



Social Modality for Post Flood Disaster Cimanuk River in Garut Regency

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ABSTRACT

Based on the observation that the implementation of Disaster Management in Garut Regency has not been implemented optimally. This is evident from the fact that there are still many victims when a disaster occurs so that overall handling is still necessary. The research method used is qualitative. The type of qualitative approach used is descriptive. Qualitative research is a research procedure that produces descriptive data in written or spoken words from people and observable behavior. The qualitative method was chosen considering that this method is expected to obtain accurate data and examine research problems in depth so that the expected results can be obtained. The term gotong royong cannot be underestimated in a foreign language because gotong royong is the familiar spirit of the Indonesian people to unite, cooperate, share, help each other, and feel together to achieve common goals with benefits for all. The term gotog royong is often heard, but this social spirit is starting to weaken, especially in cities. Restoring the spirit of gotong royong today is quite a challenge today. However, participation and participation in a community group are the key to life's values to carry out a strategy in life.

Keywords: Social Modality, Gotong Royong

INTRODUCTION

Apart from being famous for its wealth and natural beauty, Indonesia is also a country that is prone to disasters. This is due to its geographic and geodynamic position, so that Indonesia has relatively high volcanic activity and seismicity. This position also causes the shape of Indonesia's relief to vary widely, from mountains with steep slopes to gently sloping areas along very long coastlines, all of which are susceptible to landslide, flood, abrasion, and tsunami hazards. Various hydro-meteorological conditions also sometimes threaten flooding and landslides, hurricanes or tornadoes, drought-related forest fires, etc. Another threat is disasters caused by various technological failures.

Indonesia is located in a tropical climate with two seasons, namely hot and rainy, characterized by changes in weather, temperature, and wind direction, which are pretty extreme. Climatic conditions like this are combined with the surface topography and rock conditions that are relatively diverse, both physically and chemically; this causes the soil to become fertile. Conversely, this condition can also cause some dire consequences for humans, such as hydro-meteorological disasters such as floods, landslides, forest fires, and drought. As time progresses and human activities increase, environmental damage tends to worsen. It triggers an increase in the number of events and intensity of hydro-meteorological disasters (floods, landslides, and droughts) that occur one after another in many regions in Indonesia.

Generally, the disasters that occur result in suffering for the community in the form of human casualties, property loss, and environmental damage, as well as the destruction of the results of development that have been achieved, including damage to facilities and infrastructure as well as public facilities, community suffering and so on. The excellent tsunami disaster in Nanggroe Aceh

Darussalam in 2004 and the earthquake in Yogyakarta and Central Java (Klaten Regency) in 2006, and several other disasters before and after had prompted the Indonesian people to accept the reality of living side by side with disasters. As a consequence of this acceptance, the Indonesian nation has issued Law Number 24 of 2007 concerning Disaster Management.

The experience of disaster management from Japan shows that disaster risk reduction in Japanese culture is a strategic aspect institutionalized to all people from an early age. As a result, when a disaster occurs, they reduce the number of victims and shorten the emergency response period. Natural signs of disasters in Japanese culture are used as practical guidelines and have become official references in forecasting disasters. In addition, the Japanese government has identified plants and animals with their respective characteristics in different natural conditions to detect hazards.

In the case of a volcanic eruption, signs have appeared in various forms, from dreams or whispers, strange natural phenomena to the behavior of plants and animals that lead to a change in natural conditions. Local people with changes in nature can understand natural cues and cultural signs that have been sent to the residents in advance. This natural change of earthworms comes out of the ground, comes out of the Untuk (small humped ground), and the walls are old so that a few people who understand immediately pack up while those who do not understand stick to their routine and interpret the message as a myth. Cultural signs of society are based on changes that occur in both plants and behavior.

Garut Regency has various topographical characteristics. The areas to the north, east, and west are generally upland areas with hilly and mountainous conditions, while in the southern area, most of the land surface has a reasonably steep slope. Judging from the slope of the land, the area with a slope between 0° - 2° is 32,229 ha or 10.51%; the slope between 2° - 15° is an area of 38,097 ha or 12.43%; slope between 15° - 40° is an area of 110,326 ha or 35.99%; land with a slope above 40° is an area of 125,867 ha or 41.06% of the area of Garut Regency.

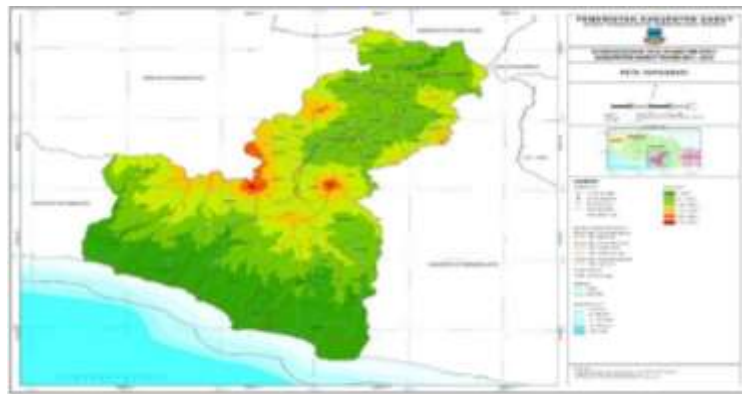


Figure 1. Topographical Condition of Garut Regency

Garut Regency is a dynamic region; with increasing time, various dynamics continue, both expected and those that are not, so that changes occur in all sectors. During its development, Garut Regency has grown and experienced significant changes. To cope with this change and growth, in early 2004, there was a division of 2 sub-districts so that the entire sub-district became 42 sub-districts, 19 sub-districts, and 400 villages with an area of 306,519 hectares. Until 2013, Garut Regency has 42 Districts, 21 Sub-Districts, and 403 Villages. Cibalong Subdistrict is a sub-district with the most expansive area, reaching 6.97% of Garut Regency or 21,359 hectares, while Kersamanah sub-district is the smallest area, an area of 1.650 ha or 0.54%. As a regency whose area is quite broad, it certainly has many internal and external problems in the running of its government. However, with all the strengths, weaknesses, opportunities, and threats that exist, the Garut Regency Government, with the application of development policies and appropriate strategies, is determined to increase the effectiveness and results for governance, implementation of development, and services to the community.

In general, the climate in Garut Regency can be categorized as a humid tropical climate because it includes the Af to Am types from the Koppen climate classification. The climate and weather in Garut Regency are influenced by three main factors, namely the monsoonal circulation pattern, the mountainous regional topography in the central part of West Java, and the topographic elevation in Bandung.

The average daily rainfall around Garut ranges from 13.6 mm - 27.7 mm or about 2,589 mm. the annual average reaches 3,500-4,000 mm. The variation in monthly temperature ranges from 24 °C-27 °C. The amount of evapotranspiration rate is 1,572 mm / year. During the rainy season, winds regularly blow from the Northwest, bringing wet air from the South China Sea and the western part of the Java Sea. In the dry season, dry winds with relatively high temperatures blow from the direction of Australia, which is located in the southeast.



Figure 2. Rainfall Conditions in Garut Regency

The geological condition of the Garut Regency area, physiographically, is included in the Zone of the Southern Mountains of West Java and the Bandung Zone with a landscape divided into four morphological units, namely volcanic cones, hills with coarse relief, hills with smooth relief, and plain. The area's stratigraphy comprises volcanic rock, sedimentary rock, and breakthrough rock, with the geological structure being folds, faults, and burrows. Soil types broadly include alluvial soil types, andosol associations, lithosol associations, Mediterranean associations, podsol associations, and regosol associations. Soil types of podzolic red-yellow, podzolic yellow, and regosol are the most widespread parts found in the Garut Regency area, especially in the southern part, while andosol soil types dominate the northern part.



Figure 3. Geological Conditions of Garut Regency

THEORETICAL REVIEW**Disaster**

A disaster is an event or series of events that threatens and disrupts people's lives and livelihoods, which are caused by natural and non-natural factors and human factors, resulting in human casualties, environmental damage, property losses, and psychological impacts. (Law 24/2007). The types of disasters according to Law No. 24 of 2007 concerning disasters are as follows:

- a. Natural disasters → caused by natural events (including earthquakes, tsunamis, volcanic eruptions, floods, droughts, hurricanes, and landslides)
- b. Non-natural disaster → caused by non-natural events (among others in the form of failed technology, failed modernization, epidemics, and disease outbreaks).
- c. Social disaster → caused by events caused by humans (social conflicts between groups or between communities, and terror).

Disasters can also be grouped according to their causes, namely:

- a. Geology: Earthquakes, tsunamis, landslides/ground movements, volcanic eruptions
- b. Hydro-meteorology: Floods, typhoons, flash floods, drought, tidal waves
- c. Biology: Epidemic, plant diseases, animals
- d. Technology: Transportation accidents, industrial failures
- e. Environment: Fire, forest fire, (remove deforestation), pollution, abrasion
- f. Social: Conflict, terrorism

Various views on disasters can be seen in the explanation below:

- a. Conventional View. This view considers disaster as destiny; the occurrence of a disaster is a:
 - 1) disaster or accident;
 - 2) unpredictable;
 - 3) uncertain;
 - 4) unavoidable;
 - 5) cannot be controlled.

Communities are seen as 'victims' and 'recipients of assistance from outside parties.
- b. The Natural Science Viewpoint. This view considers disaster as an element of the physical environment that endangers human life. As an extraordinary force of nature. Disasters are geophysical, geological, and hydro-meteorological processes. This view considers all disasters to be natural events and does not consider humans the cause of disasters.
- c. View of Applied Science. This view sees disaster based on the amount of resilience or the level of damage caused by a disaster. This view is based on the background of the building/construction civil engineering sciences. Disaster assessment is more focused on efforts to increase the physical strength of building structures to minimize damage.
- d. The Progressive View. This view considers disasters as a standard and constantly occurring part of development – disaster as a problem that never stops in the development process. Therefore, the role of government and society in disaster management is to recognize the disaster itself.
- e. The Social Science Viewpoint. This view focuses on how the community responds and is prepared to face dangers. Hazards are natural phenomena, but disasters are not natural. The magnitude of a disaster depends on the difference in the level of vulnerability of the community to the danger or threat of a disaster.
- f. Holistic View. This approach emphasizes hazards and vulnerabilities and the community's ability to deal with hazards and risks. Natural phenomena can become a danger if they threaten people and property. The danger will turn into a disaster if it is met with the vulnerability and incapacity of the community.

In simple terms, a disaster can be described as a disaster that is influenced by a vulnerability which creates a disaster risk and triggers that cause a disaster to occur; for more details, see Figure 2.1 below:

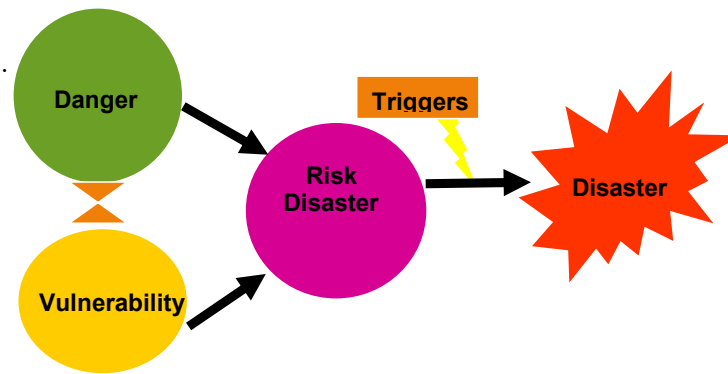


Figure 4. The relationship between hazard, vulnerability, and disaster

The description of the formula above is:

- ⊙ **Danger**(hazard): A condition, naturally or due to human activity, which has the potential to cause damage or loss and loss of human life. Danger has the potential to cause disaster, but not all hazards are always catastrophic.
- ⊙ **Vulnerability**(Vulnerability): A group of conditions and a consequence of circumstances (physical, social, economic, and environmental factors) that adversely affect disaster prevention and management efforts.
- ⊙ **Vulnerability Factors:**
 - a. Policy: There is a development policy that does not consider DRR; there is no DRR policy
 - b. Physical: Basic infrastructure, construction, buildings
 - c. Economy: Poverty, income, nutrition,
 - d. Social: Education, health, politics, law, institutions
 - e. Environment: land, water, plants, forests, oceans

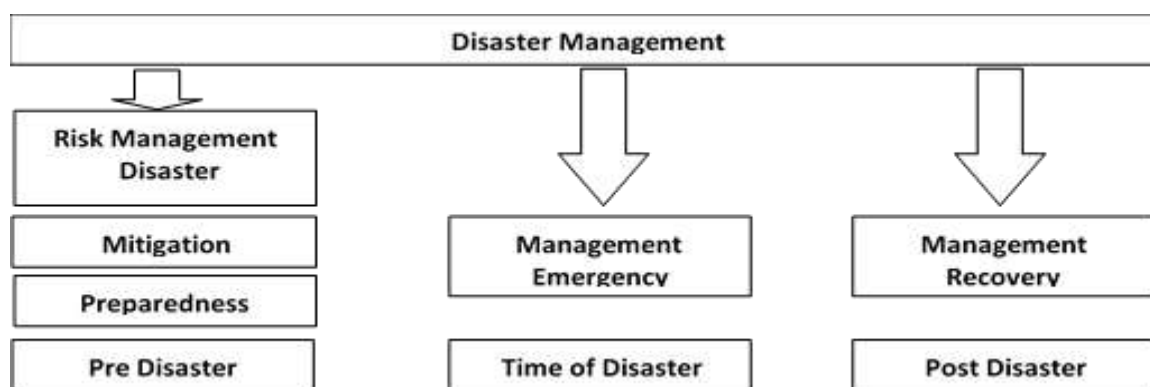
Disaster Management.

Disaster management can be defined as any effort or activity carried out in the context of prevention, mitigation, preparedness, emergency response, and recovery about disasters carried out in the stages before, during, and after a disaster. Disaster management is a dynamic process developed from classical management functions, including planning, organizing, division of tasks, controlling, and supervising. The process also involves various kinds of organizations that must work together to take precautions – mitigation, preparedness, emergency response. and disaster recovery.

Disaster Management is an ongoing process by which governments, businesses, and civil society plan and mitigate the effects of disasters, taking steps for recovery.

Implement disaster management is carried out in 3 (three) stages as follows:

1. Step pre-disaster is carried out when there is no disaster and under threat of a potential disaster.
2. Step emergency response is designed and implemented when a disaster occurs.
3. Post-stage deep disaster in the aftermath of a disaster.



In all stages of disaster management, there are 3 (three) management used, namely:

1. Management Resiko Disaster

It is an arrangement of disaster management efforts with an emphasis on factors that reduce risk in a planned, coordinated, integrated, and comprehensive manner before a disaster occurs with phases including:

- a. Disaster prevention is a series of activities carried out to eliminate and reduce the threat of disaster.
- b. Mitigation is a series of efforts to reduce disaster risk, either through physical development and awareness and increased capacity to face the threat of disaster.
- c. Preparedness is a series of activities carried out to anticipate disasters through organizing and effective and efficient measures. In this phase, there is also an early warning, a series of activities to provide immediate warning to the community about the possibility of a disaster in a place by an authorized institution.

2. Emergency Management

It is an arrangement of disaster management efforts with an emphasis on reducing the number of losses and victims and handling refugees in a planned, coordinated, integrated. The comprehensive manner at the time of a disaster with its phase, namely Disaster emergency response, is a series of activities carried out immediately at the time of the disaster to deal with the resulting destructive impacts, which include activities to rescue and evacuate victims, property, fulfillment of basic needs, protection, care for refugees, rescue, and restoration of infrastructure and facilities.

3. Recovery Management

Is an arrangement for disaster management efforts with an emphasis on factors that can restore the condition of the community and environment affected by the disaster by re-functioning institutions, infrastructure, and facilities in a planned, coordinated, integrated, and comprehensive manner after the occurrence of a disaster with its phases, namely:

- a. Rehabilitation is the repair and recovery of all public or community services to an adequate level in post-disaster areas. The primary objective is normalizing or running relatively all aspects of government and community life in post-disaster areas.
- b. Reconstruction is rebuilding all infrastructure and facilities, institutions in post-disaster areas, both at the government and community levels, with the main target of growth and development of economic, social, and cultural activities, upholding law and order, and the emergence of community participation in all aspects of social life in post-disaster areas.

Social Capital

The term gotong royong cannot be underestimated in a foreign language because gotong royong is the familiar spirit of the Indonesian people to unite, cooperate, share, help each other, and feel together to achieve common goals with benefits all. Often the term gotong royong is heard, but this social spirit is starting to weaken in particular in the city. Restoring the spirit of gotong royong today is quite a challenge today. However, participation and participation in a community group are the key to life's values to carry out a strategy in life.

On September 20, 2016, the most significant and worst badass flood disaster hit Garut again. This incident claimed 26 lives, 23 missings and evacuated hundreds of people to several scattered post points. This condition puts Garut is a crucial position in disaster management, so it is necessary to have an institutional arrangement involving the community and communities where this community participates and participates in developing local wisdom. Local wisdom can be a strategic issue in disaster management, both at the provincial or district-city level. After the flash flood that hit Garut, the discourse on capacity building and optimization of communication became very important, especially when this was a series of recovery stages.

The basic needs of the population are very diverse, such as tents or barracks for residents who have lost their homes, logistical assistance (fast food rice,) repair of basic facilities such as electricity, telephones, sanitation, educational facilities, immediate physical reconstruction, household kitchen utensils – general, medicine. In addition, the needs of school children such as stationery, schools, and many more are on a long list of fulfilling life for the affected community.

The problems faced during the post-disaster period have been identified by the affected communities in damage to basic facilities, inaccurate logical distribution, less than optimal tents in terms of quality and quantity, psychological trauma, damage to educational facilities, inaccurate data, obstruction. Income, soaring material prices, no construction team/construction experts, unclear criteria for rudanamah who received compensation, a physical reconstruction that has not been carried out quickly, promises of compensation and relocation, poverty, loss of securities, there is no coordination in the distribution of aid, lack of transparent medical personnel and bureaucratic drugs, educational problems, and socialization of government policies which is not clear.

Meanwhile, social modalities that already exist and live in the community today include the ability of the community to carry out cooperation and raise funds independently, as well as the ability to partner with various parties outside the affected areas. Many reasons can be taken into consideration in integrated disaster management and management (*Collaborative Governance*). Although some existing sectors are more likely to complement each sector's project, a holistic and comprehensive integration should be possible. Through multi-stakeholder consultations, including communities affected by disasters, it is hoped that they can collaborate, coordinate, be cooperative, and consult in formulating policies, programs, and projects to be implemented for rehabilitation and reconstruction. The involvement of all parties holistically and comprehensively can formulate practical problem solving, obtain information and understanding beyond scientific reach. It can be integrated with the dimensions of the problem, the dimensions of the actors, and the dimensions of problem-solving.

CONCLUSION

The term gotong royong cannot be underestimated in a foreign language because gotong royong is the familiar spirit of the Indonesian people to unite, cooperate, share, help each other, and feel together to achieve common goals with benefits for all. The term gotog royong is often heard, but this social spirit is starting to weaken, especially in cities. Restoring the spirit of gotong royong today is quite a challenge today. However, participation and participation in a community group are the key to life's values to carry out a strategy in life. From the explanation above, it is clear that the social modality, which in Indonesia is better known as Gotong Royong, is one of the models in disaster management.

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