Community Participation in Infrastructure Reconstruction after Earthquake, Case Study of Community Action Planning (CAP) in Yogyakarta City, Indonesia

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1. Introduction

An earthquake with 5,9 of Richter scale, one of the damaging earthquakes experienced in Indonesia, hit Yogyakarta in May 27, 2006. It destroyed a lot of residents' property. Data until July 24, 2006 shows that, in Yogyakarta city, 6,095 houses were completely damaged, 8,408 houses were heavily-moderately damaged, 15,364 houses were slightly damaged, and 218 people were killed¹⁾. In order to reconstruct and rehabilitate this desperate condition considering insufficient government resources, GTZ, an international NGO, in cooperation with some local NGOs initiated to introduce "Community Action Planning (CAP)", a newly known method in Indonesia to promote participation. The reconstruction had been well done. After the CAP, the Chairman of Supervisory Committee of Disaster Handling said that Yogyakarta could become a model and the best example

for other regions in carrying post disaster management²⁾ (21/6/2007). However, in Indonesia, practitioners for public participation are still in hard effort seeking the better method. They argued that the current method by the government has been unsatisfactory to the people. In addition, the method failed to encourage and improve the level of public participation in most development programs.

Based on the above discussion, the purpose of this paper is to measure the level of community participation in CAP program, because it is presumed to be a factor contributing to effective infrastructure reconstruction process. To get comprehensive evaluation of all CAP operations in Yogyakarta City, the cases of three villages, Karang Anyar, Purbayan, and Pandeyan, are studied. Those are the only locations of CAP in Yogyakarta City.

2. Feature of Village and Program

Karang Anyar is located in Brontokusuman sub-district of Mergangsan district, Purbayan is in Purbayan sub-district of Kotagede district, and Pandeyan is in Pandeyan sub-district of Umbulharjo district. These three villages, so-called "kampung" in the traditional administrative zone system in Yogyakarta, historically relate to the Mataram Empire's system, are the CAP areas in Yogyakarta City (see Figure 1). In present system, "kampung" can

YO GYAKAR TA CITY

KARANG

KAKANG

KAKANG

KAKANG

KAKANG

PANDEYAN

PERBAYAN

Figure 1: Map of Research Location

cover one, two, or more RWs (sub-village), or even one sub-district. This is also one of prerequisites of choosing CAP location, because factually in daily life, socially and culturally the kampung residents have much in common. Thus, CAP covers two RWs with 224 households in Karang Anyar, two RWs with 2,077 households in Purbayan, and only one RW with 225 households in Pandeyan. The main events of CAP in all villages were similar, i.e.: making village miniature, drawing the dream of village, workshop, and infrastructure construction. Meanwhile, the date, duration, and participants of each event are

different from one village to another. The features of the villages and the program are summarized in Table 2 and Table 3, respectively.

Table 2: Feature of the Villages

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Villlage	Karang Anyar	Purbayan	Pandeyan		
Subdistrict (SD)	Brontokusuman	Purbayan	Pandeyan		
District	Mergangsan	Kotagede	Umbulharjo		
SD's-Population	12.916	9.670	13.741		
SD's-Household	2.392	2.077	3.858		
SD's- width	0.93 (ha)	0.83 (ha)	1.38 (ha)		
CAP coverage: area	RW 18 & RW 19	RW 05 & RW 06	RW 03		
household	224	2.077	225		
Kampong name	Karang Anyar Lor	Bumen-Paseko	Pandeyan		

Source: Pemerintah Kota Yogyakarta and GTZ, 2007

Location	r ear	Month	Events	Actor	Participants
Karang Anyar Lor,	2006	November (14-17)	Making village miniature (mock-up)	Community	12-17 persons
a Kampung of		November (15)	Drawing the dream village	Community (children)	35 persons
Brontokusu man		November (18-20)	Workshop	Community & NGOs	87-85-80 persons
	2006 2007	January to July	Community Action for Reconstruction	Community & NGOs	Not recorded
Bumen- Paseko,	2007	February	Making village miniature (mock-up)	Community	7-11 persons
a Kampung of Purbayan		February	Drawing the dream village	Community (children)	28 persons
		February (25-26)	Workshop	Community & NGOs	85-100 persons
		May (start) to September	Community Action for Reconstruction	Community & NGOs	Not recorded
Pandeyan, a Kampung	2007	February (end of)	Making village miniature (mock-up)	Community	7-10 persons
of Pandeyan		February (end of)	Drawing the dream village	Community (children)	43 persons
		March (3-4)	Workshop	Community & NGOs	95-84 persons
		July (start) to	Community Action for	Community	Not recorded

Table 3: List of Major Events of CAP

Source: GTZ-GLG and Yayasan Pondok Rakyat (YPR), 2007

3. Survey and Result

In order to meet the above purpose, the L survey was designed based on the theory by

Sherry R. Arnstein³⁾. According to her, participation are classified into 3 levels, citizen power, tokenism, and non participation. This theory is appropriate to analyze the level of community participation seeing power redistribution among stakeholdelrs. A questionnaire was set to ask respondents' agreement on certain statements (see Table 4) with the alternative answers: "strongly disagree, disagree, agree, and strongly agree. The statements which reflect a typology of eight rungs of participation, may help analysis of power redistribution in development process. The questionnaire survey were conducted from July 21st to August 24th, 2008. The respondents were chosen from the households, using simple random sampling technique. The number of

respondents is 58, 59, and 55 in Karang Anyar, Purbayan, and Pandeyan, respectively. Analysis was made on active and non-active participants, which are categorized based on their answer to a question in the questionnaire: did you actively involve in Community Action Planning (CAP)?, because there will be active and non-active participants and both will have different perception about participation or CAP. The result is shown in Figure 2 and 3.

Evaluation of statements 1 to 5 in three cases shows respondents significantly chose "disagree". It means that the power redistribution within those statements was not happened in CAP. Meanwhile, for statements 6 and 7, the graphs show the respondents mostly chose "agree", excluding respondents of non-active participant in Karang Anyar, and for statement 8, the answers are in balance between "disagree" and "agree", whereas respondents in Pandeyan and those of non-active participants in Karang Anyar answered "agree", others did "disagree".

In Pandeyan, citizen participation reached the highest rung, because either active participant or non-active participant give the same answer "disagree" to statements 1-5 and "agree" to statements 6-8. It means that even though there is discussion or negotiation between community and government or NGO (in this case, much more between community and NGOs), community had dominant authority in decision making. The discussion or negotiation represents the dynamics of decision making

Table 4: List of Statements Evaluated by Respondents

No	Statements
1	The presence of community in program was
	only a formality for government or NGOs to realize their task or duty
2	In the program, community was engaged in
-	extensive activity, but considered as an object of
	development.
3	The community was just informed about the
	projects by local government or NGOs, but has
	no chance for feedback and negotiation.
4	Community gave their ideas and opinion about
	the project but community ideas would not be
	taken into account by local government or NGOs
5	Community gave their ideas and opinion about
	the project but only a little bit of their ideas
	would be taken into account by local
	government or NGOs.
6	Every activity in the project was the results of
	discussion among community and local
-	government or NGOs.
7	There is negotiation among community and
	NGOs or local government in determining activity in the project but community has
	dominant decision-making authority.
8	The activity in the project was determined by
U	community themselves without any intervention
	from local government or NGOs.
	nom local government of 1100s.

process in which the community initiated a plan and NGOs gave sufficient information and guidance about it. Thus, discussion or negotiation is not a kind of NGO's intervention in decision making, because finally community did it realizing its

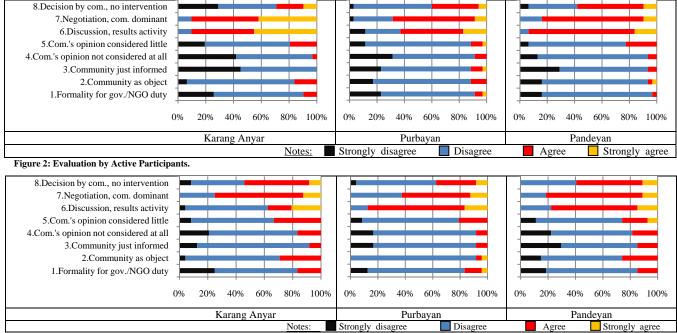


Figure 3: Evaluation by Non-Active Participants.

consequences. In Karang Anyar, the non-active participants mostly chose "disagree" for statement 6 and "agree" for statement 8, while the active participants chose "agree" for statement 6 and "disagree" for statement 8. It indicates that not every activity in the project was the result of discussion between community and NGOs. But whenever there was discussion, still decision making is eventually done by the community. In this regard, community achieved the highest rung of the participation ladder. On the other hand, active participants evaluated that every activity is resulted from discussion or negotiation between community and NGOs and there is NGOs' intervention in decision making, but community also have dominant authorithy in it. Though the answer is different between active and non-active participant, still power redistribution ranked the level of citizen power. Meanwhile, the evaluation in Purbayan is similar to the active participants' of Karang Anyar.

4. Conclusion

This paper aimed at measuring the level of community participation in CAP for infrastructure reconstruction after the earthquake in Yogyakarta City. The case study of three villages shows that the level of community participation ranked the highest, that is citizen power. In Pandeyan, it achieved the best rung of Arnstein's participation ladder, citizen control, and also in Karang Anyar, if referred to non-active participants' evaluation. However, this circumstance would correspond to the extent of citizens' power in determining the end product, infrastructure reconstruction which was in fact run well.

Reference

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- Arnstein, Sherry R.: A Ladder of Citizen Participation, edited by Jay M. Stein; Classic Readings in Urban Planning, Chapter 8: Housing, Social and Community Planning, McGraw-Hill, Inc., USA, pp. 357-375, 1995.