

SOCIALIZATION OF HANDLING RUMINANT LIVESTOCK AFTER FLASH FLOODS IN SOUTHEAST ACEH IN 2025

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ABSTRACT

Southeast Aceh Regency is one of the regencies in Aceh Province, characterized by mountainous terrain and many rivers, which often leads to disasters such as floods and landslides, resulting in flash floods in several areas of Southeast Aceh Regency. Socialization activities related to livestock management during floods are considered necessary to raise awareness among farmers and encourage cooperation in handling livestock during floods. This community service activity is carried out in three general stages: the preparation stage, the discussion stage, and the site survey stage. The discussion methods used are socialization and Focus Group Discussion (FGD) to understand the community's responses and management in flood-prone areas. The implementation of these activities contributes to increasing the knowledge and understanding of the community regarding river flood management. Armed with the knowledge and understanding provided, it is expected that the community's behavior patterns regarding the management of river border areas, waste, and so on can be applied and have a positive impact on improving river management by the community.

Keywords: Flood, Livestock, Banjir, Farmer, Southeast Aceh.

INTRODUCTION

Southeast Aceh Regency is a regency that consists of mountainous areas and river flows (Kartono and Husaini, 2023). Southeast Aceh Regency is known as an area that is often affected by floods, so handling livestock affected by floods is necessary. On November 26, 2025, flash floods occurred in several areas in Southeast Aceh Regency, such as in Ketambe District, Darul Hasanah District, Badar District, Babussalam District, Babel District, Babul Rahmah District, Lawe Alas District, and Tanoh Alas District, resulting in floods and landslides, and several livestock also became casualties (Figure 1). Flood disasters cannot be seen from just one perspective, such as a phenomenon that occurs every time it rains, or merely from the decline/change in land function, but can be viewed more comprehensively as a complex phenomenon of macro climate change that also has downstream triggers on a micro scale (changes in land function, deforestation, decline in land carrying capacity, lifestyle patterns, and population growth) due to increasing needs, which exert extreme impacts on water resources, such as reduced river base flow and increased flood discharge accompanied by high sediment transport rates (Regulation of the Republic of Indonesia, 2019). The main factor in the decline of land function is due to the pressure from agricultural activities on the land, as well as unsustainable and environmentally unfriendly agricultural practices, along with water management systems (Marical et al., 2021).



Figure 1. Flood conditions in several areas of Southeast Aceh Regency in 2025

LITERATURE REVIEWES

The most concerning issue is the process of converting forest land into agricultural and plantation areas. In addition, this increases the level of land criticality and pressure on forest areas. Further facts show that this leads to an increased rate of erosion, resulting in sedimentation along the River Basin (DAS) areas (Cahyardi & Bambang, 2020). This sedimentation has reduced the water-holding capacity of the DAS. When it rains, the water overflows and causes flooding.

The shallowing has reduced the water storage capacity in the watershed. When it rains, water overflows and causes flooding. This is further exacerbated by the behavior of communities who use riverbanks/floodplains as residential areas, so during a flood, the capacity of the river and floodplains is hindered by these conditions. This has been regulated by the Government Regulation of the Republic of Indonesia Number 38 of 2011 concerning Rivers (Permen RI, 2011). This then becomes a trigger and increases the scale of systemic impacts from climate change phenomena. Climate change makes rainfall unpredictable in terms of timing and quantity, especially when looking at trends and future rainfall predictions, indicating that the number of rainy days will decrease (leading to prolonged droughts) while the amount of rainfall increases (causing floods).

Another factor is shown by the increasing demand that results in greater pressure of agricultural activities on land, and agricultural activities that are unsustainable and not environmentally friendly. This raises concerns about the process of land conversion from forests into agricultural and plantation areas (Marical et al., 2021)

METHOD

The activities were carried out in Southeast Aceh Regency. The reason for this selection is based on the fact that the area has a quite large livestock population and often experiences flooding during periods of heavy rain. This Community Service activity was conducted in two general stages, namely the discussion stage and the site survey stage. The discussion method used was river school socialization and FGD to understand the community's response and handling of flood-prone areas. The preparation and implementation procedures are as follows:

1. Preparation stage:
 The PKM team held a coordination meeting to determine the theme, location, and partner organizations; coordinated with partners to obtain an overview of the issues occurring in the field; and collected secondary data related to flooding in the target areas.
2. Implementation stage:
 The PKM team conducted presentations on livestock management during flooding disasters and facilitated FGD (Focus Group Discussions) on community response and handling in flood-prone areas.
3. Stages of field review activities:
 The PKM team directly inspects flood-prone areas in the field to understand the problems comprehensively by having direct discussions with the local community affected by the flooding. Communication and cooperation between the proposing team and partners during the preparation stage support the success of the implementation of these activities. This can also be seen from the enthusiasm in conveying the problems faced by the local community during the FGD, which provides information for the community service proposal team from Universitas Gunung Leuser in identifying issues and presenting the necessary solutions. The follow-up program is expected to serve as an initial step in the care and management of livestock during floods for the community of Southeast Aceh Regency, and it is hoped to motivate the surrounding community to be more concerned about the river environment and livestock that are near the river and vulnerable to flooding.

Livestock affected by the flood disaster were also given locally made feed, such as feed processed from corn cob ash, which has previously been researched by lecturers in the Faculty of Agriculture, Animal Husbandry Study Program, at Gunung Leuser University (Hadirin et al., 2025)

RESULTS AND DISCUSSION

Knowledge presented to the community regarding facts in the field related to the causes of flooding, the losses caused by flood disasters, and the handling of livestock during floods using conservation methods before such flood disasters occur. In this context, the community, government, private sector, and also academics understand and care about the conservation actions taken. Based on the results of discussions in the FGD, the participants' enthusiasm in receiving knowledge about these issues can be seen, as well as their activeness in explaining flood cases in the residential areas around them, which also serves as a learning material for us as the UGL PKM team.

The participation of the surrounding community in livestock rescue actions and conservation activities such as livestock rescue techniques (Figure 2), land rehabilitation, and the collection and harvesting of seeds in this natural forest is considered to have the greatest impact, given that the community has a very close relationship with the environment. This is carried out through balancing the upstream and downstream areas of the river. Efforts to limit the negative impacts of illegal logging are made. The role of the community and local groups as service recipients is highly expected to contribute to the operation and maintenance, as well as to conserve existing facilities and infrastructure, and to protect livestock from the effects of flooding.



Figure 2. activities for loading livestock onto transport/service vehicles

Flood mitigation activities/emergency actions during flooding, for example: closing levee leaks and repairing breached levees. Other activities include participating during flood evacuation, starting from a) the notification process; b) the gathering process covering (location, direction of movement, population numbers, accessibility patterns, and flood arrival timing); c) the relocation process covering (routes, means of transportation, and timing); up to d) the evacuation of livestock and people to evacuation sites covering (space requirements, clean water, food/feed, and medicines). Next, it is necessary to carry out mitigation and recovery efforts after a flood disaster. In this case, fellow community members also play an important role in helping the areas around them. To implement recovery and mitigation on a larger scale, coordination is needed between the local community and the government or private sector in terms of funding, and academics should be involved in conducting field analysis before the flood disaster recovery and mitigation process takes place.

CONCLUSION

The implementation of socialization activities on livestock handling during floods contributes to increasing the knowledge and understanding of the community regarding how to manage livestock during floods. Equipped with the knowledge and understanding provided by the PKM team, it is expected that the community's behavioral patterns regarding livestock handling during floods, river management, waste management, etc., can be applied and yield a positive impact on the improvement of public knowledge, aiming for the achievement of healthy, sustainable livestock safety and the prevention of livestock deaths during floods.

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