

Yogyakarta Earthquake 2006 Lessons Learnt through The Recovery Process

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Presentation Outline

- GMU in International Collaborative Action for Recovery Process
- Issues in Recovery Process
- Action in Recovery and Reconstruction Process
- Lesson Learnt



Condition of ruins in Bantul just after the quake in 2006

INTRODUCTION

The importance of GMU in Collaborative Action for Recovery Process

GMU was playing a leading roles in the immediate respond to the recovery process

The earthquake provides many lessons on experiences for academicians to a better understanding in recovery process management

Collaborative studies and actions between GMU, government and International agencies such as JICA, UNDP, World Bank, GTZ, AUSAID, Java Reconstruction Fund (JRF), IFRC provide venue for academicians to collect and review many aspects of recovery process for better action in the future



International agencies involved in recovery process in 2006

Issues in Recovery Process

No	ISSUE	Focus of Issue
1	Shelter	Shelter reconstruction progress; Effectiveness of the shelter reconstruction; Impacts of shelter reconstruction
2	Livelihood	Impact of the earthquake to the livelihood of the people; Impact of reconstruction process in improving the livelihood of the people
3	Environment	Impact of the earthquake to the environment; The damage of important environmental component; Impact of reconstruction process to the environmental issues
4	Governance	The work of government in the disaster management; The effectiveness of the government disaster management ; The effectiveness support of the existing legal framework in disaster management
5	Gender	The awareness on or sensitiveness of recovery process to gender issues

Action in Recovery and Reconstruction Process

No.	ISSUE	WORKED	DID NOT WORK
1	Shelter	<p>Permanent houses refer to good quality and meet an earthquake resistant</p> <p>Since most of people have not been aware in using earthquake resistant guideline, shelter reconstruction program in the reconstruction phase has been becoming an effective media to transform the knowledge of the earthquake resistant houses to the community member.</p> <p>The most community participation based on the Javanese self help culture, known as <i>gotong royong</i>, was obtained when community was allowed to design and build the transitional shelter in accord with their individual needs.</p>	<p>Culture and environmental friendly of the design of permanent houses did not work, The dome house is completely unfamiliar to many of Javanese or Indonesian. This imported dome shape was attracted people because of its uniqueness but there has a doubt to tolerate the dome as their owned culture and questioning the fitness to tropical country.</p> <p>Shelter reconstruction system programs which were conducted in collaboration among GMU, government and International agencies did not work well since in some cases it was against the existing local social and culture.</p> <p>The least community involvement in the program was when the agencies had provided all the materials and required the communities to build their own transitional shelters.</p>



A row of newly rebuilt houses revealing visible concrete frame structures (left) and ring and lintel beams in the interior that follow the recommendations. Pictures taken in early December 2006, seven months after the earthquake, reveal that reconstruction had progressed well ahead of the disbursement of government funding (Jatmika, 2009)



An example of community efforts to reduce construction costs by using old foundations and floors. The reconstruction of this house and many others was started ahead of the disbursement of government funding, and therefore without any technical supervision.



Training of construction workers activities. Implementation of 'Gotong Royong'
(Satyarno, 2009)



Change of Dome Photographs,
(Ikaputra, 2009)

Action in Recovery and Reconstruction Process

No.	ISSUE	WORKED	DID NOT WORK
1	Shelter		<p>Reconstruction programs did not work well since the government did not own an appropriate system in managing recovery process and fit in with what victims needs. The communities actually want to return to their “daily activities” as early as one month after the earthquake</p> <p>In fact only 30% of the affected communities has returned to their “daily activities” in one month and most if not all of them were back to their “daily activities” within six months. Four months after the earthquake 26% households had not received tarpaulins nor had sufficient shelters; 13% of the households had already started their permanent houses reconstructions</p>

Action in Recovery and Reconstruction Process

No.	ISSUE	WORKED	DID NOT WORK
2	Livelihood	<p>The community based reconstruction in general will results in greater satisfaction from the affected communities. It can make the affected community could quickly back to their daily activities and restarting their livelihood in reconstruction process.</p>	<p>Self help program of the victims did not work well in case no compensation for their involvement in the program such as training program</p> <p>As poor people, they were difficult to recover their lost asset. So It should be supported by providing t-shelter program</p>



**Typology of Planned T-Shelter
Provided by UGM team**



**Spontaneous T-Shelter, self-design by
the victims**



Typical t-shelter design using *Limasan* (hip) and *pelana* (pitched or gabled) roof shapes in Java using bamboo for structure and construction (Jatmika, 2009)

Action in Recovery and Reconstruction Process

No.	ISSUE	WORKED	DID NOT WORK
3	Environment	<p>Earthquake hazard mapping has been noted well.</p> <p>Public awareness to hazard map is occurred well. It may reduce the disaster risk</p>	<p>The reconstruction program in general does not address environment issues seriously such as in implementing building permit and building codes (building coverage)</p> <p>Housing reconstruction was not integrated into much broader environmental quality</p>

Action in Recovery and Reconstruction Process

No.	ISSUE	WORKED	DID NOT WORK
4	Governance	<p>Government was still the main source of funding</p> <p>Local government was able to manage the whole process of reconstruction</p> <p>The work of government in the disaster management based on Community Empowerment becomes an effective generator for recovery since Community Empowerment Program worked well</p> <p>The effectiveness support of the existing legal framework in disaster management can be in effect supported by the collaboration among government, academician, NGO, community, and industry</p>	<p>Governance among sectors or reconstruction components was quite weak and not able to synergizing the whole process of reconstruction program</p>

Action in Recovery and Reconstruction Process

No.	ISSUE	WORKED	DID NOT WORK
5	Gender	<p>Since women are more at domestic sphere and become main actor in family welfare so women own a strategic role for community welfare</p> <p>Group motivation and community education are in effect in women 's activities since women are significant agents of change</p>	<p>Women in disaster are less access (distant) to source of information since women are more at domestic sphere</p> <p>Women in disaster are not included in decision making that make the livelihood interventions do not meet their needs which could lead women to worse condition</p>

Women Empowerment Program is directed to provide a group motivation and community education. In fact, it can be in effect in women 's activities since women are significant agents of change



Lesson Learnt

- Consider **local wisdom** to solve the problem and consider collective interest as well. Local wisdom needs to be considered in formulating policy and program in building preparedness
- Looking at the process of introducing, adopting and assimilating the **foreign culture** into the existing community, will enrich the impact of the globalization in positive way
- It is not easy to change community improper **culture** and hab mainly in the way of constructing the house which refers to how to build earthquake resistant houses
- The approach is better if more culturally, socio-economically sensitive and adaptive, so that in long term (after project completion), the built environment and the livelihood will grow sustainable

Lesson Learnt

- ▣ Trust people to manage their own recovery program and the process if decision making in the community level
- ▣ In case of Yogyakarta's experience the strategy to provide self help program by implanting the "one reconstruction" concept views post disaster reconstruction as one integrated process of the provision of emergency, transitional and permanent shelters that can **quickly** and dynamically changes over relatively short time.
- ▣ The ability of the Government to disburse **funding quickly** combined with strong Javanese self help cultures, amongst others, has led to exceptionally quick reconstruction process.
- ▣ Community Empowerment Program should be introduced and implemented as well by the **government** during the reconstruction phase. It is directed to prevent/ avoid mistaken knowledge of constructing the earthquake resistant houses
- ▣ Community Based Approach (CBA) for Community Empowerment Program (CEP) becomes a national model for rehabilitation and reconstruction program in Indonesia. This model has also been mainstreamed into World Bank supported Urban Poverty Program. It provides an effective instrument for delivering donor support to earthquake hit areas

Lesson Learnt

- One step policy sent strong signal to the surviving victims that the damage and loss occurred due to the disaster will be shouldered by the government and the community. It is complemented with a funding from Java Reconstruction Fund (JRF) and UNDP. This collaboration program can support around 60% of the damage
- Transitional shelters were not only providing a much better weather protections than tents, but more importantly support **livelihoods** for many of the affected families where many of the poor family rely their livelihoods on home based small businesses.
- The community should participate in the training and workshop in order to have a basic knowledge of how to build the houses to meet an earthquake resistant house requirements.
- **Economy**: The lack of knowledge in constructing earthquake resistant houses is worsened by the inadequate fund of the people.
- **Material for reconstruction**: The recycling process need to be introduced to other region prior to the occurrence of earthquake
- The **construction** of t-shelter to the affected people/ community was urgently needed since many families had started rebuilding their permanent house as early as 2 months after the earthquake
- To change the traditional method, UN-HABITAT gave the onsite practical training. It is strengthened by intensive monitoring activities to ensure the continuity of the quality **control of the construction**

Thank you for your kind attention