

# Community Participation Helps Government in Flood Disaster Management

**Dr. Dewi Sulistyani, MM., M.Si**

Fulltime Lecturer in Satyagama University

**Abstract-** Flood is a major problem in DKI Jakarta and it reoccurs every year, resulting in material losses and disrupts business activity in this capital city of Indonesia. It is the obligation of governments to cope with the flood problems so the loss is minimized. The purpose of this research is to find a model of community participation that can help the government to overcome the floods in DKI Jakarta.

This research used quantitative approach, with population of 1.613, 321 samples and linear regression model with coefficient of determination technique analysis.

The results of this study showed that community participation can influence the effectiveness of flood disaster management in DKI Jakarta up to 61,76%. That's why the society must be empowered and given a space to participate by taking into account economic factors, political, social, culture and education. They must also be given the knowledge and regular training and ongoing in handling the flood disaster.

**Index Terms—** Community Participation, Flood

## I. INTRODUCTION

DKI Jakarta as capital and center of economic activities has been facing high urbanization rate. This condition also create an increase on demand for housing property which resulted in increase on urbanized area and the change of the use of land to meet the housing demand. DKI Jakarta Provincial Government has made some efforts to control flooding and waterlogging, including to curb illegal buildings in watersheds, reservoirs and water catchment areas, river normalization, as well as the operation of the pump in the sluice in some areas standalone or interconnected polder areas.

The community should be involved and contribute for their local development. In order to participate in flood disaster management, public should have adequate knowledge regarding to this subject. It is part of the task of the local government, to improve public ability and create a climate that allowing for public participation which could assist governments in flood disaster management. The main objective of the participation is to bring all of the interests from parties that would be affected by the policies to be implemented into policy formulation design process. The inclusion of public participation that is manifested in the results of the planning can have substantive advantage, where public decisions taken will give a sense of satisfaction and strong public support towards the implementation. Public involvement in the process of determining public policy that can provide strategic value for the community itself to be one of the important conditions for development of political, economic, social and cultural.

Participation as a concept in the development of society in general and widely used. Participation is a central concept and basic principle of community development, effective development requires participation of all stakeholders from the

initial stages of planning process, formulating the activities that will affect them.

When people involved feel that their participation is important will have an impact on the effectiveness and efficiency of development will increase. Participation is a central concept and basic principles of community development. Effective development requires public involvement from the beginning phase of all stakeholders in the drafting of the activities that will affect them. When Public believes that their involvement in the planning process are important, this would have an impact on increasing the effectiveness and efficiency of the development process.

## II. RESEARCH METHODS

This is an explanatory research with quantitative approach. There are two variables in this research study, namely community participation (X) as an independent variable and a dependent variable of Effectiveness of flood disaster management (Y).

The population used in this research are taken from those who effected by the flood prevention implementation in Jakarta. Sample size of 321 respondents out of 1,613 of total population and data collection methods used is literature study, field research through observation, questionnaire and interviews. Data were analyzed using the following methods: (1) Descriptive statistics (2) Validity and Reliability, (3) Classical Assumption Test (Normality Test data and Multicollinearity), (4) Analyst Determination, (5) Analysis of Linear Regression simple and multiple and hypothesis Testing with t test and F test count. This research was conducted in at DKI Jakarta Province.

## III. DISCUSSION AND RESULTS

Before the findings of the study are discussed, the following section highlights the result of the tests to examine the data.

### 1.1. Reability Test

To see the coefficient reliability of the questioner's, Alpha Cronbach was calculated by using SPSS, the results of reliability test for community participation (X) has  $\alpha = 0,776$  and Effectiveness of flood disaster management (Y) has  $\alpha = 0,721$ . From the results, it can be seen that the questionnaires used for each variable are reliable, because all their coefficient reliability is higher than 0,6.

### 1.2. Validity Test

The validity of each point in the questionnaires was calculated by using "product moment" correlation technique. From 15 questionnaires responded by 321 subjects ( $n=321$ ),  $\alpha$  value was 0,05. If we compare this value of  $r_{table}$  which is 0,088, it can be concluded that each point in the instrument of all variables were valid (0,181-0,633). Community

participation (X) value was (0,230-0,633) and Effectiveness of flood disaster management (Y) value was (0,181-0,523).

### 1.3. Hypothesis Test

Based on the results of testing the hypothesis by using SPSS 16 for Windows, the obtained results of hypothesis testing calculation as follows :

$$\hat{Y} = 3,03 + 0,274X$$

### 1.4. Discussion

According Britha Mikkelsen (1999: 64), public participation is a form of community activities that arise as a logical consequence of the existence of awareness toward responsibility that related to their own self-interest, in addition, public participation is also a form of success public empowerment concerning the implementation of a program, or a specific action, in which the process of such implementation are related to public interest. On the basis of this theory, public should participate in the government process in creating the policy that addressed the flood control. This is also reinforced by Yusoff and Ghazali (2003: 5-6), the progress of public participation is in line with changes to the political structure of the democratic system. Where in the democratic system that gives enough room for public to actively participate in government project, the civil society can be realized. Every citizen is a part of a local community, as the owner of sovereignty, everybody has the right and duty to take part in the process of life as society, nation and state. Taking part in those processes is called participation, and participation can be done directly or through intermediary institutions such as the Regional Representatives Council (DPRD), Non-Governmental Organization (NGO). Participation given can be in the form of ideas, funds, manpower, and tangible or intangible goods. Participation of citizens do not occur only at the implementation stage of decision process, but throughout all stages of process, from the beginning stage of planning, formulation, implementation, evaluation, as well as the utilization of the results (Wasistiono, 2002: 33).

The Law of Popular Participation Bolivian that very existence of territorial organization of citizens (a sort of pillar of citizens (RW) in Indonesia). The rule even has the right to freeze public mandated by the government (local) if governments do not execute the decisions of citizens who run participatory (Thamrin, 2001). It means that public can supervise the construction and development on the neighborhood since they have the authority to deny any activities that are not confirming with the goal of programs, in our case flood control.

In order for the people can participate effectively, then the government must empower the locals by providing education, training and professional adviser regarding issues on healthy living, good environmental governance, the causes and consequences of flooding. It is important for society to well understand about this subject, so that they have self-awareness to encourage them self to turn bad habit into good habit that could help flood prevention programs. It's also important is to do the development transparently and provides clear information of program that taking place. With this information combines with dialogue with locals will remind each other if any development activities vulnerable to cause flooding.

With the public involvement, the government will obtain information on various problems that occur in society which could help the government in creating effective development and flood disaster management policy. By involving the locals,

it will helps during the implementation process of the policy since it's based on their needs, with that practice will also encourage people to be more participative in the locals development.

In choosing the participatory methods also need to consider the situation of activities and who should participate. Cultural background and the level of participation will determine the effectiveness of a method. By forcing a method that is not appropriate or wrong doing in its application, it could backfire and not producing the results as expected by the participant (Sumarto, 2004: 190-191). Participatory techniques that could be done are to have a dialogue interaction, workshops, public meetings, disseminate information through newspapers, social media and press conference.

The benefits of community participation are:

1. By involving the public to participate in policy-making will improve the quality of the policy because the decision will be good and right;
2. With effective community participation will be obtained main priority needs and interests of local communities;
3. Invites the public to participate is a political strategy to influence, to provide ideas, or to make an innovative society;
4. Public participation is also used to find and maintain a commitment to social justice (equity, access, participation and all the rights);
5. Public participation is also used to build citizenship, which is to allow a person to be able to have a say over decisions that affect their lives.

Model policies with community participation:

1. Public are not separate in the final decision-making process;
2. Giving priority to the principles of democracy and every citizen has the right to give his opinion and participate;
3. Provides power and control to local communities in managing the flood disaster management process;
4. Provide the capability through the provision of knowledge, training and empowerment in terms of flood disaster management to the public;
5. Improve the quality and effectiveness of local community participation in accordance with the needs and local conditions;
6. Involve and coordinate with various parties related to the Management of flood disaster;
7. Looking for problem solving together with stakeholders especially community.

Community participation should be composed of various parties in order to contribute the maximum in flood disaster management. Participants should be involved are:

1. Employees flood disaster management;
2. Experts in the field water management;
3. Experts in the field of mitigation of water-related disaster;
4. Head of policy and decision makers;
5. Water Users city both companies and the community;
6. Experts in the field of urban planning and governance inundated;

7. The Regional Representatives Council (DPRD);
8. Non-Governmental Organization (NGO).

Community participation could contribute optimally to the government in tackling flooding if;

1. Dialogue is done by involving the various elements of society, both entrepreneurs, developers, politicians and special interest groups and government authorities;
2. Have one common goal which is flood control;
3. Creates an effective two-way communication and practice mutual respect for different opinions;
4. Always take into consideration local wisdom, social, cultural, economic and level of community education;
5. Dialogue between locals and government should be conducted regularly and frequently at every stage of planning process and always creates an official report about any findings out of each dialog transparently;
6. Build a sense of belonging and togetherness regarding the decision made by community;
7. Collaborate with all parties that have influence on the development and onset of flooding;
8. Always open to suggestion from all stakeholders;

Problems that could arise during the public participation process are:

1. The process of dialogue with the public participant can be a very time-consuming and inefficient, so in the end the decision was made by experts or third party;
2. It is possible that participant unable to focus with the subject in hand, flood control, and always relates it with other irrelevant local's issues;
3. In the situation where there are many diversity in local community, could raises diversity of interest that could create local's conflict;
4. Lack of trust, thus creating an opinion among locals about the possibility of the loss of control of development to the government agencies, developers and Politicians;
5. The inability of negotiators to change the culture and behavior of society to support government programs;
6. The developers and politicians are more concerned with profit and their objectives because they thought their goals are the best objectives for the locals;
7. The government tends to agree with the developer and politicians objectives because the government considered them to be more experts and professional than the local societies.

For the community who wish to participate in flood mitigation but had many doubts caused by lack of knowledge or feel disadvantaged even harmed by flood disaster management, they should be given more insight and understanding simple but clear of flood mitigation. In this case we can ask for help to the community in order to entrust the government to deal with Flood disaster management and support the program with the participation.

Based on the experience at the time of the flood disaster occurs, people help each other to rescue goods, children, women, the elderly, the disabled, the animals in different ways and be successful. But with a meeting with the flood disaster

management for the exchange of information and communication needs can be known what is needed flood mitigation and additional data to address and solve the general public. Thus, success in flood mitigation would be maximized.

Disaster management agency owned by the government should establish a "disaster committee" consisting of local community in the smallest community level. This will make it easier to get volunteers when needed. The disaster committee also provided training and information about flood mitigation, safety instructions, real-time data about the dangers and damages that may arise, as well as information about available shelter, food, and water. Must be done routinely and periodically. The training can provide the ability for the community to rescue or aid, intervention in case of emergency (material preparation assistance and facilities, lessons on basic safety rules for the rescue). Disaster committee is responsible for informing the public about the dangers that exist in order to avoid fear and panic when a disaster occurs.

Community participation is incorporated in Disaster Committee to cooperate with the government in Flood disaster management such as:

1. Rescue Effort: detecting the presence of victims who have not been helped, locate victims, and how they can be reached and saved?
2. Clean water supply: where there is a source of clean ait that can be used, who is in need? and how to transport and distribute?
3. Shelter: locations are most suitable as a shelter and no where? Eligibility information from a shelter that is provided with the actual needs of the population?
4. External assistance: what is needed and how the coordination mechanisms that need distribution to the affected people?
5. Communication: release information before and after the state of infrastructure affected by the floods. (Roads, telephone lines, radio)
6. Transportation provides transportation information what can be provided? What is the priority of transportation?

#### IV. CONCLUSION

Community participation could help government in the flood mitigation. This is supported by research showing that community participation can influence the effectiveness of flood disaster management in DKI Jakarta up to 61,76%. The community should be empowered by the government in the development process. In order for the community to effectively participate and provide assistance to the government, they should be given education regarding of the floods, environment, health, local development and the democratic system and also the government should give a clear guideline to the public on how to participate in flood control programs. As for the community participation in flood disaster management to be effective it is necessary to have the proper method by taking into account the state of social, cultural, political, economic and educational level of the local community.

#### V. RECOMMENDATION

It is recommended for the government to provide professionals as advisor or mentor for the locals to ease the

process of participation and government should sincerely acknowledge and concerned of local needs and should treat their opinion as part of solution. The government should prepare the public in the face of floods and flood control, by providing locals with structures that could minimize impact of the flood. Socialization and provision of intensive and systematic information to the public about the role that can be done in flood control, especially regarding non-structural aspects, through an approach to the public either individually or as a group.

#### REFERENCES

- [1] Budi Winarno, 2005, *Kebijakan Publik: Teori dan Proses*, Yogyakarta : Media Pressindo.
- [2] Dror, Yehezkel, 2000, *Public Policy-Making Reexamined*, San Francisco: Chandler Publishing Company.
- [3] Indra L, 2003, *Otonomi Daerah; Evaluasi dan Proyeksi*, CV. Trio Rimba Persada, Jakarta.
- [4] Islamy Irfan, 1997, *Prinsip-prinsip Perumusan Kebijakan Negara*, Jakarta : Bumi Aksara.
- [5] Joko Widodo, 2008, *Analisis Kebijakan Publik: Konsep dan Aplikasi Analisis Proses Kebijakan Publik*, Malang : Bayu Media Publishing.
- [6] Korten, David C, 1996, *Pembangunan Berdimensi Kerakyatan*, Jakarta: Yayasan Obor Indonesia.
- [7] Mikkelsen, Britha, 1999, *Metode Penelitian Partisipatoris dan Upaya-upaya Pemberdayaan*, Jakarta : Yayasan Obor Indonesia.
- [8] Muhadam, Labolo, 2006, *Ilmu Pemerintahan*, PT. Raja Grafindo Persada, Jakarta.
- [9] Osborne, David, dan Ted Gaebler, 1992, *Reinventing Government, How The Entrepreneurial Spirit is Transforming The Public Sector*, Addison – Wesley Publishing Company Inc.
- [10] Rochman, 2001, *Ilmu Pemerintahan*, Jakarta : PT. Raja Grafindo Persada.
- [11] Rosenbloom, David H & Kravchuk Robert S, 2005, *Public Administration: Understanding Management, Politics and Law in the Public Sector*, Boston: Mc Graw-Hill Book Company.
- [12] Salam, Darma Setyawan, 2007, *Manajemen Pemerintahan Indonesia*, Jakarta: Rineka Cipta.
- [13] Sumarto, Hetifah, Sj, 2004, *Inovasi, Partisipasi and Good Governance : 20 Prakarsa Inovatif dan Partisipatif di Indonesia*, Yayasan Obor Indonesia, Jakarta.
- [14] Suradinata, Ermaya, 1998, *Manajemen Pemerintahan dan Otonomi Daerah*, Bandung : CV. Ramadhan.
- [15] Tachjan, 2006, *Implementasi Kebijakan Publik*, Bandung: AIPI.
- [16] Thamrin, 2001, *Catatan Pembuka; Pentingnya Partisipasi Dalam Proses Pengambilan Keputusan Publik. Dalam Perencanaan Partisipatif; Pendekatan Baru Untuk Local Good Governance*, Buku Seri Perencanaan Partisipatif. Logolink International Workshop; IDS-IPGI-The Ford Foundation. IPGI SEKNAS.
- [17] Wayne, Parsons, 2006, *Public Policy : Pengantar dan Teori Praktik Analisis Kebijakan*, Jakarta : Kencana Prenada Media Group.
- [18] Wijaya, H.A.W, 2007, *Penyelenggaraan Otonomi di Indonesia*, Jakarta: Raja Grafindo Persada.
- [19] Yousa, Amri, 2007, *Kebijakan Publik, Teori dan Proses*. Laboratorium Pengkajian Penelitian dan Pengembangan Administrasi Negara, Bandung: FISIP Padjadjaran University.
- [20] Yusoff dan Ghazali, 2003, *Partisipasi Publik*, Erlangga, Jakarta.

#### RESEARCH RESULT

Heryanto, 2015, *Pengaruh Implementasi Kebijakan Pemda, Profesionalisme Sumber Daya Manusia Dan Anggaran Serta Partisipasi Masyarakat Terhadap Efektivitas Pembangunan Infrastruktur Dalam Rangka Mengatasi Banjir Di Provinsi Khusus Ibukota (DKI) Jakarta*, Jakarta : Satyagama University.