preparedness and mitigation, while the village government needs to provide adequate infrastructure and implement good planning. Although challenges such as lack of awareness and limited resources exist, strong collaboration between both parties can help overcome these issues. With good education, community participation, and effective coordination, Dukuh Jawik can reduce the negative impacts of flooding and build a safer and more prosperous community. Through joint efforts, a better and more resilient future in the face of disasters can be achieved.

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