

# Analysis of the Influence of Public Participation in the Management of Resources Sustainable Water Malang District

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**Abstract** — Water is a major part of the Earth. It is also an important part of life on Earth. It is a natural resource that has limited of both quality and quantity to meet human needs. Based on a survey conducted in the village office, data showed that there are some areas experiencing drought, this area includes four sectors. The purpose of the research is to show influence of public participation in the management of resources sustainable Malang district. The research was conducted in November, 2015 in Malang district. The population is the whole Karangkates village population in Malang district. The sample was 30 people using cluster sampling. The Research instrument is closed questionnaire. Data were analyzed quantitatively in the cross tabulation done by statistical testing with linear regression statistical tests. In conclusion, there is a significant influence of public participation on the management of sustainable water resources in Malang district according to the regression model y= 6,739 + 1,299x with 51.9% reliability models.

Keywords— management, participation, resources, sustainability, water.

#### INTRODUCTION

Water is major part of the Earth. Water it is also an important part of life on Earth. Water it is a natural resources that has limited of both quality and quantity to meet human needs. The limited of water quality is the quality unfit for use or human consumption [1]. Improper use of water can cause a negative impact on the level of human health. Waer consumption which do not meet health standards can bring a variety of dangerous diseases among cholera, diarrhea, malnutrition, as well as various other diseases that affect the human's physic and psychology[2].

Based on a survey conducted in the village office, data showed that there are some areas experiencing drought, this area includes four sectors. Seen from the level of dryness RT 11 experiencing the most severe drought, this was due to the dry season, the lack of adequate water resources, and the realization of water reservoirs not yet implemented.

The coverage area of the research in Karangkates village, Sumberpucung, Malang district. The location decision is based on a history of droughts that occur every year in the dry season.

Based on introduction, this research take formulation problem, what there influence between public participation in the management of resources sustainable water in Karangkates village, Sumberpucung, Malang district?

The purpose is to know the influence of public participation in the management of sustainable water. This research is expected to help the public to manage water in a sustainable manner to deal the droght in they

## **METHODS**

The research use descriptive quantitative method which supported with qualitative method and cross tabulation method. The research consisted of: introduction survey, primary data based on the type of public participaton, followed by data processing and analysis. To obtain primary data was collected using a questionnaire data techniques

The research was conducted on Sunday, November 1, 2015 in Karangkates village, Sumberpucung, Malang district. The population in this study is the whole Karangkates village. The sample in this study was 30 people. The sampling technique is cluster sampling. The Research instrument is closed questionnaire. The data collection technique is questionnaire.

## RESULTS AND DISCUSSION

Primary data obtained from the questionnaires will be processed and tabulated. Then, statistical testing performed by simple linear regression statistical test.

**Normality Test** 

Normality test will be positive if the value of Sig > 0,05, based on the test the value of Sig. higher than 0,05. This result show that data of public participation and water resources management is normal distribution.



Picture 1 Research place in Karangkates village, Sumberpucung, Malang district.

## Simple linear regression test

Hypothesis: there is a significant relationship between influence of public participation in the management of resources sustainable water in Karangkates village, Sumberpucung, Malang district.

		Model St	ımmary <sup>b</sup>		
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	,721ª	,519	,502	3,46854	
		ANO	VAª	<u> </u>	

Mode	el	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	363,805	1	363,805	30,240	,000b
	Residual	336,862	28	12,031		
	Total	700,667	29		,,	

Model		Unstandardize		Standardized Coefficients		Sin.
Mode	(Constant)	6.739	Std. Error 7,470	Beta	.902	Sig. .375
i.	Public Participation	1,299	.236	,721	5,499	.000

Based analysis show that the value of Sig. is 0,00, this means Ho rejected. Therefore, there is a significant relationship between influence of public participation in the management of resources sustainable water in Karangkates village, Sumberpucung, Malang district, according regresion model y= 6,739 + 1,299x with reliability model 51,9 %. This mean management of resources sustainable water (y) can be explained by public participation (x) according regression model y= 6,739 + 1,299x with reliability model 51,9%, while the rest 48,1% caused by other factors.

Management derived from the word to manage that means control in Indonesian language mean mengendalikan, menangani atau mengelola[3]. There are many opinions of experts about the notion of management, including by John D millet he says management is process guidance and facilitation of the work to people who are organized in formal groups to



achive goal. James A.F. Stoner dan Charles Wankel giving a maximum limit of bahwasannya management is the process of planning, organizing, leadership, and control efforts of members of the organization and use of all the resources of other organizations in order to achieve organizational goals [4]. Paul Hersey dan Kenneth H. Blanchard limit management as a business that is done and together individuals or groups to reach the goals of the organization [5].

From the definition of management that has been described, it can be concluded that the feed management is the process of planning, organizing, and implementation of the feed to obtain maximum results.

Definition of public participation is community participation is defined as participation, the involvement of community members in a particular activity, either directly or indirectly [6]. Sastroepoetro, argued that this form of public participation in the form of:Mind

The mind is a kind of participation in the first level where such participation is participation by using the mind of someone or a group that aims to achieve something to be desired,

Power

Power is the kind of participation at the second level where such participation by utilizing whole owned power groups and individuals to achieve something to be desired,

Thought and effort

Thought and effort is a kind of participation at third level where the participation rate is done together as a group to achieve the same goal,

Expertise

Expertise is the kind of participation at the level of the fourth which case the skills to be the most desirable element for determining a desire,

Good

Goods are the kind of participation at the fifth level of participation Diman done in an item to help to achieve the desired goal, and

Money

Money is the kind of participation at the sixth level of participation which is using money as a tool to achieve something to be desired. The participation rate is usually done by those among the top [7].

From the research that has been done in sustainable water management in the village Karangaktes, Sumberpucung Malang regency is influenced by several factors, including internal factors and external factors. Internal factors include the form of individual behavior, the behavior is determined by sociological characteristics just as age, sex, knowledge, dependents, employment, and income [8]. Theoretically there is a relationship between the behavior of individuals with Tertiary participation. The greater the number of family burden caused time to participate in activities will be reduced because most of the time used to make a living in order to meet the needs of families. In addition, the length of these people live in an area will also affect a person's participation, because the person is already close to their communities. External factors can be said to be the bettor (stakeholders), which all stakeholders and have an influence on this program. The key influence is whoever has a very significant influence, or have a position critical to success of programs like companion team, socialization by the organizers (officer or village leaders)

Respondents were male sex as much as 69% of respondents selurih contained in this study, men have more than the role of women. Job or livelihood of a community are aspects that can be the size of income for someone. The better a person's job, his income will increase. Income is what will affect people's participation.

According Raharjo (1999), community-based management implies direct community involvement in

managing water resources regardless of sex society in a region. Managing means that people come to think, formulate, plan, implement, evaluate and monitor something that became his needs [10].

The results showed that public participation significantly influence sustainable water management in the village Karangkates. In was observed that the average - average people who participate in sustainable water management aged 25 and up.

Results of a previous study conducted by Bahagia (2009) shows, community participation in monitoring, control and evaluation can be done well by their advocacy and community empowerment were either done by the providers rehabilitation program that ultimately the sustainability of rehabilitation outcomes can be maintained until the stage standalone or has been able to release growth [11]. In accordance with the opinion of Sudarmadji (2001) which states that public participation in the activities of monitoring, control and evaluation is a form of real assistance that has been done to build a sense of ownership of the community [12].

The results of the study shows that education is not a significant influence on community participation in the management of water resources in a sustainable manner. This mean the level of public participation is not affected by the level of public education [13]. The level of education in conjunction with the mindset, attitudes and human behavior in everyday activities, the level of education can be viewed as one of the indicators that determine the level of public education or greatly determined the revenue level of the motivation and innovation in order to carry out the implementation of the program.

Human with the profession are required to have special skills or competence where it is greatly influenced by the level of formal education that had taken. Formal education is meant Formal education level according proposed by Ahmadi (2001) that formal education is education that takes place regularly, multilevel and follow certain requirements are strictly [14].

The strength of a person's behavior to participate in such a state can be described by a weak or absence of underlying impetus. There are at least two inhibiting factors to increase public participation in Indonesia, Hadi (1982) says that social and cultural factors [15]. Sociologically, low levels of education and limited access to information will affect the level or levels of participation.

Firmansyah (2010) says that growing participation in society is influenced by many factors [16]. It can be separated from each other because of a person's job will determine how much income will be earned. Job and a good income and meet daily needs can encourage people to participate in community activities. The sense is that to participate in an activity, must be supported by well-established atmosphere economy.

Disadvantages of this study, the sample taken is too small because it is constrained by the limited research time and the difficulty in finding the sample is representative. The solution that before distributing the questionnaire, the sample will be given a questionnaire given simulation and socialization related to the research to be carried out.

## **CONCLUSION**

Based on the analysis and discussion can be drawn the conclusion is public participation can influence the management of water resources in a sustainable manner in the Village Karangkates Sumberpucung District of Malang. Forms of community participation including at the level of partnership participation in the management of sustainable water resources in the district of Malang, participation in the form of property, labor, skill, a thought and participation in the form of social. Factors



that affect the community participation in the management of sustainable water resources in the village Karangkates Sumberpucung District of Malang that type of work, age and while faktorlain such as gender, education level, and income levels are less influential on community participation.

## **REFERENCES**

- [1] Unicef. Air Bersih, Sanitasi & Kebersihan. Jakarta : Unicef Indonesia. 2002.
- [2] Gleick, P.H. The World's Water 2000-2001: The Biennial Report on Freshwater Resources. Washington, D.C.: Island Press. 2000.
- [3] Herujito, Yayat M. Dasar- dasar Managemen. Jakarta: Gramedia Widiasarana Indonesia. 2001.
- [4] Stoner, James A. F. & Wankel, Charles. Management 3rd Edition. US: Prentice Hall. 1986.
- [5] Siswanto, H. Pendidikan Kesehatan Anak Usia Dini. Yogyakarta: Pustaka Rihama. 2010.
- [6] Kahdyanto, Ahmad. Manajemen Dasar. Jakarta: Erlangga. 2007.
- [7] Sastropoetro, Santoso. Partisipasi, Komunikasi, Persuasi dan Disiplin dalam Pembangunan Nasional. Bandung: Alumni. 1988.
- [8] Slamet, Y. Pembangunan Masyarakat Berwawasan Partisipasi. Surakarta: Sebelas Maret University Press. 1994.
- [9] Sunarti, Sunarti. How is a Strategy For Sustainability of Coastal Slums Area in Rembang City, Rembang

- District?. In: International Conference Sustainable Slum Upgrading in Urban Area, 16 April 2009, Univeritas Negeri Surakarta. 2009.
- [10] Rahardjo. Pengantar Sosiologi Pedesaan dan Pertanian. Yogyakarta: Gadjah Mada University Press. 1999.
- [11] Bahagia. Peran Pemerintah Daerah dan Partisipasi Masyarakat dalam Rehabilitasi Hutan Mangrove Pasca Tsunami di Kecamatan Baitussalam Tahun 2008. Tesis. Sekolah pasca sarjana Universitas sumatera utara. Medan. 2009.
- [12] Sudarmadji. Rehabilitasi Hutan Mangrove dengan Pendekatan Pemberdayaan Masyarakat Pesisir. Jurnal Ilmu Dasar. Vol. 2 No.2: 68-71. 2001.
- [13] Pribadi, Krishna Nur., Oktavia, Putu. Pengelolaan Sumberdaya Air Terpadu Melalui Pengembangan Kebijakan Pembangunan Berkelanjutan di Cekungan Bandung. Bandung: Jurnal Perencanaan Wilayah dan Kota. Vol 18 No 2. 2007.
- [14] Ahmadi, A. Ilmu Pendidikan. Jakarta: Asdi Mahasatya. 2001.
- [15] Hadi, Sutrisno. Metodologi Research. Jakarta: Gramedia Pustaka. 2001.
- [16] Firmansyah, Dhony. Menjadi Pemenang Kehidupan. Penerbit: Leutika. Yogyakarta. 2010.