SUPPORT TO DEVELOP REPLICABLE METHODOLOGY AND FRAMEWORK FOR UNDERTAKING RECLUSTERING OF AFFECTED COMMUNITIES AND ITS DEMONSTRATION IN SELECTED COMMUNITY

PROCESS MANUAL FOR RECLUSTERING







EXECUTIVE SUMMARY

Devastating earthquake of April 25 and May 12, 2015 has flattened more than 5 lakh houses along with damage of around 3 lakh houses. As a cascading impact of earthquake, with the shaking of earth, existing land topography has also become vulnerable to landslides. Fractures seen on the settlement land makes the reconstruction of preexisting structure on same land, more hazardous and vulnerable. This process manual expects to serve as a planning methodological tool for reclustering the existing settlement in such vulnerable locations with certain degree of intervention in order to mitigate their risk and ensure their accessibility to basic infrastructure.

With the initiation from UNDP Nepal, in close collaboration of academic locus, IOE and CEPT University, reclustering project of Majhigaun was forwarded. The main objective of the project was to learn the issues at the grass root level and address them in other cases of reconstruction. Whole procedure was adapted from the experience of Majhigaun, a settlement at Melamchi, where IOE and CEPT University collaboratively carried out the case study with field visit and came up with the re-cluster plan. Steps mentioned in this process manual were derived from process of execution of the pilot project at Majhigaun, which was further enriched with global references and more specifically case references of Bhuj-Gujarat, India. The manual also features some of the possible case scenarios that planner may have to encounter in the process, along with some suggestive steps. It is most likely that not all the cases that may happen in the reconstruction are included in this manual, but basic understanding of this manual deals with the existing and proposed institutional structure and participatory steps to be followed in the planning process. Reclustering of the settlements, which is the integral essence of the manual basically deals with the approach which includes active partnership of stakeholders through decision making and knowledge sharing, along with distributing the ownership of the project in each planning steps.

This manual records the participatory approach and institutional framework required for the reclustering approach of such cluster in case of Nepal. Such institutional setup and planning procedures are devised in more inclusive and participatory approach. Reconstruction here, in a broader term also includes those settlements located in the vulnerable areas hence needs to be re-clustered or relocated. Such reclustering approach deals with the land availability, contribution and considers the livelihood of those resident in their future location.

ABBREVIATIONS

CLPIU: Central Level project implementation unit

DLPIU: District Level project implementation unit

NRA: National Reconstruction Authority

SRC: Settlement Reconstruction Committee

UNDP: United Nations Development Programme

VRC: Village Reconstruction Committee

DUDBC: Department of Urban Development and Building construction

VDC: Village Development Committee

CDO: Chief District Officer

NGO: Non-Government Organization

FNCCI: Federation of National Chamber an

GESI: Gender Equity and Social Inclusion

TDC: Town Development Committee

TABLE OF CONTENTS

Exi	ECUTI	VE SUMMARY	I	
ABI	BREVI	ATIONS	II	
TAI	BLE O	F CONTENTS	II	
Lis	T OF l	FIGURES	IV	
BAG	CKGR	OUND	1	
	1.1	General Introduction	1	
	1.2	Need of the Manual	2	
	1.3	Objectives	3	
	1.4	Scope and Limitation of the Manual	3	
	1.5	Structure of the Manual:	4	
	1.6	Definitions	4	
2	ACTORS AND NETWORKS			
	2.1	Government institutions	5	
	2.2	Affected group	7	
	2.3	Civic society	7	
	2.4	Private Sectors	8	
	2.5	Development Partners	8	
3	INSTITUTIONAL SETUP		9	
	3.1	NRA	9	
	3.2	Village Reconstruction Committee (VRC)	9	
	3.3	Settlement Reconstruction Committee (SRC)	10	
	3.4	Thematic Units	11	
4	PAF	RTICIPATION AND COMMUNITY CONSENSUS	15	
5	PROJECT CONCEPTUALIZATION AND SITE SELECTION			
	5.1	Project Cases	16	
	5.2	Site Selection:	18	
6	PLANNING PROCESS			
	6.1	Data Collection	22	
	6.2	Data Analysis	22	
	6.3	Data Verifications and Consensus Building	23	
	6.4	Determining development standards (Community Perspectives/ Building Bye-laws)	24	
	6.5	Planning by Fynarts/Plannars	21	

	6.6 Contribution Guidelines	25		
	6.7 Plan Endorsement and Approvals	27		
7	INVESTMENT AND IMPLEMENTATION STRATEGIES2			
8	MONITORING AND EVALUATION29			
9	ISSUES AND CHALLENGES	30		
10	REFERENCES	31		
Li	ST OF FIGURES			
Fig	are 1: Preliminary map of landslides triggered by the 25 th April 2015 Nepal earthqual	ke		
	(4 th May 2015)	.1		
Fig	re 2: Planning Process	.4		
Fig	re 3: Post Disaster Recovery Framework (2016-2020), 2016	.5		
Fig	re 4: CL-PIU/DL-PIU (National Reconstruction Authority)	.6		
Fig	re 5: Proposed Institutional Set Up (Under DLPIU- NRA)	4		
Fig	re 6: Proposed Planning Process	21		

BACKGROUND

1.1 General Introduction

The devastating Gorkha Earthquake of 25 April and 12 May 2015, has displaced around 8 million people in Nepal, where 498,852 private houses and 2,656 government buildings were completely destroyed (Post Disaster Recovery Framework (2016-2020), 2016). Hundreds of settlements were shattered across 31 districts with 14 districts suffering the highest impact. Around 250 thousand private houses and 3600 government buildings were partially damaged, which needs to be restored. The government's Settlement Relocation Plan aims to rehabilitate some 36,000 earthquake-affected victims and survivor families from 300 settlements. Initial reports from Post-Disaster Needs Assessment (PDNA) states requirement of NPR 669 billion for reconstructing damaged properties and infrastructure.

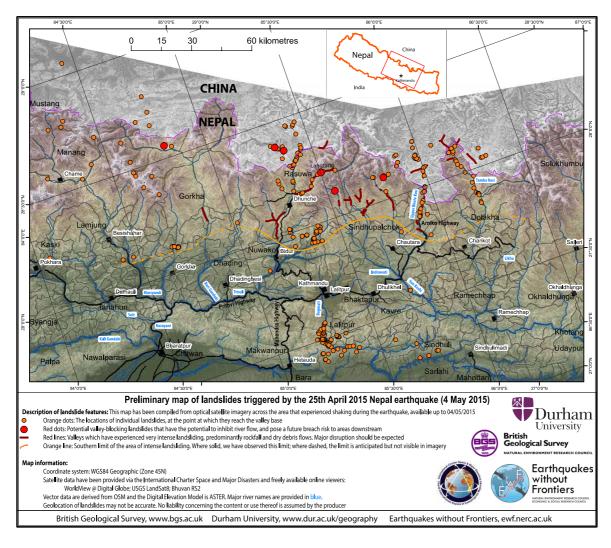


Figure 1: Preliminary map of landslides triggered by the 25th April 2015 Nepal earthquake (4th May 2015)

Source: (http://reliefweb.int/map/nepal/preliminary-map-landslides-triggered-25th-april-2015-nepal-earthquake-4-may-2015)

With the materialization of "National reconstruction and restoration policy, 2072", Government of Nepal has established National Reconstruction Authority (NRA) on 25th December 2015 with the mandate to plan and co-ordinate implementation of the reconstruction and rehabilitation programme.

With the institutional framework and guiding principles set by the authority and policy, it is institutionalized to conduct reconstruction programme in macro level. In micro level, there is no specific guidelines or framework in the implementation strategies, apart from some guiding codes set at the top level. Unstable government and weak governance has lingered the reconstruction process in its broader context. With the policy guidelines set by reconstruction policy, owner driven reconstruction is proposed for individual houses where community driven approach is proposed for community infrastructures (National Reconstruction and Restoration Policy, 2072). Concept of participatory reconstruction approach is broadly accepted but no rigid procedures are identified or set out for implementation. Reconstruction process is even more tangled because of absence of local government which could have played pivotal role in the context.

Topographically it is primarily challenging for reconstruction of some rural hilly settlements. With the shaking of the earth surface, land topography has become more fragile and vulnerable to landslides, hence making it impossible to reconstruct houses on the same land again (Figure 1). This process manual is an attempt to contribute to socio-technical aspects of reconstruction process, especially in case of reclustering/relocation in nearby locations.

1.2 Need of the Manual

Even after more than a year of devastating Gorkha earthquake, reconstruction has not taken its shape. Relief shelters were made in the initial phase by different government sectors, development partners and private sectors, but after the two monsoons, they are not habitable anymore. The need and guiding principles of reconstruction is lucidly reflected on the annex I of "National Reconstruction and Restoration Policy, 2072". This manual serves as an important tool for execution of reconstruction programme in rural housing and infrastructure sector, especially on the "Reclustering of the rural households" and relocation of settlements on to the nearby safer locations. In the rural context, where majority of households are dependent on the nearby farmlands or other occupations which are linked with that particular neighborhood, it is well understood concerning the ties between location and livelihood, hence reinforcing the concept of reclustering at such settlement. It is quite obvious to have

sense of place and attachments towards the location. This is the reason why the manual strongly emphasizes the concept of reclustering rather than relocation, where as existing challenges and opportunities are also explored in the process. In the absence of grass root level implementation strategy for rural reconstruction program, this process manual will serve as an imperative guiding tool for implementation of rural reconstruction and infrastructure program within the framework of National reconstruction act and with the spirit of national reconstruction policy.

1.3 Objectives

Objectives of this process manual are as follows.

- To provide planning guidelines and framework for the post-disaster reclustering of houses in rural areas and reconstruction of infrastructure.
- To provide institutional framework for reconstruction programme under "Shelter, Settlement Development, Public Building and Urban Infrastructure Reconstruction (District Level Project Implementation Unit)"

1.4 Scope and Limitation of the Manual

This process manual serves as one of many guidelines required for reconstruction at the grass root level. The manual rationalizes procedures on rural sector, converging on Recluster /Relocation of rural houses which are more vulnerable in their earlier locations and are required of necessary interventions. As the manual was derived from the pilot project of Majhigaun, which is of rural context and difficult geographical terrain, it is expected to be representative of majority of rural cases in terms of social strata and geographical context of reconstruction. With the primary policy of participatory approach in planning, the manual envisages people centric participatory approach in planning processes. One of the important consideration that is expected on the ground is that settlements were already in cluster or were in common locus, which is ultimately reflected in terms of community infrastructures.

It is derived from the lessons learnt during the process of engagement with one settlement, Majhigaun, which feeds one scenario and other scenarios are derived from the possible cases that can emerge during the process.

1.5 Structure of the Manual:

This manual is prepared in major three sections, where chapter 1 describes about the manual as a whole and illustrates its scope and objectives. Chapter 2, 3 and 4 basically explain about the actors involved in the planning process, need of public participation and setting up of institutional framework in the process. Section two elaborates basically on the actors involved within the process and their role in the reconstruction process. Section three comprises of chapter 5 and 6, which explains various steps involved in the planning process along with who are involved and the output of each process.



Figure 2: Planning Process

1.6 Definitions

In this Act, unless the subject and the consent otherwise require, -

- (a) **Disaster** means earthquake, fire, storm, flood, landslide, heavy rain, drought, famine, epidemic, and other similar natural disaster.
- **(b)** Local Government means VDCs or Municipality.
- (c) Local Political Leaders means local representative of nationally recognized political parties in recent election.
- (d) Local Committee means group of local people constitutes of members from local community.
- (e) Planning Process means plan making process of the reclustering.
- **(f) Participation** means the voluntary participation made by different stakeholders in the process.
- (g) Village/ Settlement refers to the location of affected area.

2 ACTORS AND NETWORKS

Reconstruction is an interconnected process and involves actors and stakeholders from different sectors. As a more participatory approach of planning, it involves different actors in society with their special authority, jurisdictions, impacts and sentiments attached with the project. Good public participation is representation of multiple perceptions in political decision-making and also helps different actors and stakeholders to own the project and act in response to contextual scenario. In this case, reconstruction in post-disaster situations, there are different actors involved with different hierarchy and dynamics which are presented in the sections below.

2.1 Government Institutions

One of the most important sector involved in the reconstruction process are ministries of government of Nepal and their line agencies. Government has formed National Reconstruction Authority (NRA) in December 25, 2015, which is the co-coordinating body of the overall reconstruction process. According to the existing institutional framework, NRA is the leading autonomous body in reconstruction, which needs to be accompanied by line agencies related to road, water supply, sanitation and others.

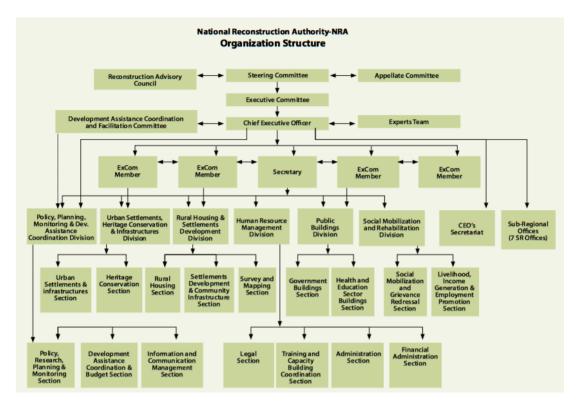


Figure 3: Post Disaster Recovery Framework (2016-2020), 2016

With different thematic sections in different hierarchy, NRA is a comprehensive body for the whole reconstruction body with devolution of authority in different level of "Project implementation Unit –(PIU) like CL-PIU (Central Level PIU), Regional Level PIU and District Level PIU. Apart from the implementation unit different thematic sections are created which will co-ordinate with the departmental line agencies in the ground level as per the need.

Since more effort is done from top down approach, the institutional set up of ground level is missing in the reconstruction act and policy. This manual serves as the guiding framework for implementation in ground level with the necessary required frameworks like: Village Reconstruction Committee (VRC), Settlement Reconstruction Committee (SRC) and other thematic groups.

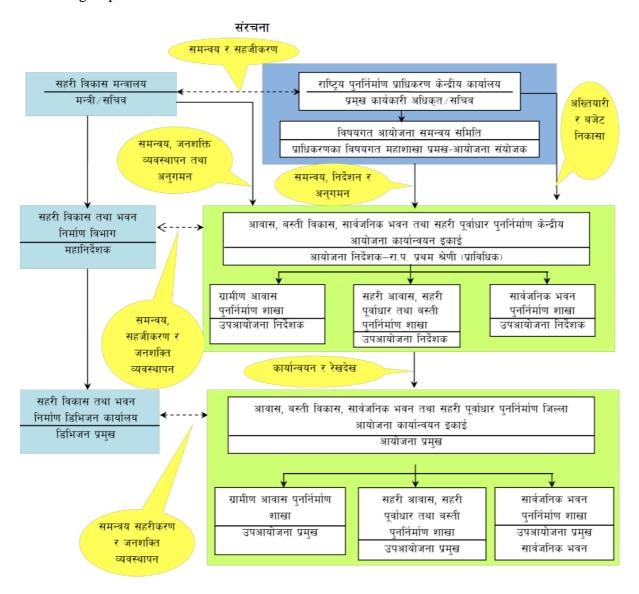


Figure 4: CL-PIU/DL-PIU (National Reconstruction Authority)

Formation of VRC and SRC are proposed in this manual where as it is important to identify the essential role and jurisdictions of existing government sectors like Chief District Officer (CDO), Department of Land Revenue, Department of Land Survey, Department of Road, Water Supply, Sanitation and others.

Table 1: Roles and jurisdictions of existing government sectors

Scope	Primary Actor	Secondary Actors	Remarks
Land Management	Chief District	Department of Land	
(Private Sectors)	Officer	Survey, Department of	
		Land revenue	
Land Management	Department of Land	Department of Land	
(Public Sector)	Survey	revenue	
Road and	Department of Road	Department of Water	
Infrastructure		supply, drainage	
Livelihood sector	Municipality/ VDCs	-	
Social Development	Department of	Municipality	
sector	Education, Health		
Environment and other	Municipality/ VDCs	Department of forest.	
sector			

Role: Coordinate the reconstruction process with NRA and execution of the project with the government resources and authority.

2.2 Affected group

Earthquake affected people are the primary stakeholder of the reconstruction process. Coming up from the different economic and social strata, these affected groups are to be addressed in individual manner. They should also be inclusive of their cultural, age, sex and caste. Users Committee formed by the affected group while implementation program could be taken as representative institution of earthquake victims.

Role: Participate in the plan making process of the Recluster plan as well as advise on the necessary required plans. Such participation should be reflected as the partnership model where certain authority will be delegated to these group for decision making process of plan making.

2.3 Civic Society

Civic societies have become important actors for delivery of social services and implementation of other development programs, as a complement to government action. Some broader definition of civic society covers non-governmental organizations as well, but

in this case civic society is referred as socially recognized and respected personality or group. Social leaders, political leaders, teachers of the village, influential persons in the village, religious leaders, elders are considered as important actors under civic society. These are important part of stakeholders as they are more informed about the situation and play catalytic role in carrying out a project in a lucid manner.

Role: Moderate the plan making process on the ground. Convincing the local people about the project and interpreting the substance of plan making to the local people. Explaining about the existing scenario of the grassroots level and coordinating the whole planning and implementation process.

2.4 Private Sectors

One of the important strategies of reconstruction involves the aspect of livelihood and upgrading the lifestyle of people after reconstruction. After the destructive earthquake, people didn't only loose their houses but also lost their occupation. Private sectors or the business society are important part of the reconstruction process which brings investment in the process. Establishment of big agriculture park, animal husbandry, fish farm or small scale industry needs to be initiated by the business sector. It is important to convince all the actors involved in the reconstruction process making the whole process mutually beneficial to each group.

Role: Closely interact with the SRC and VRC regarding the livelihood and economic development project. Investment plan will be shortly briefed out by this sector.

2.5 Development Partners

Development partners can also be categorized under civic society but looking at the scope of these partners, it is important to understand them separately. Development partners in the form of NGOs, INGOs, academic sectors, research organizations are important aspect of the reconstruction as they are equipped with high quality resources and abundant financial resources. The experiences of some international NGOs is important to learn on the process of reconstruction. These organizations have expertise in mobilization of resources and are availed with abundant resources.

Role: Coordinate with the VRC and assisting local government, planners and other actors with their available resources and experiences.

3 INSTITUTIONAL SETUP

3.1 NRA

Government has already set up the key coordinating body in terms of National reconstruction authority under the act of National reconstruction act, 2072 and with guiding principles set out in National reconstruction and restoration policy, 2072. Institutional structure and hierarchy of NRA and its associate body are presented in Figure 3 and 4. NRA is the prime autonomous body working under the observation of steering committee formed of prime minister and leader of opposition in parliament. Assigned for coordinating the whole reconstruction process, international donors, managing resources, devolving authorities to local level and setting out principles for ground root reconstruction work, NRA is leading the reconstruction process.

3.2 Village Reconstruction Committee (VRC)

As this manual serves for the rural reconstruction program, Village reconstruction committee is proposed as the coordinating body in the ground level. Each village is comprised of numbers of settlements, where each settlement is comprised of 50-100 households in average, usually of homogenous in character, in terms of caste or profession. Village Development committee/office is the prime body in the village for all the administrative work, hence VRC will work hand on hand with the VDC especially focusing on VRC. One VRC will serve as the coordinating body for all the reconstruction work within the village.

In reference to the "Community reconstruction ordinance, 2073" ¹, these Village Reconstruction Committee (VRC) will closely act along with "Reconstruction Coordination Community" and "Community Reconstruction Community".

The Village Reconstruction Committee (VRC) will be constituted with the following Members (around 18-20-members in the Committee)

- 1 representative (VDC or Municipality)
- 1 representative (TDC, in case the settlement comes under two different VCDs)
- 2 affected people
- 3 leaders of locally recognized political parties.

¹ पुनर्निर्माण सामुदायिक समिति सम्बन्धी निर्देशिका, २०७३

- 3 representative of line agencies (Road, Water supply sanitation, drainage)
- 1 representative Land revenue department
- 1 representative Land survey department
- 2/3 representative NGOs/ INGOs active in the settlement or locality.
- 1 representative FNCCI
- 3 nominated as per the need (socially recognized personnel)

Selection of the members in VRC should be based on basic principle of Gender equity and social inclusion (GESI).

Major task of VRC is to approve the comprehensive document prepared by Settlement reconstruction committee (SRC) and forward to upper level.

VRC needs to allocate required budget and monitor the whole reconstruction process.

VRC is responsible to **coordinate** with the development line agencies and development partners **in mobilization of resources** within the project area.

3.3 Settlement Reconstruction Committee (SRC)

As the number of settlement within a village may vary, number of settlement reconstruction committee may vary. SRC is the action oriented body which performs the over all planning activity and submits it to the VRC for the proceedings. SRC is responsible from the step of conceptualization of the project till execution of the project. SRC may use some necessary resources in terms of man power and other resources in the process of planning. SRC directly coordinates with the thematic units, which are responsible to collect data in different themes and make necessary recommendation in their specialized themes.

The Settlement Reconstruction Committee (SRC) will be constituted with the following Members (9 Member Committee)

- 1 Locally recognized or respected person within the settlement
- 4 representatives (2 Male, 2 Female, at least 1 scheduled caste or other backward society)
 from affected people
- 1 Urban Planner² (One urban planner could work for number of SRC)

-

² Civil Engineer/ Masters in Urban Planning

- 1 Engineer³ (From DUDBC) Member secretariat
- 1 Representative (VDC or Municipality or TDC) responsible to coordinate with VRC
- 1 Development partner

Selection of the members in SRC should be based on some basic principle of Gender Equity and Social Inclusion (GESI).

SRC is responsible for variable steps of project conceptualization to data collection to plan making and finalization of plan.

SRC will also be responsible for ensuring participatory approach in planning as well as implementation of the project.

SRC will primarily co-ordinate with the thematic units formed.

3.4 Thematic Units

Thematic units are important as they are responsible for collection of data and advising SRC in the plan making process about the ground reality. These units are the volunteer units mostly responsible for particular themes hence mostly allied with their related field. Different thematic units and their tasks are mentioned below:

3.4.1 Livelihood Unit

It is constituted with 7 Members

- i. 2 Affected People
- ii. 2 Business society/ Private sectors
- iii. 1 local leader
- iv. 1 NGOs
- v. 1 social representative (Teacher or other professionals)

The Unit performs the following Tasks

- i. Assessment and analysis of economic status and livelihood of affected zone
- ii. Identification of possible livelihood projects
- iii. Identification of key stakeholders and possible investors in the projects
- iv. Identification of Challenges in economic plan and implementation

³ Civil Engineer/ Architect

- v. Assisting in sector of Economic development plan by providing necessary information and guidance
- vi. Conducting different thematic and sub-thematic meetings at local level
- vii. Make necessary recommendations

3.4.2 Land Reform and Infrastructure Development Unit

It is constituted with 9 Members.

- i. 2 Affected People
- ii. 1 Engineer/ Architect/ Planner
- iii. 1 Municipality representative
- iv. 1 Representative from Land Survey Department
- v. 1 Representative from Land Revenue Department
- vi. 1 local leader
- vii. 1 representative from NGOs
- viii. 1 social representative (Teacher or other professionals)

The Unit performs the following Tasks

- i. Assessment of damage in affected areas, in terms of households and infrastructure investment
- ii. Assessing vulnerability of the existing locations and identification of safe location nearby the settlement
- iii. Identification of GAPS in infrastructure development and need of Reclustering
- iv. Collection of information regarding land ownership and necessary documents
- v. Infrastructure need assessment
- vi. Conducting different thematic and sub-thematic meetings at local level
- vii. Make necessary recommendations regarding infrastructure information

3.4.3 Social reforms, resilience and Environmental Protection Unit

It is constituted with 7 Members

- i. 2 Affected People
- ii. 1 Engineer/ Architect/ Planner
- iii. 1 Sociologist/ environmentalist
- iv. 1 local leader
- v. 1 NGOs

vi. 1 social representative (Teacher or other professionals)

The Unit performs the following Tasks:

- i. Assessment of social status and composition of the zone
- ii. Identification of Eco sensitive spots
- iii. Collection of information regarding forest areas, water bodies and other important conservation zones. Resource mapping
- iv. Risk sensitive analysis (Flood, Landslide and Slope)
- v. Awareness regarding the projects and its long term implications
- vi. Conducting different thematic and sub-thematic meetings at local level
- vii. Make necessary recommendations

3.5 Proposed Institutional set-up

The institutional set-up for the Village Reconstruction Committee (VRC) and Settlement Reconstruction Committee (SRC) has been proposed at Figure 5.

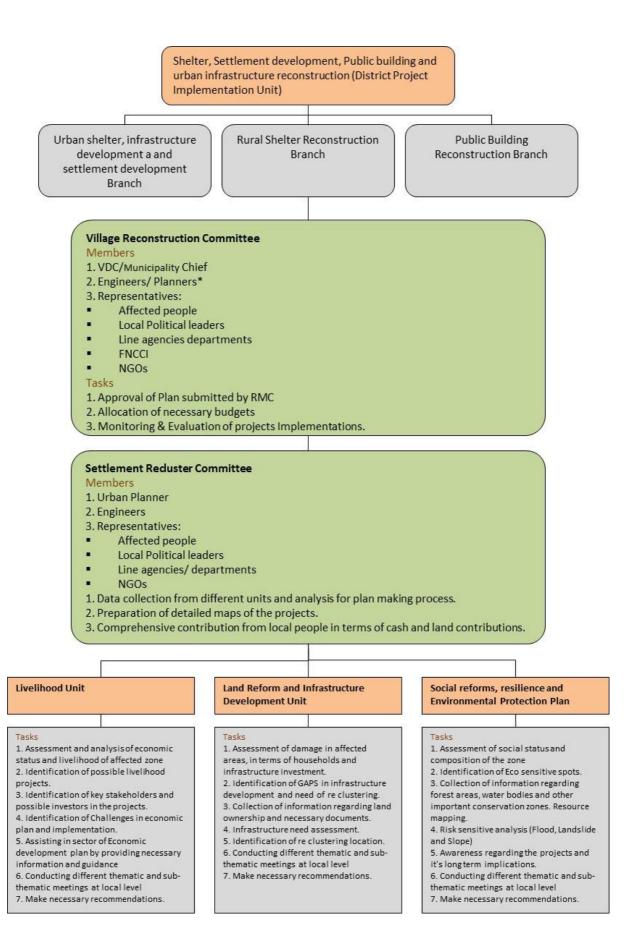


Figure 5: Proposed Institutional Set-up (Under DLPIU- NRA)

4 PARTICIPATION AND COMMUNITY CONSENSUS

The guiding principle of the reconstruction process manual is based on the participatory approach of planning, which must reflect the gender equity and social inclusion (GESI). It is important to understand that in the process of planning, involvement of each and every stakeholder are indispensable, which is addressed through different planning procedures and institutional framework. It is necessary to comprehend that participation of the external actors like civic society, experts or, other institutions with the affected group of people is to empower them in this planning process. Such participation from different sectors enables them to understand the multi-sector approach of reconstruction and distribution of liability. Hence, as moderator of the planning process, it is crucial to understand the need of the affected people who are supposed to live there in future and adapt the plan as per the requirement and necessary humane standards. From the step of project conceptualization till the finalization of 'Comprehensive Recluster Plan,' it is necessary to include series of public meetings and different level of consultation with the stakeholders. Sensitization of local people will empower them in preparation of the plan, and will make them more liable towards the process. It is necessary to make the local people own the project, which will ease the implementation and long term sustainability.

One of the important aspect of the reconstruction planning or, reclustering of the settlement in those rural areas is standardization of the infrastructure. Width of the roads, water facilities and other basic physical and social amenities are quite different than what is set in national standards. For example, minimum width of 8 meter or 6 meter doesn't seem to be achievable in the clustered location because of disapproval from affected people and doesn't make the sense of rural settlement as well. It is important to build consensus upon the standards of the infrastructure in the plan making process and make plans as per the common understanding. Such standards must reflect the need of local people as well as suffice the basic humanitarian standards.

5 PROJECT CONCEPTUALIZATION AND SITE SELECTION

After the brief information laid out on the earlier section regarding the terminology and different actors involved in the Recluster Plan, different phase of the planning process is identified. It starts with identifying the project and site selection process. The project is conceptualized with the help of VRC and few members from the possible settlement.

5.1 Project Cases

With the scenario of settlement cluster of households ranging from less than 20 to larger settlement of 20-100 households or greater, different scenarios are likely to happen on the site. Some of the most likely cases are briefed below along with the initial steps recommended to be carried out. These cases are based on their level of participation, degree of infrastructure available, number of households and approach required.

5.1.1 Scenario 1: Voluntarily Approached Participation (All households agreed for Reclustering)

- a. Land owners come to the local government or VRC asking for the technical assistance.
- b. Land owners agree to the participation process and possible relocation sites.
- c. Land owners agree for the land adjustments and necessary contributions they have to make in terms of land for infrastructure and other development.
- d. Complying with the necessary site selection criteria and identification of relocation site, a project is conceptualized and SRC is formed to carry out planning process.

Looking at the vulnerability of the site and requirement of relocation, members of VRC visit the site and explain the existing scenario and possible cases after reclustering.

The VRC sensitizes the local people about the vulnerability and their opportunities with the reclustering, ultimately leading from step a to d.

5.1.2 Scenario 2: Some people refuse to participate

It is quite likely that certain settlement or small group of people are not willing to co-operate with the planning process. There are two possible cases which might arise.

There may be a case (Case 01), where they may not be willing to contribute in the planning process but willing to sell their land for reconstruction process. The other case (Case 02) may be such that, they may not be ready to share the communal space with another group. In case 02, conflicts may arise among the settlements, hence they need to resettle in a new location.

In earlier case, it is quite possible to buy certain chunk of land with certain subsidy from government level and other infrastructures are provided to the people as per the planning process. The procedures could also be followed as the same that was followed in distribution of land to the landless people in Nepal. Please refer the Land Reform Act, 1964 for further details.

It is important to consider if few households, don't want to co-operate in the planning process, it is required to be respectful to their decision and proceed without disturbing their existing livelihood.

5.1.3 Scenario 3: Non Participation

Those lands, which are not very vulnerable to the natural disaster but are scattered with lack of infrastructure are susceptible to low quality of life within the locality. After identification of such site, VRC approaches the community, if they agree then project is conceptualized. If they don't agree to participate in the planning process, then project is terminated.

5.1.4 Scenario 4: Forced Relocation/ Reclustering

In case, the people are living in the vulnerable areas and still do not want to participate, according to the Natural Calamity (Relief) Act. 2039 B.S. (1982), "Government may give order to evacuate or, caused to be evacuated the people from the Disaster Area to the area of safety." As the land is already very vulnerable for any further settlement, such settlements will be relocated to nearby most appropriate location. Then the reclustering process of such settlement will be followed as per the previous scenario.

As the basic spirit of this process manual is to deal with the comprehensive participatory approach and implementation of the reclustering process in more grass root level, we expect least disagreement in the process. Although there might be some conflict in terms of decision

making and implementation in plan making process, such conflict resolution mechanism has to be dealt with existing local government structure and prevalent laws⁴.

5.2 Site Selection

Site selection is one of the most important aspect of the Recluster plan. There are certain guidelines and parameters set out in this manual which will help to identify new locations for Recluster.

5.2.1 Site Selection Parameters

Some important aspects that needs to be considered during site selection are mentioned below:

- 1. Willingness of the community should be the top priority of the site selection as it depicts the implementation strategies. Communities which are willing to participate are more positive to embrace the planning process which ultimately helps for implementation.
- 2. Vulnerability: it must be analysed with the site visit through observation or geological study about the vulnerability of the settlement with respect to natural disaster's risk.
- 3. Minimum number of households: Minimum number of households that needs to be clustered should be analysed locally as per the field analysis and existing case scenario. But fundamentally, it is must to have at least 10-20 number of households that needs to be clustered and can be supplied with required infrastructure. The number of 10-20 could be decided depending upon other aspects like geographical terrain, infrastructure investment required, vulnerability of the location and coherence of the households.
- 4. Socio-economic status: It must be analysed prior to the initiation of the project regarding the social and economic status of the people of settlement. Most of the affected region lies in the rural high terrain where the basic livelihood is linked with agriculture and remittance. Vulnerability posed by the social and economic context of these settlements has to be thoroughly analysed so as to understand the need and urgency of the reclustering. Such social context primarily determines the planning approach and form of

_

⁴ १. राष्ट्रिय पुनर्निर्माण प्राधिकरण ९अस्थायी आवास निर्माण तथा निजी आवास अनुदान वितरण सबन्धी कार्यमा स्थानीय स्वयसे वक परिचालन सम्बन्धी निर्देशिका०

२. पुनर्निर्माण सामुदायिक समिति सम्बन्धी निर्देशिका, २०७३

the reclustering. It also points out the expected degree of participation in the plan implementation process and their contribution in the implementation phase.

5.2.2 Necessary Procedures

If the identified location fulfills the parameters set out in earlier chapter then plan making process should be proceeded. Some basic steps needed for site selection are:

- 1. Visiting site with the VRC member and representative of the affected people.
- 2. Complying of the Recluster site with the parameters of site selection.
- 3. Identification of ownership of the land.
- 4. Collection of cadastral map of the site.
- 5. Confirming the existing price of the land and proceeding for the acquisition of the land as per the existing guidelines set out in Land Acquisition act, 1977.
- 6. Collection of cadastral map of existing localities and land ownership certificate of the existing owners in their location.

6 PLANNING PROCESS

After the identification of the relocation of the site, it is important to form one effective Settlement reconstruction committee which will be responsible to carryout the whole planning process and will produce comprehensive Recluster plan ready for implementation. Such planning process needs to be highly participatory in approach and reflect the substance of previous settlement as well. Actors involved in this process are mentioned above apart from which some other actors or experts could be involved for special task like surveying, geology study, etc. Bottom top approach of the planning process is proposed with notion of GESI.

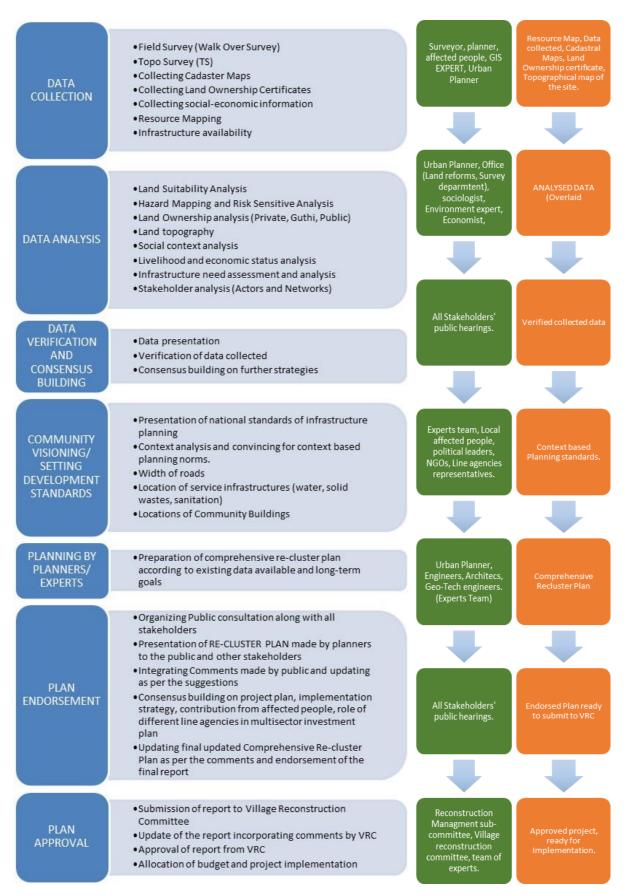


Figure 6: Proposed Planning Process

6.1 Data Collection

6.1.1 Steps

- a. Collection of social and economic data of the affected people.
- b. Collection of land information of existing settlement and of proposed location.
- c. Collection of information regarding infrastructure requirement and need assessment.
- d. Topographical field survey of the proposed relocation site.
- e. Collection the land ownership certificate
- f. Acquisition of land of proposed relocation site.
- g. Resource mapping of the settlement.
- h. Collection of cadastral map.

6.1.2 Actors

- a. Settlement reconstruction committee
 - i. Thematic units
- b. Surveyor
- c. Geologist
- d. Sociologist / Environmentalist.

6.1.3 Participation

- a. Involvement of thematic units in data collection.
- b. Consultation program about the need of the project
- c. Informing about the procedure of the planning.
- d. Collecting demand of the people.
- e. Interviews or Focused group discussion with the people.

6.2 Data Analysis

6.2.1 Steps:

- a. Recording of collected data: Physical (Spatial), social and economic data.
- b. Analyzing availability of public and private land.
- c. Analyzing need of land for Recluster plan.
- d. Resource mapping analysis.
- e. Hazard Mapping, Risk analysis and Vulnerability analysis of the site.

- f. Socio-cultural analysis
- g. Infrastructure need assessment
- h. Livelihood and economic status assessment

6.2.2 Actors:

- a. Settlement reconstruction committee (SRC)
- b. Urban Planner
- c. NGOs/ INGOs Representatives

6.2.3 Participation:

- a. Involvement of thematic units in data analysis
- b. Cross verification about the data with key informants

6.3 Data Verifications and Consensus Building

6.3.1 Steps:

- a. Presentation of collected and analysed data to the larger group of people
- b. Verification of the data in public forum.
- c. Updating the data, if there are any missing data or distorting information
- d. Identification of need of the people
- e. Finalizing the infrastructure needs for the development
- f. Setting out goal/vision of settlement and endorsing in the public.

6.3.2 Actors:

- a. Settlement reconstruction committee
 - i. Thematic units
- b. Representative from Village reconstruction committee (2-3 in numbers)
- c. Representative from Department of Survey and Land revenue.

6.3.3 Participation:

- a. Presentation of the analysed data and verification of it with community participation.
- b. Consultation program about the infrastructure need of the settlement and goal setting.

6.4 Determining development standards (Community Perspectives/ Building Byelaws)

6.4.1 Steps:

- a. Determining the development standards for planning such as:
 - i. Width of Roads
 - ii. Number of Water facilities
 - iii. Location of waste disposal
 - iv. Community buildings and their locations
 - v. Number of households in single clusters
- b. Determining the building and planning standards for the settlement
 - i. Building control guidelines (Building bye-laws)
 - ii. Number of floors, minimum floor area, location of toilets, etc.
 - iii. Material use and construction technology

6.4.2 Actors:

- a. Settlement reconstruction committee
- b. Municipal/VDC Engineer

6.4.3 Participation:

- a. With the cognitive mapping or other means of participatory planning approach, different community perspective in planning are identified.
- b. Planning and setting development control standards with their own consensus in the larger public forum will make them more responsible to follow the rules and own the regulations.

6.5 Planning by Experts/ Planners

6.5.1 Steps:

- a. Preparation of Recluster plan as per the guidelines/ principles set out in earlier discussions.
- b. Preparation of prototype houses as per requirement of local people.
- c. Providing optimum infrastructure facilities required for the development of cluster
- d. Identifying the percentage of contribution required during the planning.
- e. Preparation of investment plan and budget requirement.

- f. Preparation of implementation plan and setting out time frame.
- g. Finalization of comprehensive Recluster plan

6.5.2 Actors:

- a. Settlement reconstruction committee
- b. Representatives from VRC
- c. Urban Planner
- d. Actors (NGOs, Private Sectors)
- e. Municipal/VDC Engineer

6.5.3 Participation:

- a. This step is more of the experts input, while basic principle set out in this steps is already an outcome of earlier participatory process.
- b. Regular informal consultation with key informants, thematic units and local people regarding the development of plan.

6.5.4 Reclustering Guidelines:

- 1. Altitude: People prefer to shift to places with relatively similar altitudes.
- 2. <u>Distance:</u> The effort is to keep the new location as close as possible to the original cluster.
- 3. <u>Orientation:</u> The orientation of the original cluster/houses (Facing ridge/valley, facing direction, towards river etc.)
- 4. <u>Cluster Unison:</u> Cluster could be together with its original inhabitants. Forced mixing may have negative effects.
- 5. <u>Environmental Sensitive area</u> should be avoided as much as possible, like water bodies, forests, watershed, etc.
- 6. <u>Closer to the Market Area:</u> People would prefer to move to the new location which has got potential to expand or is in vicinity of market center.

6.6 Contribution Guidelines

With the case reference from Bhuj post earthquake relocation and principle of town planning scheme of India, we've understood that contribution ratio in the land after the infrastructure is done with flat percentage basis, unlike tedious calculative process that we adapt in land pooling process of Nepal. Regarding the urgency of the reconstruction and lack of

availability of qualified human resources, it is better to have flat 40% ⁵ contribution for infrastructure or in other case deduction of the land could be based on the scale of land ownership.

Table 2: Flat contribution ration of land after infrastructure is provided

Existing Land	Contribution (%)	Remarks
Less than 8 Ana	20%	
Less than 2 Ropani and greater than 8 Ana	30%	
Greater than 2 Ropani	40%	

Minimum contribution in open public spaces: 5-10%

⁵ 40% contribution is the general practice adopted in the ground root level of land pooling and well accepted model of land re-adjustment often considered as 60-40 model.

26

6.7 Plan Endorsement and Approvals

6.7.1 Steps:

- a. After the completion of the comprehensive Recluster plan, it is presented to the affected group of people.
- b. Explaining about the contents of the plan and making them aware about the necessary contributions they need to make.
- c. Incorporating comments from the public and different stakeholders in the consultation program and updating likewise.
- d. Consensus building on project plan, implementation strategy, contribution from affected people, role of different line agencies in multi-sector investment plan.
- e. Preparation of final updated plans as per incorporating necessary comments and suggestions from public.
- f. Final updated plan forwarded to VRC and other upper hierarchical institutional for approval of project and allocation of the budget.

6.7.2 Actors:

- a. Settlement reconstruction committee
- b. CDO or Representative from CDO's office
- c. Representative of DL-PIU (DUDBC)
- d. Representative of VRC
- e. Representative of NGOs, INGOs, Civic Society, Public sector and other stakeholders.
- f. Municipal/VDC Engineer

6.7.3 Participation:

- a. Most important participation step for the endorsement of the final update comprehensive Recluster plan.
- b. Comments made by public are incorporated for updating the plan.
- c. Endorsement of the plan with public consensus.
- d. Ownership of the project while endorsing and forwarding to upper level for approval.

7 INVESTMENT AND IMPLEMENTATION STRATEGIES

After the approval of the project from VRC or other higher level institution, investment plan is prepared integrating different stakeholders. Multi-sector investment plan is to be prepared along with the participatory implementation approach. In such steps, different actors such as private sectors, development partners and government sector may come to an agreement on the share of contribution they are willing to make. As the manual basically focuses on planning process but it's important that Implementation strategies should cover but not limited to following themes:

- Demolition and Debris Management
- Reuse of temporary shelters.
- Building Conversions
- Construction Materials.
- Construction Technologies
- Site Management.

As per the quintessence, presented in reconstruction policy, it must be understood that reconstruction or relocation must go hand in hand with the culture and social status of the local people. Material used and the technology adapted must be earthquake resilient but also reflect the socio-cultural status of that settlement. More importantly, guidelines set by the government for community level execution will be the defining document for implementation strategy⁶.

-

⁶ पुनर्निर्माण सामुदायिक समिति सम्बन्धी निर्देशिका, २०७३

8 MONITORING AND EVALUATION

It is important for the eminence implementation of the project. Investment of the recourses in such a large scale need proper procurement, quality control, monitoring and evaluation other project. Consultation with the community and evaluation of requirements and capacities is critical before deciding on any reconstruction approach and during the reconstruction process.

Monitoring and evaluation of plans and projects could be undertaken with different perspectives and methodology. Monitoring and evaluation should indicate how and when to evaluate the implementation of the strategic plan and its assumptions that contribute to the success of the implementation and the risks that bring failure (Urban Planning and Implementation Manual). Main points that need to be considered in monitoring and evaluation are:

- Time schedule
- Task accomplishment
- Indicators
- Resource utilization and management
- Achievement of objectives

Some major points to be considered during the evaluation process are:

- Ensure participation of community and different stakeholders during planning process
- Prepare and use feedbacks from monitoring and evaluation in the planning process
- Include representatives from stakeholders in monitoring and evaluation team
- Prepare project implementation and accomplishment report
- Undertake post project evaluation (fulfillment of objectives, level of success in reaching the target population, economic and environmental impacts,)
- Prepare feedbacks from experiences of all spatial levels of planning
- Incorporate feedbacks in the planning and implementation process

9 ISSUES AND CHALLENGES

Reclustering of the existing settlement into new location is itself a challenging process where few more complications are added with the land ownership, lack of availability of public land, overlapping bureaucratic structures, political influences and other factors. It is expected that with the participatory approach involved in the planning, it will elicit local people to own the planning process and own the project itself. Mobilization of large amount of resources and coming from different stakeholders is itself challenging which needs to be properly integrated and procured in the manner.

Issue of land ownership and contribution might be little defiant in the planning process which needs to be handled with proper patience and exchange of information. Transfer of public land to the private ownership might bring intrusion of land mafia which needs to be handled with proper ethics and counter check-balance mechanism.

Lengthy process of participation could bring frustration toward the affected people regarding the Recluster, hence it is necessary to address the immediate problems and proceed for long term solutions.

This manual will serve for setting out principle for the Recluster or reconstruction program integrating different actors and stakeholders in participatory approach. Different steps involved in this manual are not mandatory but are proper guide for participatory reconstruction approach. This manual complies with the pre-existing framework of legislations and institutional set up, hence it is expected that the manual is acknowledged by different sectorial departments and supported in the process of plan making.

10 REFERENCES

(2072). National Reconstruction and Restoration Policy. Kathmandu: Government of Nepal.

(2016). Post Disaster Recovery Framework (2016-2020). Nepal Reconstruction Authority.

Kathmandu: Government of Nepal

Urban Planning and Implementation Manual