

Long term recovery from the 2004 Indian Ocean Tsunami

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1. Introduction

It becomes five years from the devastating damage of the 2004 Indian Ocean Earthquake and Tsunami Disaster. Banda Aceh in Indonesia is the nearest region from the epicenter, where around 126,000 were killed from the event. Especially children who are vulnerable to tsunami because of short height were killed for tsunami.

Due to international support from all over the world, recovery of infrastructures and housing has almost completed within four years and BRR, which is in charge about coordinating recovery works, ended their business in April of 2009. And those who lost their spouse are having new family, and post-tsunami born kids are playing in the field. One remaining big recovery project is the recovery of road network between Banda Aceh and Calang. And now is the real kick off of long term recovery in Banda Aceh by local people.

This paper shares long-term recovery process in Banda Aceh from the annual field survey in Banda Aceh region, and discusses about remaining issues for long term recovery.

2. Housing Recovery

2.1 Issues on housing recovery

Housing recovery is the largest project in the recovery project. Almost 50 % of recovery budget was used for housing recovery (RAN database). At first, the government decided to distribute housing to those who owned and lost their housing. Unit size of the housing is 36m² and cost is around USD3, 000. But within the impacted area, there were no housing stock and renters cannot leave from the interim housing, barrack. And government extended targets for housing support to renters.

2.2 Structure of Housing Recovery

There are two axes about housing recovery after disaster. One is on site or moving out from the impacted place, the other is making decision individually or by community (Fig.2). In case of housing recovery in Banda Aceh, on site – individual reconstruction is basic way. But one neighborhood community, Desa Lambung, successfully completed land use readjustment. And, there exists three types of housing recovery with relocation such as 1) housing for renters, 2) and use regulation, and 3) losing land for land

subsidence. Housing complexes for renters which locate suburban of Banda Aceh will have serious problem after all the recovery projects.

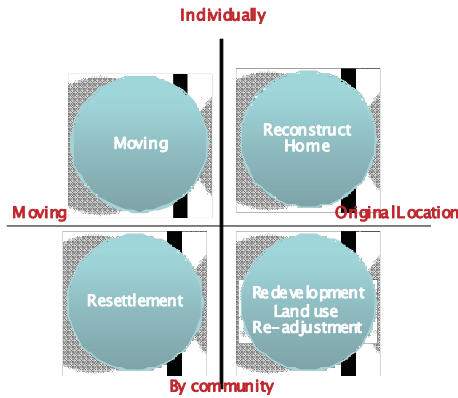


Fig.2 Structure of Housing Recovery after Disaster

3. Remaining issues on long-term recovery

It takes at least ten years to complete a long term recovery from devastating disaster. Continuous monitoring on recovery process is necessary. Following are comments from five years monitoring and evaluation about a long term recovery process of Banda Aceh.

3.1 Recovery in Submersed Village

Because of subsidence of ground for plate movement with earthquake, in eastern cost of Aceh State, many villages were sunken under water. For the recovery of villages, they have moved to new location near from their villages formally their farming lot etc. We don't have lessons about recovery process from sunken villages, and it is important to learn from their experiences.

3.2 Housing Supports for Low Income People

Those who moved to suburban resettlement complex for renters are mainly works for informal sectors such as temporary construction workers, cab drivers etc. And they don't afford to pay for transportation fees to commute to working place in urban area. It is likely that they sell their houses at suburban area and move to urban area in Banda Aceh or move out to large cities in Banda Aceh after all the construction works for recovery have completed, because they cannot find their job in Aceh area.

Housing support policy keeping them to interim housing until housing stock in urban area even though they should stay shanty barrack for longer time could be considered.

3.3 Strategic Timeline Management of Housing Recovery

Reconstructed housings should be used as permanent housing. In the very early stage of housing reconstruction, low quality housing were supplied to complete housing recovery as fast as possible. However, it needs almost five years to complete housing recovery for devastating disaster. Housing recovery with good quality houses with five years strategic timeline should be considered.

3.4 Sustainable Long Term Recovery

2004 Indian Ocean Earthquake and Tsunami Disaster occurred in Christmas season, and killed many foreign tourists. Because of that, unexperinced huge donation was collected, and unpresidnted scale of recovery support was conducted.

Support from all over the world overwhelmed management capacity of supporting agencies. For example, Medical Sun Frontier refused to receive donation after some period because they cannot responsible for quality of support. And huge recovery support also caused “support addiction” at impacted communities. India refused international support for this event because it was internally manageable scale of disaster. Both refusals of supports were explained as good examples in Disaster Report 2005 of Red Cross and Red Crescent because it makes sustainable response and recovery possible. It is important to consider the support scheme which can keep self reliance of impacted community even after devastating disaster.

3.5 Telling Lessons from Disaster

In Band Aceh, Tsunami Museum building was completed but preparation of exhibition is still on the way. In Japan, the importance of sharing lessons inter generation and area is commonly understood, but not in the other countries. Sharing lessons of disaster are essential to make disaster resilient society. Importance to maintain and sharing live lessons of disaster should be shared in all over the world.



Fig.2 Tsunami Museum in Banda Aceh

References

Recovery Aceh - Nias Database, Indonesia (RAN database), <http://rand.brr.go.id/RAND/>, referred on Dec.29, 2009

International Federation of Red Cross and Red Crescent (2005), World Disasters Report 2005, International Federation of Red Cross and Red Crescent