

Consideration on the Situation in One Year after 2015 Nepal Earthquake

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ABSTRACT: Government of Nepal has struggled for “building back better” and to make disaster resilient society from the 2015 Nepal Earthquake. The Government set up National Reconstruction Authority or NRA to accelerate recovery and reconstruction activities. Although more than one year has passed from the disaster, we cannot see much difference; there are still many numbers of collapsed houses and rubbles remained. I considered the cause by analysing NRA’s policy and actual situation, housing reconstruction support and disaster reduction education. There are four types of challenge to be solved – vulnerability, priority, government capacity and disaster culture. We should emphasize on steady and continuous support for long term, even if such support might be invisible in front of the public.

Keywords: build back better, vulnerability, priority, government capacity, disaster culture

1. INTRODUCTION

The 2015 Nepal Earthquake mainly hit Kathmandu valley area and its north eastern and north western areas. The first major earthquake occurred in April 25th, followed by the second one in May 12th. Their magnitudes were respectively 7.8 and 7.4. Their intensities were said to be around 5 on the Japanese seven-stage seismic scale. Although this scale does not usually bring huge damage in Japan, the number of death and injury respectively reached 8,959 and 22,232 in Nepal.

Nepal is one of the least developed countries. When disaster hits these countries, many overseas countries provide assistance, which tends to focus on the rescue and relief stage and have not further involved in the recovery and reconstruction stage. In this regard, the Third United Nations World Conference on Disaster Risk Reduction addressed the importance of “build back better” as one of the priorities for action at Sendai Framework for Disaster Risk Reduction 2015-2030.

I make a research with my colleague to consider what kind of support is useful to make disaster resilient society in Nepal. We had the field trips from September 22nd to 28th in 2015 (1st) and from April 22nd to 30th in 2016 (2nd). We mainly visited disaster affected areas in Kathmandu and Bhaktapur cities and Nuwakot District. We also got interviews there (table 1).

We understand that capacity building of the government and empowerment of affected people & community is the key issues to build back better, based on the lessons from the Great Hanshin Awaji Earthquake in 1995. In this study, I focused on the role of National Reconstruction Authority or NRA which was newly established by the government, and picked up housing reconstruction support and disaster reduction education to implement the policy adopted by NRA. Housing support influences on people’s lives, which is always problems in any countries including advanced ones like Japan. Disaster reduction education should not be disregarded because fostering young generation leads to make next society. I analyzed the gap between the policy and the actual situation.

This study has addressed the consideration on the situation in one year after the disaster. The analysis was based on the interviews and materials received during the research trips.

2. GOVERNMENT POLICY TOWARD “BUILD BACK BETTER”

2.1 Recovery Vision and Strategic Objectives for the Reconstruction Programme

According to “Nepal Earthquake 2015, Post Disaster Recovery Framework, 2016-2020”, the government has raised “Recovery Vision” and “Strategic Objectives for the Reconstruction Programme” (Chart 1). It is found out that the government aims to make disaster resilient society where it’s beyond the stage of just recovery to original forms. And the programme emphasizes on reconstructing houses and other public buildings, because they were severely devastated due to vulnerability. It also pays attention to capacity building of the state as well as people & community, which expresses strengthening both top down and bottom up approach.

2.2 Establishment of NRA

Nepali government has 26 ministries. As for disaster management issues, Ministry of Home Affairs is in charge of emergency response soon after disaster. Ministry of Urban Development is in charge of housing reconstruction and Ministry of Federal Affairs and Local Development is in charge of local affairs. It is said that cooperation among ministries is not always strong.

Table 1: Destination for interview

	1 st trip	2 nd trip
Government Agencies	MoHA, MoFALD, MoUD, MoE	MoE, NRA Steering Committee Member
Local Government	Kathmandu Municipality, Bhaktapur Municipality, Nuwakot District	MoUD (DUDBC), MoE, Shankhu Municipality, Nuwakot District
Support Organization	JICA Nepal, UNDP, NSET, Red Cross	JICA Nepal, NSET
School	Elementary & secondary schools, Khwopa Engineering College	Elementary & secondary schools, Khwopa Engineering College

The government has established NRA on December 15th in 2015. Its establishment was delayed, due to the new constitution. In Nepal, monarchy was abolished to transit into federal democratic republic system in 2008 after the political conflict. The procedure of a constitution was launched in 2013, but was prolonged until September in 2015. Recovery and reconstruction activities were not given the first priority.

NRA is a time-limited organization for five years. NRA designs a detailed plan of organizations and systems to implement reconstruction at the national and local level. Training and coordination mechanisms will support the recovery and reconstruction programme, and monitoring and grievance redress will help ensure transparency and accountability.

Four ministries; Ministry of Urban Development or MoUD, Ministry of Federal Affairs and Local Development or MoFALD, Ministry of Education or MoE and Ministry of Culture, Tourism and Civil Aviation or MoCTCA are responsible for a large volume of reconstruction tasks, and these ministries relatively set up a Central Level Project Implementation Unit (CL-PIU) and District Level Project Implementation Units (DL-PIU). NRA authorizes reconstruction projects and disburse funds to the CL-PIUs. While NRA is an executing agency in charge of policy, coordination and inspection, these four ministries implement projects decided by NRA. And NRA provides technical assistance and capacity building support for reconstruction, setups a monitoring system to track the progress of the reconstruction programme, integrate gender and social inclusion in recovery and integrate participation of NGOs and INGOs in recovery.

NRA itself has three type of local organizations. The first one is "Sub-Regional Offices" which coordinate between central authorities and local bodies. The second is "District Coordination Committees" which will be established in each district to coordinate, evaluate and suggest course corrections. And the third is "Resource Centers" which will be built for every 3 to 6 VDCs (village development committees) to support communities to undertake their own reconstruction.

2.3 Challenge for NRA

Chart 2 shows "Bottlenecks" and "Challenges ahead" presented by the Joint Secretary of NRA at "Nepal Earthquake one year memorial Build Back Better and Resilience Workshop" by JICA Nepal Office, to be held in Kathmandu in April 25th, 2016.

It cannot be said that NRA has smoothly launched its activities with its power. The problems are mainly from lack of human resource and less coordination capacity. NRA's staff is mainly dispatched from concerned ministries. NRA cannot be always independent from other ministries. It might be difficult for a new agency to achieve its mission under the sectionalism by central ministries. Especially, this problem is severer in local areas. We should consider the role of NRA, while there are a lot of challenge to be solved (Chart 3).

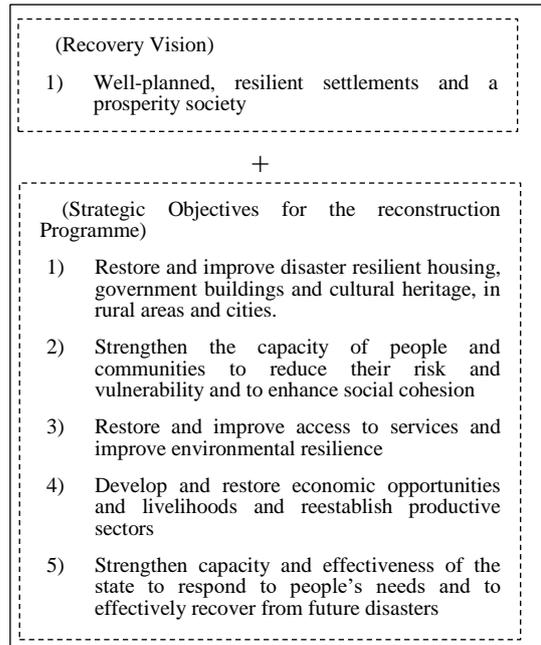


Chart 1: Recovery vision & strategic framework

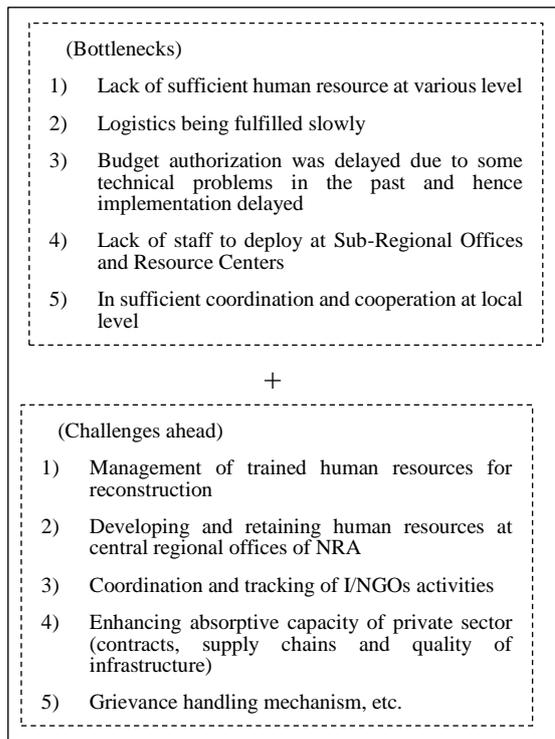


Chart 2: Bottlenecks and Challenges for NRA

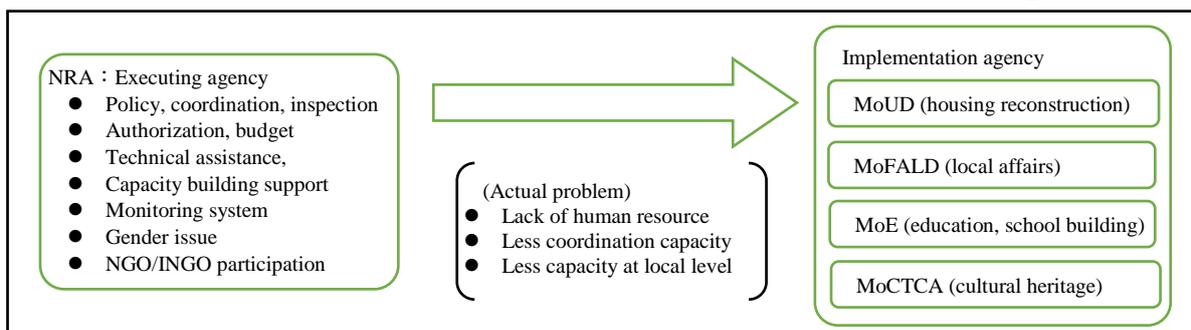


Chart 3: NRA's mission and actual problem

3. SUPPORT FOR HOUSING RECONSTRUCTION

3.1 Support policy

602,581 buildings were totally and 284,482 partially collapsed in this disaster. Many houses, especially in rural areas, are made of brick or stone with less reinforcing bars, which get these housing to be easily broken. In urban areas, many houses are built with reinforced concrete. But it is said that many houses do not abide the building code. Big family system is still popular in Nepal. When their sons have their new family, they extend their building by adding their floors above.

Nepali Government provided each affected family with 15,000 Nepali rupees or NRPs (1 NRP is equivalent to around 0.00918 USD, as of June 24th in 2016) for ensuring evacuation shelter. Secondly, the government subsidizes 200,000 NRPs in total for housing reconstruction. NRA is in charge of execution and MoUD implements the project. The amount is divided in the three stages. In the first stage, 50,000 NRPs are provided when the government acknowledges the identity of house owners. In the second stage, 80,000 NRPs are provided when the government inspects whether the part of housing foundation has been built, according to the building code. And in the third stage, the rest of 70,000 NRPs are paid by inspecting the rest of a house to be earthquake resistant.

In addition, the government provides special community loan, which provides 300,000 NRPs with no interest. And it provides special loan of 2.5 million NRPs in urban areas and 1.5 million in rural areas. Its interest rate is only 2%, while general housing loan has 9 to 10%.

3.2 Challenge for the support

DUDBC or Department of Urban Development and Building Construction of MoUD is in charge of implementing the subsidy. There are some challenges to implement. The first one is lack of engineers to inspect housing reconstruction. The original number of engineers at DUDBC is around 150. But they need to ensure around 2600 engineers, 1250 sub-engineers and 750 assistant engineers to launch the project. When I visited DUDBC in April 2016, recruitment was going on. They will be dispatched to resource centers in affected areas. It will take further time to complete inspection.

The second one is lack of capacity at the local level. VDC's capacity is also limited. The number of VDC's staff is usually 3 to 4, consisting of VDC secretary, technical person and helper. One VDC usually covers nine wards. In remote rural areas, each ward covers several mountains. As for the first inspection, qualified candidates (affected house owners) have to apply at the VDC office with long queues. It is hard job to get access to VDC office across the mountains.

Engineers will also get hardship to inspect each household in the remote areas. Each resource center will generally one engineer, one sub-engineer and 1 assistant engineer, although these number is flexible depending on how many VDCs one resource center covers.

The third one is the amount of subsidy. Although the government has prepared the model design of anti-seismic houses according to the building code; 17 types were proposed by DUDBC or JICA, many people criticized that small amount. As far as I got through the interview, total cost will be 10 times higher. It is hard for many people to reconstruct their houses even if they got the subsidy.

The fourth one is that people who do not own a house are not supported by the government. The target of the subsidy is house owners. From these factors, many people still spend their lives in emergency shelters (see photos). Chart 4 summarizes these points.

4. DISASTER REDUCTION EDUCATION

More than 8,500 schools were fully damaged. 19,000 class rooms were totally collapsed and 11,000 were partially collapsed. NRA and MoE will reconstruct school building, in cooperation with JICA and ADB. However, there seem to be no measures from the viewpoint of soft measures, except for some counselling to students for a short period soon after the disaster.

My survey team has included an experienced high school teacher and a researcher (who used be a student of that teacher) in the field of disaster reduction education. That teacher has been to Nepal many times to extend that education. He also has an experience in the support activities in Sri Lanka (after the tsunami disaster in 2004) and in China (after the Sichuan Earthquake in 2008). They will implement the education on the following.

- 1) Understand the importance of earthquake-resistant building: We should strengthen the education to school teachers, students and their parents from the viewpoint of soft measure.



Photo: Shelter camp in one year after the disaster (Nuwakot District)



Photo: Collapsed houses in one year after the disaster (Shankhu City)

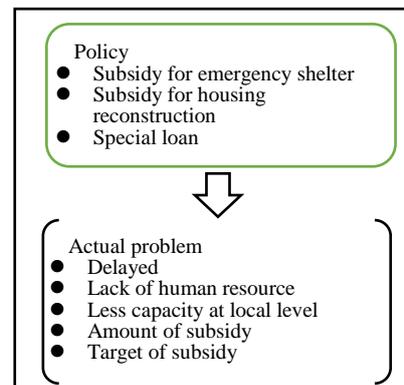


Chart 4: Policy and actual problem for housing reconstruction support

- 2) Implement proper evacuation when a disaster hits: In this disaster, some school children went back to the school buildings and lost their lives, although they were outside the buildings at the time of an earthquake. They were taught in the class when an earthquake hit, they should hide under the desk. We should instruct them to make their proper decisions depending on the situation.
- 3) Implement psychological care to school children after a disaster : Many students have suffered from trauma for long time after the disasters. We should incorporate psychological care into disaster reduction education in long term.

We will implement disaster education support activities, in cooperation with National Society for Earthquake Technology-Nepal or NSET, local NGO. We expect such activities to lead to the case study in Nepal. We have already tested a disaster reduction education class for year 10 students and a seminar for school teachers in April, 2015. We will start such project from the coming August until the end of June 2018. The finance is from the donation which Hyogo Prefecture Local Government collected from citizens to support Nepal.

We have already visited more than 10 elementary or secondary affected schools to explain the project. But school principals and teachers requested us to support building hard infrastructure and did not address the importance of disaster reduction education so much. This is a matter of disaster culture. Although it will take long years to extend the culture, we should strive to be localized in the society (Chart 5).

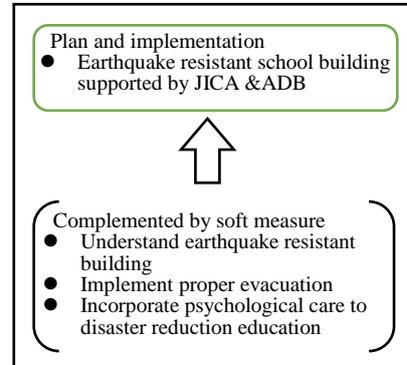


Chart 5: Importance of disaster reduction education

5. CONCLUSION

Although more than one year has passed from the disaster, we cannot see much difference; there are still many numbers of collapsed houses and rubbles remained. From this study, I show the causes why recovery and reconstruction has not progressed so much in one year after the disaster by focusing on RNA's policy and its implementation.

The first one is that people, buildings and other things are quite vulnerable, which made disaster resilience more complicated. The second one is that recovery and reconstruction activities were not always given top priority. The period to establish the constitution was overlapped, which delayed the policy by NRA. The third one is that government capacity is not enough on implementation basis. Although NRA sets the policy, it is not easy to translate it into the action, especially at the local level. And the fourth one is that disaster culture has not taken root in the society. People tends to emphasize on the reconstruction of hard infrastructure. However, soft measure is also as important as infrastructure.

Accordingly, support should be on a long term basis to solve these challenges and to lead to capacity building of the government and empowerment of people & community. It is found out, from the cases of housing reconstruction and school education, disaster culture should become popular. Not only the policy proposal but also capacity of implementation is required to achieve the goal. In this regard, human resource development is important in local level.

Overseas assistance has usually focused on emergency stage soon after the disaster, which is more visible in front of the public, including people who donated their money. However, from the viewpoint of recipient of the assistance, invisible, steady and continuous support is necessary. Such support leads to making disaster resilient society in Nepal (Chart 6).

This is the study to consider the situation in just one year after the disaster. It can be still the initial stage toward "build back better". NRA is expected to promote recovery and reconstruction activities in five years. Role of stakeholders including NGO and community should be discussed. Especially, we should take into consideration the influence by the establishment of new constitution, which will strengthen local autonomy. Based on these points, I would like to continue and develop the study.

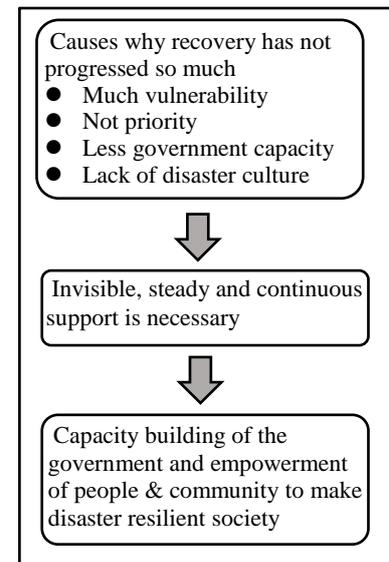


Chart 6: Causes why recovery has not progressed and support for the solution

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