Model of Environmental Communication over the Citarum River

S Sumartias1*, L Komala1 and R Romli1

1Faculty of Communication Sciences-UNPAD
Jl. Raya Bandung Sumedang KM.21, Hegarmanah, Jatinangor, Sumedang District, West Java 45363

*suwandi.sumartias@unpad.ac.id

Abstract. The article purpose to elaborate: attitudes, behaviour and understanding of Citizen’s Citarum River, especially at Cieunteung and Linggar Villages Bandung Regency which are often exposed to floods, waste and rubbish through the perspective of "bottom up" environmental communications. The research method used is descriptive approach with qualitative data analysis technique. The results indicate that still low attitudes and understanding of citizens about the condition of a healthy river (air and water); Lack of awareness and communication activities between citizens, formal and informal community leaders in finding the right solution; The low participation of citizens and community leaders in seeking sustainable solution; Lack of supervision and law enforcement of the environment. Recommendation: The importance of advocacy movement, participation and assistance from and by citizens of the Citarum River (Bottom up Communication); The importance of forming groups or communities of citizens at the Citarum river area; The importance of communication and coordination is done intensively and sustainably; Local government interventions need to involve formal and informal leaders; The importance of supervision and law enforcement seriously and professional.

Keywords: Environmental Communication, Citarum River, Community, Lack of awareness, Advocacy

1. Introduction

West Java community have long known the Citarum River as the longest and largest river, it has a length of 296 km. The existence of rivers has many function in daily life. One of them is the river as a source of community life. Rivers and humans become an ecosystem that supports and needs each other. But on the other side, the river also often gets unfavourable treatment, especially as waste or rubbish dumps, both large industries and households.

The bad condition of the Citarum River has long been known, it has been a concern of the world and the central government, even President Joko Widodo ordered to immediately restore and revitalize the Citarum River. As rapid population growth and industrial development resulted in the emergence of a variety of very complex and unique problems experienced by the Citarum River.

Citarum River, actually like a living organism is being "chronic pain", cause the main factor of human activity that have not realized the importance of the river maintenance. Many problems faced by the Citarum upstream, midstream and downstream. Main problem faced: industrial waste pollution; garbage; home industry; siltation, erosion, etc. [1].
Over 40 years, a lot of research, and community service appropriate expertise of several research institutions, both related agencies and universities in Bandung (example: ITB; UNPAD; UNPAR; UNPAS, UPI; UIN, etc.). However, the results so far have not seem significant, the condition of the Citarum River has not changed significantly.

West Java Governor Ahmad Heryawan (2017) mentioned that the Citarum River need to get special and comprehensive attention from the government. Citarum has become a very dirty river, all factory waste is discharged into the river. Some bacteria have appeared. Jokowi determined that Citarum be returned clean and sustainable as time immemorial. Because he realized Citarum has a major role to society. Because he realized Citarum has a major role over society.

Head of the Central River Region (BBWS) Citarum, Yudha Mediawan released Merdeka.com. (January 17, 2018) said the floods that hit the Bandung area is not separated from the description of the problems of the Citarum upstream to the downstream. It must be addressed from upstream to downstream so that Bandung is free from flooding. Problems Citarum upstream: degraded land 26.022 hectares (20 per cent) and the erosion 592.11 tons per hectare per year, 500,000 cubic meters of garbage per year that can not be accommodated into the drainage system and rivers. Then sedimentation 7.9 million tons per year into the Citarum River due to high erosion in upstream areas and rivers polluted from industrial waste dumped into the Citarum River every day.

By observing the various problems encountered over Citarum River, through environmental communication research, aims to determine the attitude and behavior of the citizens over the Citarum River polluted; garbage piling up; and flooding. The attitude and behavioural people surveyed would be the basis for establishing a bottom up model of environmental communication. Communication have fundamental function in daily life. Likewise over the Citarum River pollution problem, the role of communication between communities over the river area, of course requires communication processes and activities that are able to answer the various problems faced.

2. Research Method

As the first research, the research design used the descriptive study with qualitative data analysis techniques. Through a study of the understanding, attitudes, and actions of the communication of the Citarum watershed about the condition of the river which is polluted, littered and flooded, is expected to be a source of data for creating a model of environmental communication about the Citarum watershed. By exploring data from citizens who are the subject of research, the breadth and depth of data will be more important, so that the data or research results can be a valuable input in solving the Citarum watershed problem, especially in the study of environmental communication. Data and collection techniques Data were collected through structured in-depth interviews, observation and literature review that were relevant to the research problem. Key informants are residents who are exposed to waste, flood and garbage at Linggar Rancakek Village and Cieunteung rural, Bandung Regency.

3. Result and Discussion

Based on interview and observations at two areas, Linggar and Cieunteung Village, Bandung Regency. The informants said that the river pollution caused by industrial or household waste. They have not awareness of health and clean river maintenance. On the other hand, they are still have assumption that rivers belong to everyone and have long been an inseparable part of whole life. Waste is considered to be something that must be disposed through the river easily.

The river is used by residents or industries to dispose of waste. Various regulations regarding a healthy and good environment for better quality of human and nature as sustainable development. It have not direct relationship with the existence of the river itself. Because the river will continue to drain a variety of garbage or waste that is near residential or industrial, the most important is far from the environment. River is a comfortable, spacious and long place to dispose of garbage or waste. The river pollution and silting become a separate part of the residents over the Citarum area.
The community leader assesses that residents are lack attention of the river condition. They expect too much from the intervening government to solve the pollution problem of industrial and household waste, including flooding. Bad feeling and annoyed with the situation, it is also difficult to build communication between citizens and industry or with community leaders and often does not run smoothly and experiences a dead end to find the right and best solution.

There has been an effort to improve environmental conditions which waste pollution, with the support of environmental activists, but not running sustainably. Even those who surfaced were more resigned and often industrial parties with strong capital potential, tried to influence citizens or environmental figures by converting a certain amount of money.

Actually, the industry contribution for developing the environmental village is very minimal, there is no real and significant CSR program. In fact, there is no assistance with natural disasters that often occur in villages, for example, during floods.

The Citarum environment watershed has been facing the threats and damage for long time. The damage and or pollution of the Citarum River is caused by human behaviour with the lifestyle of citizens and industries. They have not an awareness of the importance of a healthy and comfortable environment for the sustainability of natural and human development.

The Citarum conditions are very relevant with the previous research, with a study of the Problems and Solutions of the Citarum Watershed and Analysis of Government Policies. The results of the research show that as the most important component in life, the existence of water should be preserved and preserved. Water conservation rules must be adhered to in daily life so that water sustainability can last until the future. The Citarum River as one of the biggest water potentials in West Java has a great potential for the community, both for its beneficial potential and for its potential to be detrimental. Unfortunately, the community and the government tend to be complacent by the potential benefits of the Citarum River, and unwittingly increase the potential loss of the river. Reduced land conservation areas, densely populated settlements, pollution of rivers by domestic and industrial waste, and others cause disasters such as floods, droughts and landslides. This is a problem that must be resolved jointly between the government and the community. Coordination, division of responsibility, and harmonious communication are believed to solve the complicated problems that occur in the Citarum River [2].

The current condition of the Upper Citarum Watershed is very concerned, because the quality of the river is not suitable for consumption for household needs, both for drinking, bathing and washing. It is caused by pollution originating from household, industrial, office and so on. The biggest pollutant of the Citarum River is domestic waste. The portion of organic waste can reach 60 percent, the other 30 percent from industrial waste, the rest comes from agriculture and livestock. [3]

The attitudes and behavior of the Citarum community cannot be separated in their lives so far, each other supports mutually, but often rivers for many residents or industries, especially the Citarum community are used as a dumping point for various waste or garbage, including ways to manage destructive agricultural land river environment, resulting in erosion and siltation of rivers.

Thus, a comprehensive approach or paradigm is needed from various scientific studies, especially those that are oriented to social culture engineering, so the environmental communication approach based on attitudes and citizen awareness is an alternative in finding solutions. Including involving various communities in the Citarum area.

Social institutions are a tool for environmental activists in carrying out their activities in flood management in the Upper Citarum watershed. The use of this social institution is because its members have the same meaning and the same symbol as the identity of the group. The meanings that are shared jointly are functionally realized through political, economic, religious, and social structures. This patterned behavior, or habit, is the link between the structure and function of culture as symbolically communicated [3].

Realizing efficient and effective environmental communication, the strategic role of local media, mass media and online media needs serious attention. Environmental messages in the Citarum watershed area can be designed in such a way as to achieve a healthy and sustainable environment. At present,
massive social media is widely used by the public, and it is very easy to use it in building environmental communication.

There is extensive literature discussing the value of online communication of individuals in online communities (Wangberg et al. 2008; Rosenfeld et al. 1989; Rhoades and Eisenberger 2002). The other contributions in this area highlight the social value of the social interaction of users in online communities and the production of social support within these networks (Obst and Stafurik 2010; Kraut et al. 2002; Hwang et al. 2010). Social support is a theory derived from social psychology, defined as the experience of individuals to be respected, loved, helped or cared for by other members of a social network (Cobb 1976). Establishing this type of support in a social group attracts individuals to join them, as help, support and feedback in these social communities assist an individual to have a better feeling about the platform or to make better decisions once they approach a problem or an issue. This supportive environment persuades people to interact with peers about many areas in their daily lives (Laurenceau et al. 1998). Social support is multi-dimensional, with different scholars developing various constructs in their studies. For example, it is argued that social support has appraisal, emotional, informational and instrumental dimensions (House 1981). Other scholars categorise social support as both intangible, such as emotional and informational support, and tangible support (Schaefer et al. 1981). Social media has facilitated social interaction of individuals in online communities; the nature of these interactions is virtual and is based on messages containing social support, emotional support and informational support (Madjar 2008) in [4].

The challenges that are often faced in the Citarum community, often the existence of communities and formal and informal community leaders, experience changes in orientation and habits in everyday life, mainly due to economic pressure and the influence of globalization in the era of free markets. The decline in the values of mutual cooperation and / or morality of power, has long been suspected to be massive in various social elements of life. Instead of managing and or handling river pollution. The low quality of education and skills, more difficult it is to solve the problems around the Citarum watershed. And this condition is used by the industry to act and act less responsibly in the management and preservation of the environment.

Environmental communication as a communication strategy and or concept of rules so that people who receive communication can understand what they personally have to do to protect the environment, understand what the government or environmentalists do to prevent flooding and improve environmental quality, and be careful against threats to human health and the environment.

Robert Cox (2006) in Jurin et.al. (2010) defined environmental communication: “Informal – a study of the ways in which we communicate about environment, the effects of this communication on our perceptions of both the environment and ourselves, and therefore on our relationship with the natural world. Formal – the pragmatic and constitutive vehicle for our understanding of the environment as well as our relationships to the natural world; it is the symbolic medium that we use in constructing environmental problems and negotiating society’s different responses to them” [3].

4. Conclusion
Based on the research, the attitudes and actions of communication between citizens, citizens and community leaders, as well as those related to the bad conditions of the Citarum River are increasingly important. Awareness of each individual or group of sustainable citizens is the key to building a bottom-up communication environment. The form of persuasive communication environment based on citizen awareness, of course requires assistance, persuasion and intervention from regional or central elites, environmental care communities or NGOs in a synergistic and sustainable manner. Likewise with the existence of manufacturing, agriculture, animal husbandry, etc., a persuasive and solutive communication approach is needed to no longer dispose of waste into the river, as the industry's responsibility in maintaining the health of the river environment and its citizens. In terms of the conversion of agricultural land or forests that have been so damaged, of course, a persuasive communication approach is needed gradually to find a joint solution between the government and the farmers in overcoming the negative impacts on the Citarum River. And this program is certainly not
easy, because the lives of farmers who rely heavily on land for long-term livelihoods, a land conversion program is needed with appropriate and professional solutions, so as not to lose their livelihoods.

5. References
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