

Shelter Reconstruction and Rehabilitation in the rural areas of Nepal in response of Nepal Earthquake 2015

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Abstract

Nepal lies in earthquake prone area. Nepal experienced big magnitude of 7.8 Richter scale earthquake in 25th April 2015 recently which occurred after 81 years of the deadly earthquake. The wild earthquake was responsible for significant economic loss which was estimated seven million USD¹ and large number of infrastructures damage with 755,549 individual houses. Government of Nepal, various donors including international communities worked together for rehabilitation and reconstruction of damaged infrastructures and individual houses. This study aims to know the completion rate of reconstruction of individual houses which was done through the cash transfer modality.

Government of Nepal formed Nepal reconstruction Authority to lead reconstruction and decided to provide conditional cash grant (CCG) shelter re-construction to the eligible beneficiaries.

Keywords:

Reconstruction, Nepal Reconstruction Authority, conditional cash grant, CLPIU, DLPIU

Introduction

Nepal is most vulnerable country in terms of multi hazard and earthquake risk. It ranks 4th, 11th 20th and 30th in terms of climate change, earthquake, multi-hazard and flood risk respectively.² As the country lies in the high seismic zone, large-scale earthquakes were frequent in the country in the past including the earthquake of 25th April 2015 and 15th January 1934. The recent earthquake adversely affected the country and it's economic growth.

¹ PDNA 2015, Government of Nepal

² UNDP/ BCPR, 2004

Nepal Reconstruction Authority (NRA) was leading reconstruction efforts until January 2022 which is now taking responsibility by Nepal Disaster Risk Management Authority (NDRRMA). Reconstruction of individual house is being carried through conditional cash grant (CCG) and technical assistance. Beneficiaries were selected as per criteria set by NRA and project agreement (PA) was done with eligible beneficiaries to provide financial and technical assistance. As of December 2021, it is reported that 741,031 houses were reconstructed as NRA had conducted conditional cash grant agreement with 827,340 beneficiaries. There is an increment of beneficiaries by 9% during the agreement time as compared with baseline.

Department of Urban Development and building Construction (DUDBC) provided technical support and monitoring whereas Ministry of Federal and Local Development (MoFaLD) was responsible for community mobilization and facilitation. District level project implementation unit (DLPIU) of both ministry level provided technical support at the district level.

Methods

Literature review was carried out to perform this study as a first step. Both primary and secondary data were collected to do detailed analysis. Below mentioned steps were followed to conclude this study.

Literature review on the Nepal earthquake 2015 and reconstruction related policies, guidelines, and documents

Nepal earthquake 2015 related documents such as news, video documents, post disaster need assessment (PDNA) and other facts were collected and reviewed. Guidelines, policies, and directories as well as technical manuals also reviewed. The theoretical part of each document were used to enhance knowledge on reconstruction and other sections were used to know detailed procedures for house construction specially on cash grant disbursement and monitoring.

Questionnaire preparation

Questionnaires were prepared to collect primary data from field. District level information was collected from District Administration Office (DAO), District Coordination Committee (DCC previously known as DDC), Nepal Red Cross Society (NRCS), Non-Government organizations (NGOs) and Municipalities. The purpose of information collection was to know how beneficiaries were selected, what kinds of documentations were needed to include in agreement with Government, how beneficiaries were received and utilized conditional cash and; how did beneficiaries build their houses.

Secondary data was collected from various sources such as project implementation units (CLPIUs), National Reconstruction Authority, Nepal Disaster Risk Reduction Management Authority (NDDRM) and Housing Recovery and Reconstruction platform (HRRP)

Study on procedure of reconstruction

Local level Government unit selected beneficiaries for shelter assistance as per NRA guidelines and did agreement with eligible households (HHs). Department of Urban Development and Building Construction (DUDBC) prepared sets of prototype design of houses with different designs. Beneficiaries were asked to select one of the type and model of house from the catalogue. Trained construction workers were providing technical assistance along with NRA Engineers during the construction time. NRA was releasing first tranche which is NPR 50,000. First tranche is estimated for site clearance and construction work upto plinth level. Once beneficiaries utilized first tranche, they are eligible to receive second tranche. After the technical report verified by Engineers, such

beneficiaries are eligible to receive NPR 150,000 as second tranche which is provided for superstructure work. After utilization of second tranche, beneficiaries are subjected to complete latrine construction. After the technical verification, such families are eligible to receive third tranche which is NPR 100,000. All the transactions are made through bank transfer.

Housing reconstruction guideline is explaining the process and requirement followed by monitoring checklist. NRA has prepared technical monitoring manual for common understanding and uniformity.

Gap Analysis.

Based on the primary and secondary data, gap analysis was done to know the reasons of delays in house construction.

Data analysis and presentation

Study Data and Analysis Technique

Both primary and secondary data was collected, quantified, and analyzed. Identified beneficiaries, number of grievances, project agreement (PA) signed, first/second/third tranches disbursement, number of house completion and verification related data was collected.

Secondary data collection and Analysis.

Beneficiaries, fund disbursement and house completion data is mentioned below.

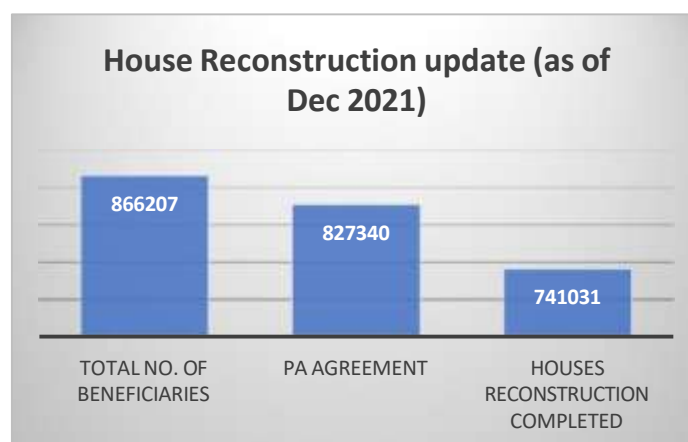


Figure 1: House reconstruction update.

Figure 1 shows 866,207 families are eligible to receive shelter grant for house reconstruction however NRA has made conditional cash grant agreement with 827,340 HHs only which is 95.5% total beneficiaries. Total number of beneficiaries has been increased by 9% as compared with post disaster need assessment (PDNA) report.

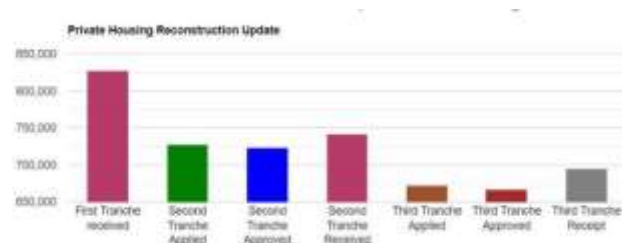


Figure 2: Fund disbursement status for house reconstruction

Figure 2 above shows number of beneficiaries who received first, second and third tranches. Beneficiaries are eligible to receive first tranche immediately after the agreement signed. Hence, high number of beneficiaries received first tranche. To receive second and third tranches, beneficiaries are needed to utilize cash for house construction as per agreed design and specifications. It takes time for construction, verification, submission and approval. So, less number of families are receiving subsequent tranches slowly. Some families are also not starting construction after receiving first tranche which resulted drop out in the beneficiaries list.

Table 1 shows district wise progress against beneficiaries who has signed in agreement and completed house. 75% of the beneficiaries completed house as of December 2021 in 31 districts. Reconstruction rate is more than 85% in eight districts and less than 50% in five districts.

Table 1 : District wise reconstruction progress

SN	District	Total No. HHs	Agreement	completed	Percentage
1	Sindhupalchok	90573	88617	79885	90%
2	Nuwakot	78518	76537	68536	90%
3	Dhading	82598	80322	59565	74%
4	Dolakha	72388	69409	62161	90%
5	Gorkha	70363	68593	59251	86%
6	Ramechhap	55576	54221	41275	76%
7	Kavre	80743	77124	54609	71%
8	Sindhuli	40308	38936	20860	54%
9	Makwanpur	38443	31035	22721	73%
10	Okhaldhunga	26336	25787	24555	95%
11	Kathmandu	48235	43534	19227	44%
12	Rasuwa	12934	12274	10905	89%
13	Lalitpur	29485	26849	10097	38%
14	Bhaktapur	28648	25153	11104	44%
15	Lamjung	14887	14294	6899	48%
16	Tanahun	14856	18688	12367	66%
17	Solukhumbu	12779	12444	11334	91%
18	Khotang	9977	9622	6056	63%
19	Chitwan	8443	7478	6401	86%
20	Gulmi	4723	4469	3309	74%
21	Syangja	9421	9070	5170	57%
22	Kaski	6602	6043	4322	72%
23	Palpa	5104	4576	2391	52%
24	Bhojpur	6735	5848	3456	59%
25	Parbat	5928	5665	4185	74%
26	Dhankuta	3460	3186	1896	60%
27	Nawalparasi	1077	1071	1009	94%
28	Baglung	2553	2374	1965	83%
29	Arghakhanchi	1225	1100	705	64%
30	Sankhuwasabha	2224	2067	968	47%
31	Myagdi	1065	954	713	75%
Total		866207	827340	617897	75%

Similarly, Table 2 shows only 95.51% of beneficiaries conducted an agreement with National Reconstruction Authority for housing grant. Such 38,867 HHs are not taking participation in the

reconstruction process. There are seven districts where less than 90% beneficiaries signed the agreement for house construction.

Table 2: District wise agreement status

SN	District	Total No. HHs	Agreement	Agreement Completed
1	Sindhupalchok	90573	88617	97.84%
2	Nuwakot	78518	76537	97.48%
3	Dhading	82598	80322	97.24%
4	Dolakha	72388	69409	95.88%
5	Gorkha	70363	68593	97.48%
6	Ramechhap	55576	54221	97.56%
7	Kavre	80743	77124	95.52%
8	Sindhuli	40308	38936	96.60%
9	Makwanpur	38443	31035	80.73%
10	Okhaldhunga	26336	25787	97.92%
11	Kathmandu	48235	43534	90.25%
12	Rasuwa	12934	12274	94.90%
13	Lalitpur	29485	26849	91.06%
14	Bhaktapur	28648	25153	87.80%
15	Lamjung	14887	14294	96.02%
16	Tanahun	14856	18688	125.79%
17	Solukhumbu	12779	12444	97.38%
18	Khotang	9977	9622	96.44%
19	Chitwan	8443	7478	88.57%
20	Gulmi	4723	4469	94.62%
21	Syangja	9421	9070	96.27%
22	Kaski	6602	6043	91.53%
23	Palpa	5104	4576	89.66%
24	Bhojpur	6735	5848	86.83%
25	Parbat	5928	5665	95.56%
26	Dhankuta	3460	3186	92.08%
27	Nawalparasi	1077	1071	99.44%
28	Baglung	2553	2374	92.99%
29	Arghakhanchi	1225	1100	89.80%
30	Sankhuwasabha	2224	2067	92.94%
31	Myagdi	1065	954	89.58%
Total		866207	827340	95.51%

FINDINGS AND RECOMMENDATION

Main findings of the study are listed below:

- a. Owner driven approach is one of the best and widely accepted approach for reconstruction of shelters in all earthquakes affected districts: It is found that ownership feeling is high in the cash transfer modality as it created flexibility for procurement and construction worker selection.
- b. Delays in reconstruction: The country is still in recovery phase as eight years already completed when reconstruction phase started. It is found that 95.51% of total selected families agreed to rebuild the houses whereas only 75% of the houses were built so far. It is learnt that country has spent more time for beneficiary selection and tedious paperwork also made delays in starting construction work. It is also known that NRA has conducted beneficiary selection process multiple time which consumed resources and time.
- c. Frequently changing policies and regulations: Due to political instability, Government has changed key personals at the top level frequently in National Reconstruction Authority (NRA) and such turnover made significant changes in reconstruction policies. These changes made confusion at the district level and at the beneficiary level. Initially, Government announced NPR 250,000.00 as total cash grant for house reconstruction and later new Government made changes on amount and increased to NPR 300,000.00. NRA also made significant changes on cash disbursement conditions, technical supervisions checklist and deadline.
- d. Less community participation: The reconstruction process has been conducted in owner driven approach however it is learned that community people and local stakeholders are consulted less in the reconstruction process. NRA is only focusing on conducting agreement with beneficiaries and technical supervision.
- e. Lack of Capacity development of local construction workers and beneficiaries: Community meetings, one to one technical meeting and technical orientations were not provided to beneficiaries. NRA and different Government and Non-Government organizations conducted training to construction workers at limited only. Many families brought construction workers from outside the community and districts for reconstruction. If NRA could identify, train and capacitate local construction workers in all working communities, construction works could be completed quicker than this. Beneficiaries could be mobilized for construction followed by 1 or 2 lead masons to make house faster and stronger.
- f. Inconsistency on data management: It is observed that data is not managed in structured and uniformed way. There are many raw data is available in different leading Government Offices which is creating confusion and inconsistency.
- g. Substantial paper works and documents: Beneficiaries were asked to complete many paper works such as agreement, inspection checklist, technical recommendation papers, application for the fund request, acknowledgement receipts and other paper works which made the delays in construction work, difficulties on managing huge volume of paper works.

Conclusion:

From the above analysis, it is concluded that reconstruction of houses is going very slowly. Due to rapid changes in policies and management, involvement of many Government and non-Government organizations and slow fund disbursement process resulted delays in house construction. It is known that only 75% of individual houses were completed in eight years.

Recommendations:

Policy level intervention:

Government of Nepal needs to prepare reconstruction and rehabilitation policies immediately after such disaster. Once prepared, Government should make amendments after certain interval not the replacement. Such policies should be prepared in consultation with affected families by including people with disabilities (PWDs), women and children to make inclusive.

High level of community participation:

Community groups at the local level should be formed with 20-30 households in each group to train and mobilize for owner driven approach. Members of such groups will learn from each other and can also make exposure visit to other groups. It will help to complete reconstruction in very short period with quality construction.

Capacity Development:

It is strongly recommended to conduct various types of capacity development activities at different level during construction process which includes; orientation to beneficiaries on build back safer, mass awareness on safer construction, training to construction workers at the community level, advanced training to lead construction workers at village level and Training to community supervisors at municipality level. Standard type of tool kits should be provided to construction workers and basic tool kits should be provided to beneficiaries to start construction.

Continuation of cash transfer modality:

It is recommended to continue cash transfer modality as it gives flexibility to the beneficiaries on procurement and construction.

Further study is recommended on the reconstruction process and quality of houses.

It is strongly recommended to know the reasons of delays in reconstruction of individual houses in the deeper level. It is also recommended to do study on the quality of construction to know the compliance of National building code.

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