Reconstruction of Traditional Houses After the Earthquake -Case of Kotagede, Yogyakarta-

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1. Introduction

On May 27, 2006, an earthquake with 5.9 Richter scale destroyed some parts of Yogyakarta Special Territory and Central Java Province. The earthquake caused not only the loss of many human life and their properties but also destructed several valuable heritage buildings. Although the central government with municipal government has paid attention on reconstruction of damaged heritage buildings, the treatment of those buildings is similar to that of ordinary houses. Moreover, even though

central government and municipal government along with NGOs and local communities has done many reconstruction activities, still the process is unfinished three years after the disaster.

This paper aims to investigate the problems of the delay of reconstruction, observing the role of stakeholders. For this purpose, a questionnaire was performed to 60 traditional houses owner. Depth interview to central and municipality government official and NGO's was also conducted.

2. Feature of Kotagede and Reconstruction Program

Kotagede is located in Yogyakarta Special Territory. Some areas belong to Yogyakarta municipality and the other are the parts of Bantul Regency (Figure 1). Kotagede is the oldest district in Yogyakarta, formerly was the capital of Mataram Kingdom. According to the data from Yayasan Kantil (a local NGO's for traditional house preservation in Kotagede), there are about 170 traditional joglo roof houses built from 1700 to 1930. Indonesian law number 5, 1992 stated that heritage building is an artifact that attains the age of minimum

50 years and has important values in the history, science and culture.



a). After earthquake source: OPKP





Figure 2: Reconstruction process

Table 1. Criteria of damage level

Type of damage	Criteria		
	Major damaged	Moderate damaged	Minor damaged
Structural damage	More than 40 %	20 % - 40 %	10 % - 20 %
Architectural damage	More than 80 %	40 % - 80 %	20 % - 40 %

Source: Department of Public Work, 2006

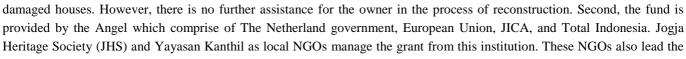




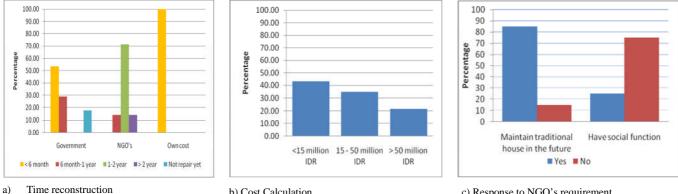
Figure 1. Map of research location.

The data also shows that 21 traditional joglo houses were completely damaged, 25 were major damaged, 75 were moderate damaged and the rest had minor damage or no damage. The central government has categorized the damage level into three criteria as follows: major damage, moderate damage and minor damage (Table 1).

Regarding the fund and assistance for reconstruction of these houses, there are three ways. First, the central government gives subsidy to the owners of the house according to the level of damage, which are 15 million rupiah for major damaged houses, 4 million rupiah for moderate damaged houses and 1 million for minor reconstruction process cooperating with Gadjah Mada University for designing and planning. Those owners who get the grants from this NGOs will get assistance for reconstruction of their houses. Third, the owners of minor damaged repair the traditional house with their own cost.

3. Survey and Result

In-depth interview to key persons in local, provincial, the central government and local NGOs (JHS and Yayasan Kantil) were conducted from June 8th to July 4th, 2009. A questionnaire was set to ask respondents opinion about reconstruction process. The questionnaire survey for the traditional house owners were conducted from August 10th to September 15th, 2009. The respondents were chosen by use of purposive sampling technique. The number of respondents is 60.



Source : Survey August 2009

b) Cost Calculation

c) Response to NGO's requirement

Figure 3 Analysis result

Figure 3a shows the length of reconstruction process, the victims need six month up to one year to rebuild their house. Although they started to repair their house with the government grant, the amount of grant was not sufficient to conserve the houses properly. According to 56.7 % respondents, the cost calculation to conserve damage traditional house is more than 15 million IDR (see Figure 3b). As the result, many house owners used different material to repair their traditional house. They used concrete instead of wood because it easier and cheaper.

On the other side, the NGOs also took part in traditional house reconstruction. In depth interview with key person in JHS and Yayasan Kanthil revealed that they were involved on planning and designing process in the construction process. They also proposed difficult requirement to the traditional house owner. First requirement is promissory note from the traditional house owner, which they will not sell their house in future. Second, the traditional house owners should give the permission to the community to use the house as public space such as community hall. Figure 3c explains the response to NGO's requirement, about 85% respondents desired to maintain traditional houses but only 25% respondents agree to use their house as social facilities. The construction process took time between 1,5 year up to 2,5 year for each house. The construction needs more time than ordinary construction by the central government fund because of the conservation principle and community culture. In Javanese culture, people choose specific day in the Javanese calendar before started the construction and it takes 3 month up to 1 year. Another problem is the difficulty to find special labor in reconstructing traditional house as stated by local NGO's.

4. Conclusion

From the above discussion, we can conclude that:

- a. The reconstruction using the grant from the central government is relatively fast because the model is cash money scheme, but the most consequences of them is to ignore the conservation principle.
- b. The reconstruction supported by the NGOs took more time because:
 - The NGOs give some conditions are a little bit difficult to be fulfilled by the owners.
 - The construction includes cultural values existed in community.
 - Labor who have specialty in repair traditional house are limited.

Reference

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