# THE FUNCTION OF GOVERNMENT COMMUNICATION IN BUILDING WATERSHED COMMUNITY AWARENESS ABOUT ENVIRONMENTAL CLEANLINESS TO AVOID FLOODING

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**ABSTRACT:** An unclean environment can cause flooding, especially for people living in watersheds. To realize public awareness about environmental cleanliness to avoid floods, the Government must carry out a Communication Function to increase disaster awareness knowledge to flood-prone communities by maintaining environmental cleanliness.

This study used qualitative research methods. Data collection was carried out using indepth interviews, participant observation, document studies. The informant of this research is the Derah Disaster Management Agency (BPBD) Manado City, Head of Prevention and Preparedness, Caamat, Lurah, Community.

The results of the research show that the function of government communication in building watershed community awareness about environmental cleanliness to avoid flooding is (1) Informative function: Provide information both directly through socialization and through the media. Provide information in writing or unwritten. The government created an Early Warning System and SITASYA Application based on information technology. (2) Regulatory Function: Government communication is directed at policy regulations and building public awareness about flood potential, so as to comply with government policy not to litter and live in Pandu relocation. (3) Persuasive Function: Influencing people living on the banks of rivers to be aware of flood disasters, and act quickly and appropriately when a disaster occurs even after a disaster. (4) Integrative Function: Build coordination of tasks of related unit groups such as City Government, BPBD, TNI, POLRI, SAR, Subdistrict, Kelurahan, etc. in an integrated manner to carry out tasks to prevent casualties due to floods.

Keywords: Government Communication Function, Environmental Hygiene, Flood

## INTRODUCTION

Environmental cleanliness is something that cannot be separated from human life. Adopting clean living habits will create an environment free of waste. A clean environment can be realized from simple things, such as maintaining the yard, channels, yard, and not littering. If each individual applies a healthy lifestyle to the environment by not littering, so that garbage will not inhibit the flow of rivers which can cause the distribution of water flow to be disrupted [1]

An environment that is free of waste will avoid dirt and existing diseases and avoid flooding. Based on worddometer data, there are around 7.8 billion people who are world residents in 2021, and this number is spread across more than 230 countries in the world and will increase every second. The increasing number of occupation growth has led to an increase in waste production. Waste that has a lot of impact on environmental pollution. Based on the 2020 population census, Indonesia is the fourth largest country in the world with a population of 270.20 million people. This makes Indonesia a country that will contribute a large amount of waste in the world. In 2019, the Indonesian Ministry of Environment and Forestry said that every year waste in Indonesia continues to increase to reach 175,000 tons per day or equivalent to 64 million tons per year if using the assumption that the waste produced by each person per day is 0.7 kg. This makes Indonesia the second largest producer of waste in the world.

As social creatures, humans have a relationship and dependence on their environment, because between humans and the environment cannot be separated. In addition to interacting with fellow humans, in human life also interacts with their environment. The relationship between humans and the environment is a symbiotic relationship of mutualism, because between the environment and humans need each other, where humans need nature as a source of life and the environment needs humans in the process of conservation.

A clean environment will have an impact on health but also have an impact on the environment. Where, a clean environment will be comfortable to occupy and inhabit. Clean environmental conditions will improve physical and spiritual health, and will avoid floods.

Environmental health problems, especially waste management, become social problems that are difficult to overcome, if public awareness of environmental cleanliness is low. It is necessary to provide understanding to the community about the importance of maintaining environmental cleanliness such as household waste management, environmental cleanliness, choosing organic

and non-organic waste and disposing of it in the trash, especially for people living in watersheds that are prone to potential flooding.

Manado City is the capital of North Sulawesi Province which has 11 sub-districts and 87 kelurahan. Manado City is located in Manado Bay, and is surrounded by mountainous areas and the coastline is reclaimed land that is used as a shopping area. Based on data from the Central Statistics Agency in 2022, the population of Manado City is 454,606 people, with a density of 2,934 people/km2. The high birth rate of Manado City residents from year to year is 0.5% has an impact on increasing waste production in Manado City. According to data from the Manado City Environmental Office in 2021, it shows that 0.4 kg of waste produced comes from household waste. If the population of Manado City is almost five hundred thousand, it means that there are 650 tons of waste produced every day.

Flood disasters include natural disasters that almost occur every time the rainy season arrives in Manado City. On January 27, 2023, extreme weather occurred, namely rainfall with a maximum intensity of 300 mm which resulted in increased water discharge resulting in flooding, especially in the Watershed (DAS) in Manado City. As a result of the flood, 420 houses of Manado City residents were severely damaged by flooding, while 103 others were moderately damaged and 448 lightly damaged [2].

Currently, there are around 2,250 families living in the watershed in Manado City, namely in the Tondano, Tikala, Mahawu, Bailang, Sario and Malalayang watersheds. Flooding in Manado is partly caused by the conversion of watershed functions (DAS), therefore the importance of structuring the flow of rivers that pass through Manado, due to significant land use change [2].

The Manado City Government has appealed and even prohibited people from building residential houses on the riverbanks, but a number of residents after the disaster in Manado City on January 15, 2014, continued to rebuild their residential houses and businesses along the river. Even though it is very risky for the security and safety of the residents themselves [3].

The lack of public knowledge about awareness of maintaining environmental cleanliness and how to manage organic and non-organic waste from the government due to lack of information causes flooding, causing property losses, environmental damage, and threatening and disturbing people's livelihoods, even lives [4].

It is necessary to implement the Government Communication Function to build public awareness and increase knowledge of the importance of maintaining environmental cleanliness to

people living in flood-prone watersheds as well as an effort to implement policies, as an effort to reduce disaster risk and preparedness in disaster management.

Government communication to people living in the Manado City Watershed (DAS) is a process of dissemination and exchange of information to influence attitude, understanding and behavior. This shows that both the government and the public are part of the government communication process, both as a *sender* at one time, and as a *reveiver* at another time. It is necessary to implement the Government Communication Function, namely the Informative, Regulative, Persuasive and Integrative Function to people living in Watersheds (DAS) to inform matters related to regulations and is a way for the community to receive messages and implement them in a voluntary, non-coercive and coercive way [5] related to building public awareness to maintain environmental cleanliness.

### LITERATURE REVIEW

Cleanliness is a state that looks clean, healthy and beautiful. [6] A clean environment is the basic right of every human being in obtaining health in his livelihood. Everything that happens in the environment will affect the survival and welfare of humans and other living things around them. Human self-awareness is needed to keep the environment clean.

According to Subrata [7], natural conditions will directly affect the development and behavior of living things around them. The human environment can be distinguished from the natural environment and the social environment. Both are closely interrelated, so the sustainability of each is determined by the existence of its environment. The natural environment will not be well maintained if humans do not care for and maintain it.

Humans must have awareness to keep the environment clean, free from waste that can have a negative impact on the environment and for human life. An unclean environment can cause flooding. Not disposing of garbage in its place will cause obstruction of river flow, especially for the environment around the watershed (DAS). Similarly, illegal and large-scale felling of trees will result in deforested forests and cause reduced water absorption and soil easily eroded by rainwater, causing floods and landslides.

Watershed (DAS) is an area bounded by mountain ridges where rainwater falling on the area will be collected by the mountain ridge and will be flowed through small rivers to the main river [8]. Watershed includes a land area that is a unit with rivers and their tributaries, which functions

to contain, store and drain water from rainfall to lakes or to the sea naturally, whose boundaries on land are topographic separators and boundaries in the sea to water areas that are still affected by land activities [9].

Government communication is needed to urge the community to maintain environmental cleanliness as an effort to prevent flooding in the watershed in Manado City.

The process of government communication is initiated by the sender (administrator or government manager) who tries to communicate with the bureaucratic apparatus, the community or other organizations. For this reason, a set of information is chosen as the message you want to send (*ideation*) in the form of words, signs or symbols (*message*) that are easily understood by the recipient and are expected to have an effect. The message conveyed can be in the form of policies, procedures, regulations and decisions verbally or nonverbally. Messages are delivered through channels that are considered more effective. Channels or tools are delivered through specific media [10].

After the message is sent, attention in the communication process is directed to the receiver of the message (*receiver*). One specific response is expected by the sender of each message he delivers. The recipient decodes the message received, then he responds to the message. How the receiver responds to a message is determined by the recipient's understanding of the message he receives. The response given by the recipient becomes feedback, or feedback (feedback) for the sender of the message.

So government communication is essentially a process of disseminating and exchanging information within and outside the organization. Through communication, the government intends to influence the *attitude*, understanding, *and* behavior of the bureaucracy and society. Thus, everyone involved in the administration of democratic government is part of the communication process of government, both as a sender at one time, and at another time he becomes a *receiver* [11].

The functions of Government Communication (Parce and Robinson in Ulber Silalahi: 2004) are:

- Informative Function
- Regulatory Functions
- Persuasive Function
- Integrative Functions

## **METHODS**

This research uses qualitative methods with a descriptive approach., is a research procedure that produces descriptive data in the form of written or spoken words of people and observable behavior (12).

Research informants are people who are seen as capable of providing information and can designate others as informants who can provide more in-depth information, which are selected by *Purposive* and *Snowball Sampling* (12).

The informants of this research were the Head of the Derah Disaster Management Agency (BPBD) of Manado City, the Head of Prevention and Preparedness, Sub-districts, Sub-districts who were selected *purposively*, and People living in Watersheds (DAS) were selected by *snowball*.

The focus in research is an indicator of the Government Communication Function of Parce and Robinson in Ulber Silalahi (2004) with the focus of the study:

How is the Government Communication Function in Building Watershed Community Awareness about Flood Potential in Manado City, through Informative, Regulative, Persuasive and Integrative Functions?

Data collection was carried out using qualitative approaches, namely observation (participation), in-depth interviews (*indept interviews*), and document studies (13). This is done with the aim of capturing and understanding the function of government communication in building watershed community awareness about flood potential in Manado City,

Data analysis was carried out from the beginning and throughout the research process. In this study, qualitative data analysis will be used with an interactive model developed by miles and Huberman (13), namely: Data Reduction, Data Presentation and Impunity Withdrawal.

### **RESULTS AND DISCUSSION**

Manado City with an area of 157.26 Km 2 is watered by the Tondano river with a length of 39.9 Km where the downstream part is ±7 Km through Manado City with its tributary, the Tikala river with a length of 23.6 km. These rivers have the potential to cause flooding in Manado City.

Manado City is an area with topography and tropical climate with high rainfall can reach >3000mm / year. In 2014 there was a flash flood disaster that hit Manado City, this flash flood

was caused by the loss of forests and small rivers around Manado City and damage to catchment areas. The impact of floods that occurred in Manado City was damage to residents' homes, paralyzing community activities, and moral and material losses as well as damage to infrastructure and facilities. Determining flood-prone areas is very important for decision makers for planning or managing activities. Manado is also a coastal city that has a coastline of 18.7 kilometers. The process of development and development of Manado City area from the Tondano watershed, Sario watershed and Malalayang watershed has caused a reduction in water catchment areas [14].

Floods often hit Manado City, especially during the rainy season. This makes North Sulawesi Province one of the flood-prone areas in Indonesia and in terms of the area of inundation is ranked 8th out of all regions in Indonesia so that it becomes one of the cities that is considered at high risk of flood danger.

In the last decade in Manado City there have been 3 floods that resulted in major losses suffered by the community and government, namely in 1996, 2000 and 2005. Manado has now become a flood subscription city because when it rains some roads and houses in the lowlands will be flooded, this of course disrupts traffic, material losses, diseases and other impacts that also harm the city of Manado [15].

The distribution of flood-affected areas is in 5 sub-districts, namely Paal District two affected by floods with an area of 436.42 Ha, Tikala District affected by floods with an area of 230.76 Ha, Singkil District affected by floods with an area of 361.48 Ha, Tuminting District affected by floods with an area of 373.39 Ha, and Wenang District affected by floods with an area of 360.92 Ha.

Within 10 years, Manado City is often hit by widespread floods, such as in 2014 – 2020. The worst flood period was in 2014, which killed 25 residents and left 1 missing. Meanwhile, material losses, namely as many as 829 houses were damaged. In 2020, the most affected subdistrict is Paal Dua sub-district, because Paal Dua sub-district is squeezed by 2 major rivers in Manado city, namely the Tondano watershed and the Tikala watershed [15].

In early 2023, floods and landslides hit Manado City again, causing one resident to die and dozens of families to be affected by the incident. Heavy rains that occurred in the city area caused the Tondano River to overflow. Flooding at some point could not be avoided so that dozens of houses were submerged with water levels of 80 to 300 cm. The flooded areas occurred in five subdistricts, namely Paal Dua, Tuminting, Sario, Wenang and Singkil sub-districts. Meanwhile,

landslides hit six sub-districts. Landslide points were identified in Paal Dua, Singkil, Tikala, Bunaken, Wanea and Tuminting sub-districts. (BNPB Manado City, 2023)

Currently, there are around 2,250 families living in the watershed in Manado City, namely in the Tondano, Tikala, Mahawu, Bailang, Sario and Malalayang watersheds. Flooding in Manado is partly caused by the conversion of watershed functions [17].

The government established the Central Natural Disaster Management Advisory Board (BP2BAP) through Presidential Decree Number 256 of 1966. The person in charge for this institution is the Minister of Social Affairs. BP2BAP activities play a role in emergency response management and disaster victim assistance. Through this decision, the paradigm of disaster management evolved not only focusing on human-caused disasters but also natural disasters.

The frequency of natural disasters continues to increase. Serious and coordinated disaster management is urgently needed. Therefore, in 1967 the Presidium of the Cabinet issued Decree Number 14/U/KEP/I/1967 which aimed to form the National Coordination Team for Natural Disaster Management (TKP2BA).

In Manado Mayor Regulation Number 64 of 2016 concerning the Position, Organizational Structure, Duties and Functions and Work Procedures of the Manado City Regional Disaster Management Agency (BPBD), it is explained that BPBD is led by a head held concurrently (*ex-Officio*) by the Regional Secretary of Manado City.

Government Communication is the process of disseminating information both inside and outside the organization, so government communication exchanges or shares information both internally with fellow employees and externally with the public. Through communication, the government intends to influence attitude, understanding and behavior. Thus, everyone involved in the administration of government is part of the government communication process, both as a *sender* at one time and at another time as a *receiver* [17].

Rainfall with high intensity at the beginning and end of each year resulted in the overflow of six rivers around Manado City, namely Mahawu River, Bailang River and Tikala River. Manado City is crossed by 6 rivers, namely Tondano River, Tikala River, Mahawu River, Bailang River, Sario River and Malalayang River. Flash floods accompanied by landslides repeatedly occurred and resulted in casualties of life and material. To avoid casualties, the government conveyed information to the community, especially those living on the banks of the river, about the potential for flooding.

# - Informative Function

The informative function is the function of government communication that provides the information needed so that the public can do what the government says effectively and efficiently The community needs to be informed about policies related to flood management and risk to people living in watersheds.

Manado City is crossed by six rivers, namely the Tondano, Tisila, Mahawu, Bailang, Sario, and Malalayang Rivers. During the rainy season which is usually at the beginning and end of the year, extreme rainfall has the potential to overflow the six rivers, especially due to the overflow of the tondano watershed, sarui river, bailang river and tikala river. BPBD Manado City recorded that in March 2022 there were two residents who died and 278 people from 155 households affected by floods and landslides. There are 13 villages in 5 sub-districts in Manado City that were affected by the incident. Therefore, the government provides information to the community, especially those living on the banks of the river, to be vigilant when the rainy season arrives.

In government communication, this function is performed by people at higher levels to send information to people at the lower levels, in this case the Manado city government or the Regional Disaster Management Agency (BPBD). People who need information from the government can also contact the government who have the information they need about flood management.

Many informative communications are carried out by the government to the community, especially those living in the Watershed (DAS) in Manado City, both in written and unwritten formats. The content of the message is how to build awareness of people living around watersheds (DAS) about the potential floods that can threaten them in the rainy season.

In Manado City, there are already seven points of flood-specific disaster early warning systems as a government communication effort in this case the Regional Disaster Management Agency (BPBD) of Manado City, which is spread across several existing sub-districts and kelurahan, including Molas Village, Paal II District, Dendengan Luar Village, Ternate Tanjung Village, Tanjung Batu Village, Pakowa Village and Malalayang 1 Timur Village. This system serves to provide information and warnings to the community to be prepared and act according to the right time, situation and conditions when a disaster will occur.

The government provides information that there are certain telephone numbers from the government and parties related to disasters that can be contacted by the community if the water discharge begins to increase and has the potential to flood.

The Regional Disaster Management Agency (BPBD) of Manado City also provides information by conducting socialization twice a year to people living in the Watershed about the Flood Early Warning System so that people know what to do when a disaster is about to occur.

The Regional Disaster Management Agency (BPBD) of Manado City has created a technology-based *Early Warning System* as a means of government and community information to be easily accessed by anyone. The early warning system uses the SITASYA (Community Monitoring System) application. The SITASYA application is a service that monitors the condition of Manado City through Circuit Closed Television (CCTV) based on information technology, including monitoring areas where there are disaster events. But due to several obstacles so that the flood early warning system only two systems were running and the rest were damaged did not work.

The government builds an early warning system as a form of government attention so that the public can get information faster when a disaster occurs so that there are prevention and preparedness efforts from the government and the community to avoid disasters. There is also the SITASYA application, which is a community monitoring system in charge of monitoring the condition of Manado City through CCTV so that disaster-prone areas can be monitored during the rainy season. However, due to lack of *maintenance* including repairing damaged equipment, so that of the seven points of the flood early warning system built, only two systems were running, the rest were damaged and did not function.

## - Regulatory Functions

The regulative function of communication involves directed communication about policy regulations or messages about building awareness of people living in watersheds about the potential for flooding during the rainy season. Communication involving regulative functions is often unpleasant, but it is essential for the safety of society.

This function is related to applicable regulations related to floods and their impacts. The Manado City Government or the Regional Disaster Management Agency (BPBD) has the

authority to control all information submitted, the authority to give instructions or orders, so as to enable the community to carry out orders or appeals as appropriate.

The Manado City Government or BPBD expects residents on a number of riverbanks to move to relocation housing in Pandu Village to overcome floods that often hit Manado City. No matter how many reservoirs are created, if people still live above the waterways, there will still be floods. This was informed by the Manado City Government in this case by the Mayor of Manado directly or using mass media.

Until now, residents who have received relocation continue to live in their homes on the banks of the river. Of the approximately 2,000 relocation houses provided, only 400 to 500 units are occupied by residents. Therefore, the government continues to encourage by implementing a number of strategies so that residents want to help the government in overcoming floods in their areas. Although the nature of government information is persuasive, it must still be firm. Media cooperation is also needed to appeal by informing firm efforts from the Manado City government and BPBD.

The Manado City Government will continue to add facilities in the relocation house ranging from public transportation, the availability of clean water to street lighting that has coordinated with the National Disaster Management Agency (BNPB). The relocation plan as soon as possible, the government will again provide socialization to people living on the banks of the river.

The water level can be monitored by the Manado City Government from the Smart CCTV Command Center, especially in the rainy season, it can be seen to where the height is and whether it is approaching the danger level line. The potential for floods and landslides is in the Tuminting, Banjer, Taas, Tikala, Sario areas, so that the CCTV Smart Command Center directly monitors the condition of water levels and situations after floods and landslides. So that if there are people who must be evacuated, they can be helped immediately.

Therefore, the Manado City Government appealed to residents living in the disaster area to immediately evacuate to a safer place. The government appeals to all people, especially those living on riverbanks and areas prone to landslides and floods, please evacuate immediately to safer locations, while sending a message, let us all pray for the safety of all Manado city people.

The Manado City Government also opened a Health Post and disaster management assistance for the community, namely the Authority Health Center, the Post next to the Klabat Coffee House, the Paniki Bawah Health Center at the Kairagi I Subdistrict Office, the Tikala Baru

Health Center at the Manpower Office, the Bengkol Health Center at the Bhayangkara Buha housing, and the Ranomuut Health Center at Bethel Eden Paal 2 Church. For flood and landslide victims who need medicine, the Health Post prepares the necessary.

### - Persuasive Function

The persuasive function of communication is an effort made by the government to influence people living on river banks so that they do not live in watersheds that are prone to flooding. Through persuasion communication, the Manado city government appealed to the community to live in the Pandu relocation house.

The government appeals to people living in flood-prone areas, namely in watersheds, that be vigilant if the water has reached a height of 102 meters, must be prepared if the water has reached a height of 2-3 meters, and if the water has reached a height of 3 meters and above, it means that a disaster has occurred. So that people must immediately leave the place of residence and look for a higher and safer place. We the government is also trying to persuade people not to build houses or live in places that are prone to flooding."

Communication or communicating seems easy, but actually cannot be separated from various obstacles or obstacles in its implementation. By knowing or being aware of (possible) obstacles or factors that can commonly be obstacles in this communication activity, we can hope that we can overcome them or avoid them. So that the process of delivering messages takes place well and achieves the goals of communication that we do.

Education delivered by the government in the form of appeals not to live in watersheds is not followed by the community, because they do not want to leave the house they have occupied for a long time. Also because access to schools, workplaces and shopping malls is just nearby, in contrast to if they had to stay in a guide relocation house.

## - Integrative Functions

Integrative Communication is the delivery of messages carried out by the government as communicators that aims to make the public or communicants understand the content of the message conveyed. Integrative communication is a form of reaction shown in a behavior.

Integrative communication will provide comfort to both parties who carry out a communication, both government and society. Because both have clarity in communicating, thus the purpose of communication is carried out, effective and goes according to plan.

The government as a communicator prepares in advance what will be conveyed to the community or communicants, so that existing communication will be structured and clearly purposed. Integrative communication is an effort between government and society. The process of sending information or messages to recipients is carried out in an integrated manner to achieve the goal, namely the community knows what to do if a disaster will occur, when a disaster occurs, and after a disaster. The target of this communication is a person in the community individually and certain community groups, such as families living on the banks of rivers. Also for government officials on duty in flood-prone areas, such as in Ternate Village, Taas, Tikala, Dendengan Luar, Ternate Tanjung Village, etc.

Integrative functions relate to the provision of channels or things or tools that can make it easier for members to perform tasks and carry out commands well. Generally, every organization will try to provide channels so that each member can communicate and perform work according to his duties. Every organization strives to provide channels that enable employees to perform their duties and jobs well [18].

Similarly, the Manado City government provides technology-based channels such as the Early Warning System or Flood Disaster Early Warning System installed at seven points in Manado City. In order for the community to more quickly know the situation when a disaster occurs and more quickly carry out prevention and preparedness efforts, the Manado City government provides an integrated technology-based channel, namely the Early Warning System installed in Ternate Tanjung Village, Tanjung Batu Village, Batu Kota Village, Dendengan Dalam Village, Bailang Village, Pakowa Village and Paal Dua Village".

The Manado City Government integrates, in collaboration with Public Works (PU), the Regional Disaster Management Agency (BPBD) and related parties to regulate settlers on the banks of the river. One way is relocation. If the riverbanks can be arranged, they can stay there with the limits of the river trough kept to a minimum undisturbed. This can be done with the construction of an upright river wall, so it does not use a lot of space.

In controlling floods, there are three things that the Manado city government does, namely draining flood discharge far from settlements, settlements must stay away from floods, and settlers

who are close to the risk of flooding must be able to know the characteristics of floods so that they can adjust to floods. Set the banks, do not have to displace. Such perceptions must be eliminated. All that must be done is to arrange to minimize the river trough to accommodate the flood discharge. For this reason, riverbank communities are invited to dialogue, encouraged not to live in riverbank areas anymore because of flooding, and encourage them to live in Pandu relocation houses.

The Regional Disaster Management Agency (BPBD) of Manado City has provided 2,047 housing units to relocate residents living on the riverbanks. It's just that, only 400-500 housing units are filled. While the rest is still empty, because many people choose to live on the banks of the river instead of in Pandu, Mapanget District, Manado City. There are many people who live on the riverbanks, then many have been able to relocate in Pandu but still live on the riverbanks. The relocation of people living on the banks of the river will be a priority program of the Manado City Government to minimize flooding. Nevertheless, it is reluctant to evict those who are still naughty, even though they have received rations. He still chooses persuasive ways to relocate his citizens. The city government is still doing persuasive methods.

It is well realized by the government that the location of the house in Pandu, Mapanget District, is quite far from the city center. Also because the facilities are not adequate. However, the City Government is committed to continuing to strive to complete the facility. Although far away, the government will fix and complete the facilities there. The city government has also provided public transportation to get there.

## **CONCLUSIONS**

The results of the research show that the function of government communication in building watershed community awareness about environmental cleanliness to avoid flooding is (1) Informative function: Provide information both directly through socialization and through the media. Provide information in writing or unwritten. The government created an Early Warning System and SITASYA Application based on information technology. (2) Regulatory Function: Government communication is directed at policy regulations and building public awareness about flood potential, so as to comply with government policy not to litter and live in Pandu relocation. (3) Persuasive Function: Influencing people living on the banks of rivers to be aware of flood

disasters, and act quickly and appropriately when a disaster occurs even after a disaster. (4) Integrative Function: Build coordination of tasks of related unit groups such as City Government, BPBD, TNI, POLRI, SAR, Subdistrict, Kelurahan, etc. in an integrated manner to carry out tasks to prevent casualties due to floods.

This study recommends that additional budgets are needed to repair damaged systems and applications so that flood information can be directly received by the community. It is necessary to increase socialization to the community and affirmation of rules for people who violate rules on environmental hygiene, who still litter causing waterways to become obstructed, thus having a virtuous impact that endangers public safety.

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