

# **ASSESSMENT OF LAND GOVERNANCE: A CASE OF URBAN LAND READJUSTMENT**

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Enschede, The Netherlands

February, 2014

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#### DISCLAIMER

This document describes work undertaken as part of a programme of study at the Faculty of Geo-Information Science and Earth Observation of the University of Twente. All views and opinions expressed therein remain the sole responsibility of the author, and do not necessarily represent those of the Faculty.

# ABSTRACT

Land readjustment (LR) for the infrastructure development and relocation of irregular squatters into land readjusted area is feasible with the change in the situation of land ownership and adequate consensus of the users. Security of land tenure, participation and equity are the prerequisites to initiate LR projects. However, neither the government nor the private sectors alone meet the comprehensive societal goal. Thus the governance actors should be integrated into the network for sustainable urban LR. These issues are closely related to the land governance. Therefore, the main objective of the research is “*To assess the land governance principles in different aspects of governance for the case of urban land readjustment*”.

Research methodology adopted is both desk research and case study. The land governance framework is developed with the help of indicators to shape the fieldwork and assessment of land governance principles in different aspects of the governance for urban LR. Qualitative, quantitative and spatial data are collected from the different governance actors to prevent the biasness of the data. Text based method and MsExcel are used for the analysis of qualitative and quantitative data, whereas ArcGIS is used for visualization of spatial data. The validation of LR is reviewed to relocate the squatters into land readjusted area.

The analysis result shows that the significant weaknesses in addressing tenure security such as absence of explicit land policy and laws related to LR, delays of the LR projects, lack of appeal system. Besides, land contribution is found (30 to 55 %), which is unfair because value based method is not adopted. In the case study area, LR projects have been seen initiated by the government agencies with the consensus of 51% of the users and not seen initiated by the private sector. This shows the absence of governance network. On the other hand, tenure security, participation and equity for shelter to squatters are missing. Application of land readjustment method in existing squatter area seems difficult due to the problems related to space, vulnerable location and land documentation. However, proper relocation of squatters into land readjusted area is possible with the concept of social housing, participatory land readjustment and with the help of governance network to make social inclusion and cohesion of settlements.

Finally, sustainable urban development using LR is not far to meet the demands of the government and cities but the proper incorporation and implementation of land governance principles are necessary. The construction of multi-storey building is suggested to meet the equity for shelter and for the realisation of tenure security by the squatters to meet the agenda of Millennium Development Goal 7D.

Keywords: *Land governance principles, Governance network, Assessment, Land readjustment, Squatters relocation*



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## ABBREVIATIONS

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DFID:	Department for International Development
DUDBC:	Department of Urban Development for Building Construction
DoLRM:	Department of Land Reform and Management
DoS:	Department of Survey
FIG:	International Federation of Surveyors
ERMC:	Environment and Resource Management Consultant P.v.t.
FAO:	Food and Agriculture Organization
GDP:	Gross Domestic Product
GLDP:	Guided Land Development Program
GTZ:	German Technical Cooperation
KVTDC:	Kathmandu Valley Town Development Committees
KVTDA:	Kathmandu Valley Town Development Authority
KM:	Kathmandu Metropolitan
BM:	Bhaktapur Municipality
LR:	Land readjustment
LGAF:	Land Governance Assessment Framework
LMTC:	Land Management Training Centre
MDGs:	Millennium Development Goals
MoUD:	Ministry of Urban Development
MOHPP:	Ministry of Housing and Physical Planning
MoLRM:	Ministry of Land Reform and Management
TDPICs:	Town Development Planning Implementation Committees
TDC:	Town Development Committee
TDA:	Town Development Acts
SIDA:	Swedish International Development Cooperation Agency
SSS:	Shankhamul Squatter Settlement



# 1. INTRODUCTION

## 1.1. Background

There are different push and pull factor behind the increasing demand of developed land for housing in urban areas such as rural-urban migration, population growth, natural disaster, expectation of job and urban facilities (Paudyal, 2006). As a result, most of the cities and the governments are facing many challenges to relocate the urban people in well planned and environmentally safe areas (Enemark *et al.*, 2009). In addition to this, the people who are living in squatter settlements are deprived from the security of land tenure, land development rights and land use rights (Pugh, 2000). Therefore, they are far from the facilities provided by the government and consequently suffering from the poor environmental conditions such as lack of water, sanitation, health facilities and education (Atterhög, 1995). However, land is one of the single un renewable natural resource and is related to basic necessity such as food and shelter for living beings (Palmer *et al.*, 2009). Therefore, sustainable land development is necessary to meet the basic need for shelter in urban area of developing and under developed countries which cannot be achieved without change in the land rights and condition of the land ownership such as change in geometry, area, land use and location (Muller, 2004).

The government and the private organizations are the main land developing agencies to facilitate developed land plots in the land market through the urban management methods, process and techniques (Larsson, 1997). These methods might be compulsory or voluntary depending upon the legislation of the government (Hebbert, 1994; Turk *et al.*, 2010). One of the non-compulsory or voluntary urban land development method is the Land Readjustment (LR) and which is based on self-financing project and win-win strategy (Archer, 1986; Muller, 2004). It is used to readjust the irregular boundaries of the land plots with infrastructure and utility facilities (Doebele, 1982; Hong *et al.*, 2007; Lemmen *et al.*, 2012; Muller, 2004). Land readjustment projects are introduced by the central government, local governments, municipalities, private organizations and public agencies with the participation of land owners and tenants. In 1902, Germany had initiated LR as an urban infrastructure development method for converting agricultural land to urban land with the enactment of land transfer law called *Lex Adickes*. Later on from 1954, LR technique has been adopted for disaster recovery in Japan under the Land Readjustment Acts 1954 and about 30% of the urban land were developed using this technique. Besides land use conversion and disaster recovery, LR has been used in Europe, Asia and America as urban renewal, development of new urban cities and prevention of spotted settlements (Atterhög, 1995; Yomralioglu, 1993).

Despite the popularity and advantages of the LR technique, there exist several issues related to the principles of governance such as security, equity and participation (Turk, 2008). Therefore, the assessment of the governance principles in different aspects of the governance such as policy, process and structure is necessary for efficient and sustainable urban LR. Moreover, it is important to review the LR in the case of squatters to find out whether it is possible to relocate the squatters into the developed and environmentally friendly area based on participatory approach (UN-HABITAT, 2013a). Principally, land readjustment projects are fully dependent on the consent of users (land owners) to use their land for the infrastructure development and for cost recovery of the project (Doebele, 1982). Neglecting the consent of the users might create problems. For instance, almost 30 % of Japanese urban land has been developed by LR technique but there was considerable disagreement by the small land owners with argument that the LR technique has favoured large landowners. Consequently, about half of the municipalities have not apply this technique (Atterhög, 1995). Similarly, the study on consensus among the land owners and multi-sectorial involvement in LR reveals that LR projects are fully dependent on the participation among the land owners, private sector and the government (Hong *et al.*, 2007).



In addition to the participation, equity is another significant principle of the land governance for sustainable LR. Inequity in distribution of the land resources causes several difficulties in building consensus and finally convert into violence, thus equity is measured by the value of the needs (Yomralioglu, 1993). Equity can be described in terms of input equity, process equity and output equity (Doebele, 1982). Input equity advocates the involvement of users (stakeholder; landowners are the entire users in LR project) in the policy formulation and planning. Process equity such as justified land contribution ratio and inclusive participation of users favours fair system (Karki, 2004a; Turk, 2008). Output equity can be measured in terms of the benefit returned from the LR project through land value and urban facilities (Turk *et al.*, 2010). Therefore, lack proper land evaluation method of land contribution to LR project may cause forced eviction to the small land owners (Doebele, 1982). Hence, losing the sentimental value attached with their land and social relationship. However, good land governance is always supportive against the forced eviction (Karki, 2004a). Besides the equity, land tenure security is another principle to be assessed in LR. *“Land tenure security strengthens the relation between people and land”* (Simbizi *et al.*, 2014).

Insecurity in land tenure discourages the land owners to participate in land readjustment process. During the LR process temporary land owner is the land developer, who can restrict the transaction of the parcel by subdivision and physical changes on the land (Karki, 2004b). On the contrary, due to delay of the LR projects, land owners might be prevented from the land use rights. In Nepal, land ownership certificate and restriction free letter from the Land Revenue office are essential to get the financial credit from the bank but when land ownership certificate are submitted to the LR project it creates the problem to get the credit from the bank. Security of land tenure, in the case of the project handled by the private organizations is another challenge to convince the land owners about security of the land tenure and other use rights (Turk, 2007). To face these problems, the network among inter-organizational and multi-sectorial stakeholder is necessary for sustainable LR (Mattingly, 1996). According to Sorensen, when the governance actors are participated in a network to meet common societal goal then such a network is called governance network (Sorensen, 2005). In the governance network, power is shared among the governance actors for sustainable urban development (Stoker, 1998).

In addition, for the case of squatters who are deprived from the land tenure and equitable access to land for shelter is essential to review the LR for the relocation of squatters into land readjusted area. Relocation of the squatters into land readjusted area can be possible by constructing social houses by the government, private sector and civil society groups through allocation of the cost recovery land from LR projects. Participatory and Inclusive Land Readjustment (PILaR) approach could address many challenges of conventional LR through incorporating participation among the government, internal users (land owners), external users(squatter people), civil society groups, academia and private sector to support the squatters providing secure shelter (UN-HABITAT, 2012, 2013a; World-Bank, 2002).

These aforementioned issues are closely related to the land governance. Thus, it is essential to assess the land governance principles such as land tenure security, participation and equity in different aspects of the governance for sustainable implementation of urban LR. It is also important to review the LR for the relocation of squatters into LR area to meet the need of basic shelter and to support the *“Millennium Development Goal 7D related to significant improvement in lives of at least 100 million squatters by 2020”* (UN, 2013).

## **1.2. Research Problem**

International practices for the urban development show that the cost effective, participatory and sustainable urban infrastructure development requires the adoption of land governance principles, proper land development method and governance network (Deininger & Feder, 2009; Magel *et al.*, 2001; Nyseth, 2008; Uzun, 2009). Literatures have revealed that in many developed and developing countries, different urban land development methods such as site and services, Guided Land Development Program (GLDP)

and LR have been practiced for the urban infrastructure development (Mattingly, 1996; Shrestha, 2010). These methods have been practised under the central government, local government, land owners committees, real estate agency and private sectors (Archer, 1992).

Out of many urban development methods, LR has been seen as the cost-effective method to develop the urban land based on the consent of land owners (Archer, 1992; Rajkarnikar, 2002). Cost effectiveness can be determined as no financial burden paid by the government for the infrastructure development, where all the infrastructure development cost are shared by the land owners through the contribution of their land. Thus the justified land contribution, adequate compensation to the evicted land owners and existence of appeal system are necessary to initiate the LR projects (Doebele, 1982; Karki, 2004b; Muller, 2004; Sorensen, 2000b). Security of land tenure and equitable access to land for shelter and benefit from the infrastructure are equally important to conduct LR (Karki, 2004b). LR projects are depends on the participation among the stakeholders and integration of governance actors (Mattingly, 1996). Therefore, governance principles are necessary to be applied in different aspects of governance for sustainable urban LR because good land governance always considers adoption of the land governance principles for fair, efficient, effective and sustainable land development (Zakout *et al.*, 2006).

Land readjustment has been applied in different instances in various countries for urban development processes such as urban infrastructure development, facilitating urban developed land for residential purpose, disaster recovery, prevention of spotted settlements (Doebele, 1982; Sorensen, 2000b) but still its use and impact in the squatter settlements has not been addressed (Shrestha, 2013). Also, the role and importance of land governance and governance actors are found in other urban development processes and is conspicuously absent for the relocation of squatters in land readjustment area. The land governance is always a supportive and effective tool to reduce the conflict of the competing interests on the land and property whereas the good land governance supports the security of land tenure, participation, equity to access the land, natural resources and shelter to all (FAO, 2007; Trivelli, 1986). Thus, above arguments show the problem is “the exploration of the issues that lessen the security of land tenure, participation and equitable access to land during urban land readjustment for the sustainable urban infrastructure development and review the LR for the relocation of squatters into land readjusted area to support the basic shelter”.

### **1.3. Justification of the Research**

Assessment of land governance principles such as security of land tenure, participation and equity in different governance aspects (policy, process and structure) is necessary to know whether the land governance principles are taken into consideration for sustainable urban land readjustment. The research is quite significant in the perspective that once the assessment of land governance principles have been done in the different aspects of the governance for urban land readjustment, it will be logical and easy to find the way of making interventions such as formulation of sustainable policies, laws and its implementation to overcome the weaknesses in land readjustment. The assessment is also important to strengthen and improve the shortcoming of the governing system and to improve the process of urban LR. Therefore, the assessment result can guide the governance actors about how to meet the sustainable urban LR.

Sustainable urban land readjustment requires participation of stakeholders such as land owners and other related stakeholders because land owner contribute their land for infrastructure and other actors are representative for proper utilization of land. Policy, laws and plans should be prepared in a fully participatory and inclusive process to encourage and express the interest and voices of minorities and rural people in decision making process. It is considered that the consultation for policy making and implementation without incorporating the voices of all participants is not called consultation (FAO, 2007). Therefore, participation should not be socially, economically, culturally, politically and gender biased.

Study on participation of land owners and lease holder in the land readjustment project from Germany and Japan shows that the participation is initial step to initiate and complete the project (Doebele, 1982; Hong *et al.*, 2007). Fixed percentage of participants may force the compulsory agreement of uninterested users which can create the dispute among participated and non-participated users in the entire LR project area and consequently non-participated users can obstruct the progress of the project.

Laws, policy and enacted legislation about land tenure security should be clear and guaranteed to the users who contribute the land and benefited from the developed infrastructure. Forced eviction, lack of appeal system, inadequate compensation, inaccurate land document and long term delay of the project are the issues of tenure insecurity (Karki, 2004b). Therefore, in the good land governance practice, land tenure should be secured to encourage and engage the users in land readjustment process. Tenure security increases the trend to make investment by the users on their land and property. Therefore, good land governance should incorporate the land tenure security for secure enjoyment of land property.

Equity to contribute land for LR and access to benefit from LR are to be justified and acceptable. Lack of the justified land contribution method can marginalise land owners having small land parcel. Equity to access the land for shelter, accurate and easy access of land information to the users (land owners) is taken as good practise in good land governance. A study on challenges to implement LR in Kathmandu valley by Karki (2004b), shows that the urban facilities in both land readjusted and non-land readjusted area, given by the central government are not fair. Land owners in land readjusted area have to pay enough land for urban facilities while the people in non-land readjusted area have been using urban facilities without paying infrastructure installation cost. Such unfair treatment encourages the people to oppose the LR project and live in informal settlements. Therefore, assessment of equity in the different government aspects is equally important to know about the input, process and output equity in LR project.

In addition, increasing squatter settlements are the major challenges faced by the government and cities to relocate them in safe and developed areas. Tenure security, participation among the governance actors and equity to access the land for shelter are prime concern before the relocation process. In Nepal, from 1970 to 1980, site and services program was practiced for providing serviced plots to low income group. However, due to various reasons such as long term negotiation with land owners, high demand of compensation and abuse of political power the government had abandoned the site and service program. The private sector has initiated housing apartment since 1990 and mainly the elite were seen as beneficiary groups. These scheme are seen as a kind of business scheme used by the land owners and the housing companies rather than the socialization and inclusive community (Shrestha, 2010). Around 1988, LR projects have been initiated by the government agencies to facilitate the serviced land to the users (land owners) but it is consciously unknown whether the LR project support the access of serviced land plots for the construction of affordable houses to squatters (Karki, 2004b).

The other reasons to review the LR for the relocation of squatters: (a) Interim constitution 2007 of Nepal guarantees the provision of shelter to all citizen (GoN, 2007) but the secure shelter is not possible without relocating the squatters in safe area. (b) The Millennium Development Goal 7D, which relates to significant improvement in lives of at least 100 million squatters by 2020 (UN, 2013). (c) The UN-HABITAT agenda for secure and safe housing to squatter can realise the security against the forced eviction and more comfortable to engage in their job (Shrestha, 2010). PILaR by UN-HABITAT (2012), shows that the participatory and inclusive LR can support to the urban poor and squatters. However, without assessment of land governance principles in LR it is difficult to extrapolate that LR might be supportive to squatters. Therefore, the assessment of land governance principles in urban LR is intended to study the issues that lessen the tenure security, equity and participation in LR. Meantime, review of LR is intended for the validation of LR for the relocation of squatters into LR area.

#### 1.4. Research Objective and Research Questions

##### Main-Objective

The ultimate objective of this research is “To assess the land governance principles in different aspects of governance for the case of urban land readjustment”.

##### Sub-Objectives

Sub-objectives and research questions are formulated with the help of main objective. The aim of the sub objectives of the research is to fulfill the assessment gap of land governance in urban land readjustment and review the urban land readjustment for the relocation of the squatter settlements. To meet the requirement of each sub objective, the whole research is conducted with the help of at least two research questions per sub-objective. The answer of each research question is fulfilled by the proper research methodology such as desk research methodology and case study. Sources of data used in this research, selection of respondents, data collection technique, resource used and analysis methods are described in chapter four. The sub-objectives and research questions are illustrated in the following table (1-1):

Sub-Objectives	Research questions
1. To develop the land governance framework for tenure security, equity and participation applicable for LR.	✓ Which land governance indicators are applicable for LR? ✓ How can the indicators be validated?
2. To assess tenure security, equity and participation in LR	✓ How does tenure security imply in LR? ✓ Does LR incorporate the equity? ✓ How does participation imply in LR? ✓ How effective is LR in terms of governance network?
3. To study the LR for the relocation of squatters.	✓ How do tenure security, equity and participation contribute in the squatter settlement? ✓ Is LR suitable to relocate the squatter settlement?

Table 1-1: Research sub-objectives and questions

#### 1.5. Conceptual Framework

This research is mainly focussed on two concepts: 1) Land governance and 2) and the land readjustment. Figure (1-1) shows the conceptual framework of the research. **Tenure security, equity and participation** are the three selected land governance principles that are to be assessed in urban LR with the help of indicators. Finally, the research is intended to review the LR for the relocation of squatters into land readjusted area.

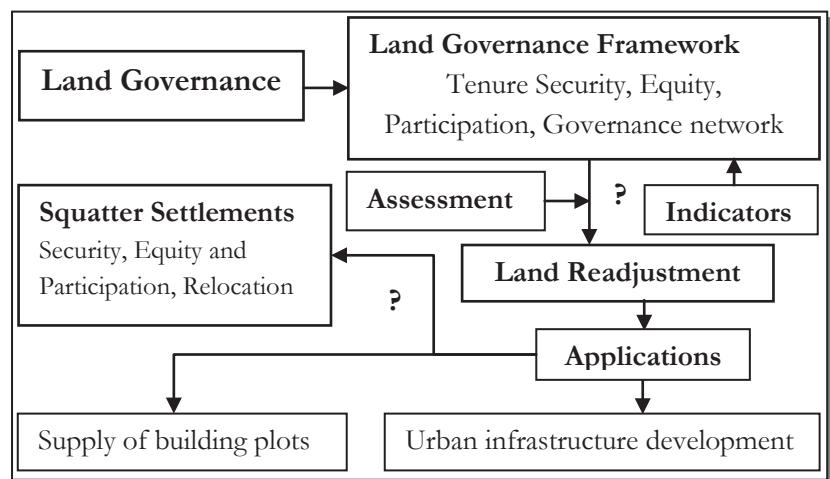


Figure 1-1: Conceptual framework

## 1.6. Research Methodology

Research methodology is defined as the strategy that guides the set of procedures for research practice and it suggests conducting the research for achieving answer of the research questions. “It is a technique used to acquire and analyse data to create knowledge and to make conclusion with the help of questionnaires, interviews, focus group discussions, survey measurements” (Petty et al., 2012). The proposed research methodology for this research is described in figure (1-1). To meet the objective of the research, single research method may not be able to

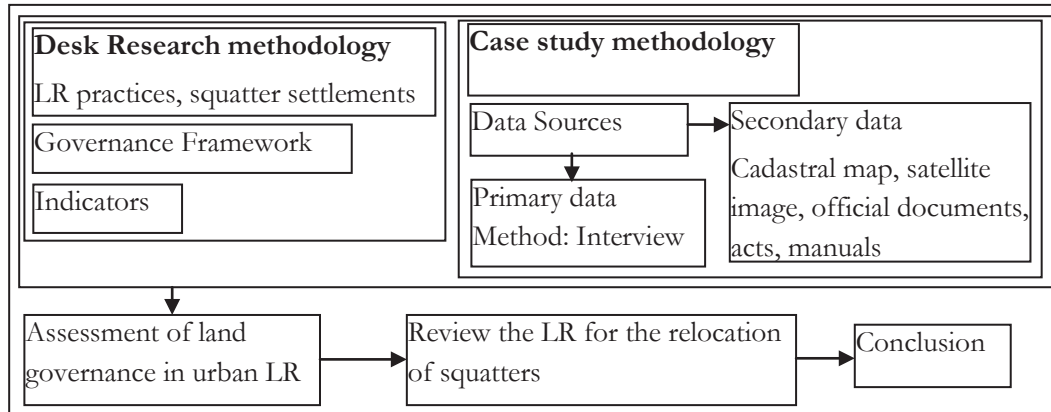


Figure 1-2: Research methodology

provide enough information for the requirement of the research (Yin, 2003). Therefore, desk research methodology and case study methodology are chosen for this research. Development of the governance framework, methods of the development of indicators, methods of assessment and review the international good practices are derived from desk research methodology. Whereas the case study methodology is adopted to assess the land governance principles and review the LR for the relocation of squatters into land readjusted area. The case study methodology is used to get the primary data and knowledge on the real practice adopted in the case study area, Kathmandu, Nepal.

### 1.6.1. Case Study Methodology

Case study methodology is used to collect data to understand the case and to examine the contemporary phenomenon within the specific context (Noor, 2008) and is defined as “an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident and in which multiple sources of evidence are used” (Yin, 2003).

Case study methodology helps to explore and grasp information through primary and secondary data collected from the field, focused on the particular case. Case study is also helpful to know the practice adopted for holistic and in-depth explanation. The assessment on the land governance requires the qualitative analysis on empirical inquiry of current situation in real life context. Therefore, case study methodology is adopted to get the answers of the questions related to sub-objectives No. 2 and No.3.

### 1.6.2. Desk Research Methodology

Desk research methodology is carried out for finding experimented and verified facts with the help of review the Scientific papers, books, published papers, conference papers and international good practice (UNDP, 2007). This is a secondary method of data collection. With the help of desk research methodology, the land governance framework applicable for LR is developed with the help of governance indicators. Desk research methodology is used to get the answer of the questions related to sub-objective one, partially used to get the answer of the research questions related to the sub-objectives two and three.



### 1.7. Research Design and Research Design Matrix

Research design is a simple and sequential form of passage visualised through flow chart to get the knowledge about the objectives included on a particular research topic. “*It is a logical plan for getting here to there*” (Yin, 2003). Research starts from introduction followed by review of literature, development of land governance framework applicable for LR, assessment of land governance principles and review the LR for the relocation of squatters into LR area. Finally conclusion and recommendation are made. Figure (1-3) and table (1-2) shows the research design and research design matrix respectively. Research design involves the logic which connects the various data to be collected to initial research questions of the study (Yin, 2003). The research design matrix shows the methodology and data type to achieve the objective of the research.

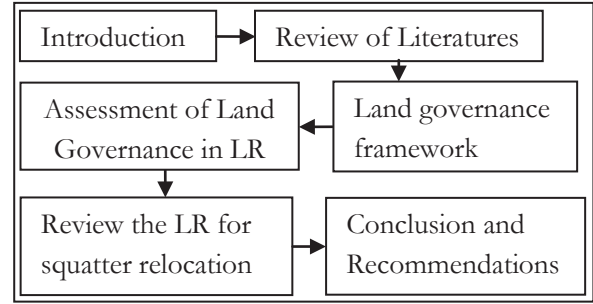


Figure 1-3: Research design

#### “To assess the land governance principles in different aspects of governance for the case of urban land readjustment”

Sub objective	Research question	Research methodology	Primary data	Secondary data
1. To develop the land governance framework for tenure security, equity and participation applicable for LR.	1. Which land governance indicators are applicable for LR?	Desk research methodology		Literature review, published and unpublished official documents, international practices
	2. How can the indicators be validated?	Desk research methodology, opinion of experts, academician		Good practices adopted in international arena
2. To assess tenure security, equity and participation in LR	1. How does tenure security imply in LR?	Case study methodology and literature review on international practices	Interview, Current practices adopted in case study area	Policy, acts, scientific land reform report, urban shelter policy
	2. Does LR incorporate the equity?	Case study methodology and literature review on international practices	Interview, Current practices adopted in case study area	Policy, acts, manual, reports Land acts, regulations and shelter policy, spatial data
	3. How does participation imply in LR?	Case study methodology and literature review on international practices	Interview, Current practices adopted in case study area	Policy, acts, manual, reports LR manual
	4. How effective is LR in terms of governance network?	Case study methodology, and desk research methodology	Interview with government, civil society groups private sector experts academia for network,	Policy, acts, manual, reports Review on governance network

			Current practices adopted in case study area	
3. To study the LR for the relocation of squatters.	1. How do tenure security, equity and participation contribute in the squatter settlement?	Case study methodology and desk research methodology	Interview with squatter federation member, government, experts, civil society group, Academia, workshop	<i>Report of High Level Land Reform Commission</i> , National acts, Interim constitution of Nepal, a report on scientific land reform in Nepal, satellite image of study area
	2. Is LR suitable to relocate the squatter settlements?	Case study methodology and desk research methodology	Interview with respondents from government, civil society, experts, academia, squatter	

Table 1-2: Research design matrix

### 1.8. Thesis Structure

**Chapter 1: Introduction:** This chapter presents the general background including the social problems related to the urban land readjustment and some governance issues that persist in urban land readjustment to justify the research problem. Both research objectives and research questions are mentioned in this chapter. This chapter includes the conceptual framework, research methodology and methods for answering the research questions. Along with this, it has the research design and research design matrix.

**Chapter 2: Literature review:** Initial stage and the foundation of this research are to conceptualize the research idea which was formulated with the help of relevant literatures and intellectual ideas from the scholars, scientists and experts. This chapter includes the fundamental and essential information related to the research problem and research area.

**Chapter 3: Land governance framework for land readjustment:** This chapter describes the development of land governance framework for the assessment of land governance principles in different aspects of the governance for LR with the help of indicators. It also includes the key questions and methodology mentioning how to develop the indicators as well as its validation.

**Chapter 4: Data collection and case study area:** This chapter discuss on the technique used for data collection, sources of data, method of data collection, respondents, processing and analysis. It also describes about the case study area for the collection of primary and secondary data.

**Chapter 5: Assessment of land governance principles in urban land readjustment:** This chapter describes about the assessment of land governance principles namely: - security, equity and participation in different aspects of governance for urban LR, using the indicators. The information derived after the analysis of primary and secondary data from the field are used to assess the land governance principles in urban LR. Finally, discussion on the assessment gap in urban LR is done by comparing the result of the assessment, international success practices and supportive literatures.

**Chapter 6: Land readjustment for the relocation of squatter settlements:** This chapter describe the governance issues in squatter settlements and evolution of squatter settlements using satellite and aerial images. It also includes the problems to initiate the LR for the development of infrastructure in existing squatter settlements. Finally, review the LR for the relocation of squatters into LR area.

**Chapter 7: Conclusion and recommendations:** This chapter finalize the whole research with the conclusion and recommendation for further research which cannot be incorporated by this research.

## 2. REVIEW OF LITERATURE

### 2.1. Introduction

The previous chapter highlighted the general introduction, research problem, objective and concept of the research. It has also briefly described the research methodology adopted to conduct this research. This chapter allows establishing the strong theoretical background, helpful to create the research problem and research methodology to conduct the research via finding important governance issues relevant to the theme of this research. This also reviews and discusses the work that has already been done by different scholars in the area of urban development especially land readjustment and squatter settlement. This chapter is important because it helps in identifying the areas of prior research to prevent the duplication of the effort and point out the way in fulfilling a need for this research. Hence review of literature is a way of getting knowledge based on international scientific articles, journals, books and other electronic media to grasp knowledge and apply on the research topic. It justifies the significance of the research area and finds the gap to be fulfilled by this research. The purpose of this chapter is therefore, to grasp the fundamental knowledge about the concept of governance, land governance, governance network, land readjustment practices at an international arena so that it help to assess the governance principles in urban land readjustment. Moreover, this chapter intends to find the governance problem in the squatter area and review the LR to relocate the squatters into land readjusted area.

To fulfill the aforementioned purpose, review of literature is the initial step to start and developing foundation for the topic to be conceptualized through this research. Hence, this chapter is divided into total ten sections. Section 2.2, 2.3 and 2.4 describes the concept of governance, land governance and urban governance. Governance network is described in section 2.5. LR process in Germany and Japan including land governance is described in section 2.6. LR to relocate squatter settlements and land governance is highlighted in section 2.7. Section 2.8 raised the common governance principles necessary to in LR and squatter settlements. Land policy required for LR and relocation of squatter settlements are described in section 2.9. Finally, section 2.10 is about the concluding remarks of this chapter.

### 2.2. Governance

According to the World Bank “*Governance comprises the practices and institutions by which authority in a country is exercised for common goods and services*” (Kaufmann et al., 2010). Governance is the capacity of the government to formulate and implement the sustainable policies. It also includes the system of the government (Weiss, 2000). UNDP (2007), has defined that “*Governance is the system of the institutions, norms, customs and policies by which society manages socioeconomic and political relationships through the interaction between state and citizens*” (Weiss, 2000). The European Commission has developed the definition very close to the theme of this research; “*Governance concerns the ability of state to serve to the citizens. It refers to the rules, processes, and arrangements by which the conflicting interests are addressed, resources are managed and power is exercised in society*” (Kaufmann et al., 2010; Sudders et al., 2004). “*Governance is formulated through the formal institutions (laws and policies) as well as informal arrangements of different actors from the government, civil societies, media and private sectors*” (FAO, 2007). Governance therefore, is a method to identify the blurring boundaries and responsibilities to deal with the socioeconomic problems through the power sharing among different governance actors. However, the government is one of the steering, guiding and leading actor among civil society and private actors involved in the process of decision making, implementing and monitoring (Stoker, 1998).

Governance is a qualitative and unbiased term that varies between the limits from weak to good governance in terms of implementation and evaluation of governance principles to articulate the aggregate voice of citizen. “*It includes the formal institutions of the government and informal arrangement from the private sector, civil society groups, citizen and media*” (FAO, 2007). Thus, the governance is conceptually broader than the



government (Palmer *et al.*, 2009). According to Kofi A. Annan The former Secretary General of the United Nations “*Good governance is perhaps the single most important factor promoting development programs and in eradicating poverty*” (Robertson, 2002).

### 2.3. Land Governance

“*Land governance is defined in terms of sound policies, process, structure and institutions by which land, property and natural resources are managed. It includes decisions made on the accessibility of one or more land rights from the bundle of land rights such as access, use, development, transfer, mortgage and disposal*” (Enemark *et al.*, 2009; Palmer *et al.*, 2009). Land governance is not only used to control land use and land development rather than this land governance is the general term used to evaluate the economic and social outcomes used for the sustainable livelihood. Land governance is basically about formulating and executing the sound land policy to establish the strong relationship between land and people (Enemark *et al.*, 2010; Hong *et al.*, 2007).

Land governance can be taken as an instrument to measure the degree of satisfaction perceived by the citizens for equitable access to land, tenure security, land use and land development (Augustinus, 2009; FAO, 2012). Land governance is therefore, more or less about the exercise of power through the legal body of the government for the equitable utilization, management and justified distribution of land and natural resource (Palmer *et al.*, 2009). However, in the absence of the land governance or with weak land governance, economically rich and politically powerful group have more access to the land than the poor (FAO, 2007). Consequently, poor might be marginalised and evicted due to the weak implementation of governance principles such as land tenure security, equity and participation for fair distribution of land and natural resources (UN-HABITAT, 2004a). Land governance is applicable in every step of the land development process and method, such as in LR, to increase the efficiency and sustainability (Auclair *et al.*, 2009). Land governance has been practiced in an international, regional, national and community level for sustainable development and to support the MDGs (Graham *et al.*, 2003).

### 2.4. Urban Governance

According to UN-HABITAT, urban governance is “*the exercise of political, economic, social and administrative authority in the management of an urban entity*” (Auclair *et al.*, 2009). It includes the process, institutions, actors and mechanism for the reduction of urban poverty, maintain urban standards and to promote social inclusion. Thus, good urban governance support the inclusion from the perspective of governance actors or stakeholders (Mathieu, 2011). It is an integrated form of the governance actors through cooperation, responsibility and accountability for urban management. Urban governance is exercised by the government because it needs the legal authority to manage, use and control over the land, property and natural resources. It includes the following principles: “(1) *Security of land tenure*, (2) *Equitable access to land for shelter*, (3) *participation*, (4) *Efficiency and effectiveness*, (5) *Sustainability*, (6) *Transparency* and (7) *Accountability and subsidiarity*. *These principles are found to be interdependent and the application of each principle requires the adoption of another principle*” (Auclair *et al.*, 2009; FAO, 2007).

On the other hand, urban activities such as infrastructure development, squatter relocation are important for sustainable urban development. Sustainable urban development requires the land policy, planning, land development methods and participation of different land related stakeholders in terms of governance network (Augustinus, 2009; Sorensen, 2005). Urban land readjustment is one of the effective method to manage the urban land and it needs the participation of the governance actors, existence of legal structure to make intervention on structure of ownership such as intervention on the bundle of land rights under the certain conditions and time period (Turk, 2008). LR can be implemented by the local government, private sector and social groups according to the legislation of the government (Muñoz-Gielen, 2012). Although, management of the land and the natural resources different countries have different importance on four function of the land administration such as land tenure, land value, land use and land development

but the priority given by each country might be based on the existing system and amount of infrastructure to be developed (Enemark *et al.*, 2009).

## 2.5. Land Readjustment in Germany and Japan

### 2.5.1. Land Readjustment Process

Land readjustment is an instrument or method which have been introduced for the adjustment of irregular plot boundaries in urban or suburban areas, aiming at the better organisation of some specific area with increased land value and benefit from the function of developed infrastructure (Lemmen *et al.*, 2012). It is a land management instrument by which public authority such as local government, designated public bodies, private association and group of land owners can participate in the process of urbanization, assembles and develop the infrastructure to convert rural land to urban form. This is a method of changing land use such as from agricultural land to urban residential land plots with increased land value but loss of some percentage of land area for infrastructure development and cost recovery (Doebele, 1982; Yomralioglu, 1993). Land readjustment can be initiated by the different stakeholders with the compulsory or voluntary participation of land owners and lease holders. During LR, existing irregular parcels are combined into a big parcel, called land *readjustment mass* and from this big parcel about 15 % to 30% land can be separated for infrastructure development, open space and cost recovery based on land value. Remaining land, called the *redistribution mass* is returned to the land owners. The redistribution of the land can be evaluated in two methods; distribution by relative size and by relative value described in annex (3). Some cases the land owner has to pay extra monetary to the project. This occurs when the land value exceeds more after the completion of the project than the value determined during the LR process. Allocation of the land plots are determined by the cooperation and participation among the land owners and the land developers (Archer, 1989; Davy, 2007; Muller, 2004; Turk, 2008; Zakout *et al.*, 2006). The procedure of the LR adopted in *Germany* and *Japan* as emphasized by Doebele (1982), Hong *et al.* (2007) and Home (2007) is summarised as below:

- *Commencement of LR*: Demarcation of project area based on spatial plan, Public notice, restrictions (land use and land transfer) with in the specified period of the project, survey for new LR design map, list of owners, tenant and lease holders and verification.
- *Preparation for LR*: Merge all land parcels into one large land parcel with single boundary, calculation of *land readjustment mass* before LR, assess the market value, calculation of all land for public use and allocate this land to municipality or Development Company, determine the share of each owner.
- *Value capture and reallocation*: Determine the value in the re-adjustment gain that owners have to pay or that may be retained in land. Consideration of the present and proposed uses of the land based on the requirement of urban development plan and land use policy as well as the needs and suggestions of owners. Allocation of re-adjusted plots for each owner, determination of compensation for owners who did not receive full share. Compensation and relocation to the small land owners based on the negotiation of the owners' committee and land developer.
- *Re-adjustment plan*: Formal decision on the LR, determine rights and obligations of each land owners and lease holder, map of new boundaries, legally binding of the new land ownership certificate and parcel map. Appeal provision, consultation and improvement.
- *Implementation*: Submission of the file about readjustment plan into the land administration, monitor the actual implementation of the plan.

### 2.5.2. Land Governance

In the Previous section 2.3 we have reviewed the land governance in terms of process, institutions and policy used to develop the land and allocate benefit from the land. In subsection 2.5.1 we have discussed about LR process reviewed from two different countries Germany and Japan taken as good practices.

Therefore, in this section we are discussing about the land governance in terms of institutions responsible for LR, governance network, tenure security, participation and equity necessary to implement LR in different two countries Germany and Japan.

#### **2.5.2.1. Land Governance in Germany**

##### **a) Institutions for LR and Governance Network**

In Germany more than 100 years ago Franz Adickes had legally instituted the LR under the law *Lex Adickes*; German Federal Building Law Code enacted in 1902 and amended in 1907 (Article 45-79). Different four types of LR are initiated in German systems such as mandatory LR by local government when voluntary regulations are fails other are: Compulsory LR, Voluntary LR and agricultural LR. The stakeholder participated in all type of LR are local government, land owners, leases holders, administrative, juridical, financial body and land boards formed by the local government (Doebele, 1982). The private sectors and local government can implement the LR according to the master plan of urban area.

##### **b) Tenure Security**

According to the Article 14(1) of German Constitution security of tenure is guaranteed to all form of tenure and all persons. German Federal Building Law Code enacted (1902) assures the tenure security and loss of land by forced eviction without adequate compensation during LR. Land tenure security problem, accessibility of land information, land use, project management, land transaction and other restriction are handled and solved by land boards and the municipality. Temporary land court has been established for any kind of appeal and disagreement by land owners. Since 1960, a special board for land valuation is existed for land valuation (Doebele, 1982; Hong *et al.*, 2007).

##### **c) Participation**

LR starts with compulsory participation of land owners and the final design should be published for twenty days for any comment and remarks. LR projects are mandatory for the urban renewal and expansion in Germany. Compulsory LR projects are initiated and implemented by the local authorities with the formation of LR boards appointed by the municipalities. Municipal offices prepare all decisions and negotiation with landowner and LR board member. LR board usually consist of five persons: a lawyer, a land evaluator, a land surveyor and two members of the local parliament. But voluntary LR project can be implemented by private sectors with the consensus of land owners and land use plan of municipality (Muller, 2004).

##### **d) Equity**

The local parliament has the decision power to approve the LR project based on feasibility report submitted by the municipality and LR board. After the approval from the local parliament, the LR project notice is published for the freeze change in the defined LR project area. The infrastructures are constructed after designing the cadastral map and the collection of the land records, verification of land owners and lease holders. The developed land is returned back to the original land owner within the specified period (one to three years) with the deduction of land not more than 30% based on land value and gain returned from LR. The land evaluation methods are described in annex-3. The open space and playground are provided by the municipality and public infrastructure such as hospital, school and fire station are shared by the central, state and federal government. The project cost is recovered by the cost equivalent land and is sold by the municipality for public use. Land owners contribution for cost recovery is most often in cash than cost equivalent land. The equity problems such initial equity (e.g., valuation of plots before LR, participation of all the land owners and their interest), process equity (e.g. land use rights with in project period, access to land information) and output equity (e.g. benefit from the infrastructure and location of plot) from the project and all the type of shift of the plots are handled by the municipality and LR board members. Adequate compensation is given to the evicted land owners who don't want to

share in LR. The LR projects are supported by the national subsidy with low or zero interest loan (Doebele, 1982; Home, 2007; Larsson, 1997; Muller, 2004; Schnidman, 1988; Turk, 2008).

### 2.5.2.2. Land Governance in Japan

#### a) Institutions for LR and Governance Network

In Japan, Land Readjustment Acts 1954 provides the legal guideline and assurance of tenure security to the land owners and lease holders. The guidelines are used to convince the pro's and con's from LR in both urban renewal and new town development. The city planning Acts 1968 has been recognised LR as one of the urban land development method and it has been legally institutionalised (Home, 2007). The multi-sectorial agency involve in LR to meet the common societal goal for providing developed land plots in urban area are: The local government, administrative agencies, National Ministry of Construction private land owners associations and public cooperation (*Japan Housing and Urban Development Corporation*) (Larsson, 1997). However, the private initiated projects are not designated in the area of city planning.

#### b) Tenure security

Land Readjustment Acts 1954 provides the legal assurance of tenure security to the land owners and lease holders. The tenure insecurity from the forced eviction, disagreement of land owners, deny to participate in LR are compensated in justified manner. Any eviction from land use rights and inaccessibility of land information are handled by the LR project initiators. Generally LR are completed between 2-3 years from the period of commence and any land use loss from delay of the project are handled by the LR committee (Doebele, 1982; Sorensen, 2000a).

#### c) Participation

*“Western town planning constitutes control of the land use by the government called town planning by public authorities thus LR are initiated by the local government in Germany but in Japan town planning is through collaborative project by land owners called town planning through co-operation”* (Hong *et al.*, 2007; Sorensen, 2000a). Therefore, many LR projects have been implemented by the private land owners association with the consensus of two third of total land owners from the selected land readjustment area. However, LR projects initiated by the Government have been considered the compulsory participation of land owners and lease holders within the project area. The final LR design is published for two weeks for any comment and remarks. Other initiators of LR are the local government, administrative agencies, Japan Housing and Urban Development Corporation (Larsson, 1997).

#### d) Equity

The entire project must have to fulfill the requirement of city zoning and infrastructure requirement. The redistribution of the land plots are based on the land value, plot size, location and any inequality loss must be compensated by the project implementing body. The cost of the project is recovered by the cost equivalent land. In Japanese LR model the project cost is recovered by the cash payment instead of land contribution, if necessary. The private initiated project have to sell (70-80)% of the cost equivalent land to public agencies and remaining part of the land to land owners within the project area but the public initiated project have to sell all land for public use to municipality (Schnidman, 1988). For the LR, generally up to 10% land is contributed for the cost equivalent and (10-20)% for the infrastructure development and open space. The contribution ratio decreases up to 15% based on land value and benefit retained from the project. The other cost for development of infrastructure are subsidised by the government and local government (Turk, 2008; Zakout *et al.*, 2006).

Review of LR process and land governance from Germany and Japan reveals that the LR projects are initiated by multi-sectorial agency with the consent of land owners. Tenure security, equity, compensation in case of forced eviction are handled by the municipality, LR board and LR projects initiators (Larsson, 1997; Li *et al.*, 2007).

## 2.6. Land Readjustment for the Relocation of Squatter Settlements

This section is developed to review the land readjustment process and practices to relocate the squatters into LR area and the land governance problems faced by the squatter people in squatter settlements.

### 2.6.1. Land Readjustment Process

Relocation of the urban poor has been practised in Nepal by site and services, guided land development program (GLDP) but they were failed due to various reasons (Karki, 2004a). In the cases of site and services; the government has to lead to buy the land and construct the social housing but it was not long lasting due to the lack of the budget and the unavailability of the cheaper land in the urban area. The GLDP was practiced for the infrastructure development on the demand of land owners. Thus it doesn't appear helpful for the squatters. On the other hand, LR method has been practised in urban land development process with the consensus of land owners (Archer, 2012; Rajkarnikar, 2002) and it can meet the dual purpose: Acquisition of land for settlement and infrastructure development (Van Gelder, 2010).

The United Nations Human Settlements Programme, UN-HABITAT has held the first consultative workshop on a new approach called PILaR- Participatory and Inclusive Land Readjustment in Nairobi from 28-30 August, 2013. The aim of the PILaR is to achieve more inclusive and participatory methodology to realize the upgrading of squatters and pro-poor. PILaR has been initiated to redevelop discrete neighbourhoods to upgrade squatters through the development of physical infrastructures and it was tested in Colombia. PILaR approach could address many challenges of conventional LR through incorporating consistent stakeholders' participation, effective engagement of land owners, civil society, financial institutions, academia and public. PILaR is focused on the inclusion, equity and transparency to increase the supply of serviced land (UN-HABITAT, 2012, 2013a; World-Bank, 2002).

The participatory squatter upgrading in Thailand was implemented in 2003 focusing to upgrade 300,000 households in 2000 poor community within the country. The beneficiaries were 90,000 household in 1546 communities and the people perceived more tenure security after resettlements. This approach was also appreciated by the UN HABITAT saying to the Thai government that *"long-term support for low-cost shelter and squatters upgrading has undoubtedly contributed to Thailand's extraordinary success in improving living conditions in squatter area"* (Archer, 2012). Thai model of squatter upgrading also suggest the participation of the government and community to develop infrastructure and housing. The above practices show the relocation of the squatters in the land readjusted area is possible with the incorporation of land governance principles and the governance network. The relocation of squatters needs the allocation of developed plots (cost equivalent land or cost recovery land) by the government or private sector for the construction of social housing. The social houses are used for the basic shelter to the urban poor such as real needy lived in the squatters. The ownership on the land is held to the name of the legally registered developer or real estate agency under the provision of the legal mandate but the property can be transferred, sold and rented to the relocated squatters by the agency using the concept of 3D cadastre (Acharya, 2013). The role, responsibility and restriction to the users are defined by the acts and policy.

### 2.6.2. Land Governance in Squatter Settlements

#### a) Tenure Security

Land occupied by the squatter settlers is not secure because the land ownership belongs to third party, either to the government or the private owner. This shows that the absence of land ownership certificate and legal cadastral map are also the tenure insecurity problems in squatter areas. Squatter people lived under the fear of eviction by the government (Shrestha, 2010). Squatter settlements are not administratively and legally recognised but they are recognised through the provision of amenities given by the municipalities (Shrestha, 2013). According to Paudyal (2006), squatter settlements are formed mainly through push and pull factors of rural-urban migration. Push factors are generally taken through increase in rural population, low agricultural production, joblessness, natural disaster, poor rural infrastructure. On



the other hand, searching for employment, urban facilities, better education are taken as the pull factors. Finally, the consequences of the rural-urban migration starts the evolution of temporary and haphazard settlements in the urban and its peripheral locations near to the market centre, bank of river, public as well as private vacant land (Paudyal, 2006). Therefore, the type of tenure security appears from de facto to perceived based on the length of the time of occupation, community formed, external supports, interconnected social relation among the entire settlers with in the community (Simbizi *et al.*, 2014).

#### b) Participation

The problem related to provision of the shelter is generally more related to political and institutional than technical because the government has the institutional, economic, political and administrative power (World-Bank, 2002). Therefore, the government should take the responsibility to manage and relocate the squatter settlements with the negotiation among the governance actors. It is also important to develop the governance network to construct the physical structures for shelter and income generation sources. Formulation of new policies to recognise the genuine squatter settlers, social integration, provision of group use rights on the land (Atterhög, 1995; Shrestha, 2010, 2013; Van der Molen *et al.*, 2008) are inherent to address the squatters. The UN-Habitat twin –track approach is focused on the adequate and affordable supply of new housing through the serviced land and housing opportunity to reduce the growth of new squatters and implementation of citywide and national wide squatter upgrading program (UN-HABITAT, 2012). The review on LR for squatters and land governance in three South East Asian cities (Indonesia, Vietnam and Philippine) shows that the squatters problems are directly related to the reduction of poverty. However, prerequisites for the reduction of poverty are related to national land policy and good land governance, participatory LR, equitable access to land for shelter and economic sources (Minnery, 2013).

#### c) Equity

People in the squatter settlements are always facing the multiple problems such as physical infrastructure, health services, education and social exclusion (Tsenkova *et al.*, 2009). In addition to these problems, squatter people are far from the recognition by the government and squatter settlements are not spatially demarcated and no land ownership belongs to squatter people. The social exclusion and lack of cooperation between formal settlements and the squatter settlements are other factors to make squatters isolated because of negative social behaviour of formal settlers towards the squatter settlers. Mostly the squatter people unable to find the life partner from the formal settlements near to the squatter area because formal settlers consideration is that the squatter people are landless, poor, they don't have any permanent address. On the other hand, the perception of the administration such as they belief the criminal activities are emerged from the squatter area. Therefore, the squatter people face the difficulty to live in squatter areas and face the difficulty of forced eviction by the central government due to absence of legal document of the land used for shelter by squatters (Shrestha, 2013).

### 2.7. Land Governance Principles

Study on LR and the squatters reveals that the land policy is the backbone to allocate the land and benefit from land and natural resources with the incorporation of land governance principles and proper land development method (Van der Molen *et al.*, 2008). Figure (2-1) shows the principles of land governance tenure security, participation and equity to be assessed in urban LR.

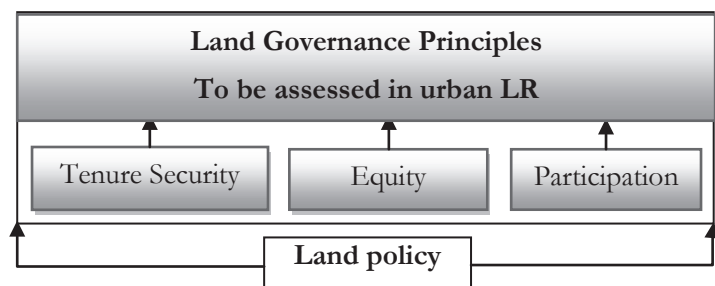


Figure 2-1: Land governance principles to be assessed in LR

This section is devoted about the land governance principles to be assessed in urban LR and review of governance network for land readjustment. Review of land readjustment for the relocation of squatters into land readjusted area as a part of validation of LR. Finally, importance of land policy required for LR and for the relocation of squatters is described.

### 2.7.1. Tenure Security

*“Land tenure is basically related to the relation between the land and the people; the manner of holding the land and the property”* (Paudyal, 2006; Tuladhar, 2004). It is further explained as the manner in which the land rights are allocated by the system emerged from the society. Therefore, tenure security is the assurance of one or all land rights from the bundle of land rights such as use, transfer, investment, credit, development and disposal of land and property (Bohannon, 1960; Simbizi *et al.*, 2014; Van Gelder, 2010). All the activities and rules about tenure are socially practised and then legalised parallel with the legislation of the government. Simply land tenure system determines who owns, what sort of resources in which location, how long time and in which condition (Hong *et al.*, 2007; Palmer *et al.*, 2009). Tenure security can also be defined as the perception of individual or group of individuals on the rights to a piece of land are continuous. No fear of eviction and external forces that prevent the land owner from the benefit of investment and capital gained by the investment in that land either by use, rent, lease or transfer. On the other hand, the tenure insecurity is measured in terms of the uncertainty of losing one or all land rights from the bundle of land rights without the consent of land owner which are essential for sustainable livelihood (Simbizi *et al.*, 2014).

Different kinds of land tenure security are explained in the literatures. Three types of the tenure security as described by Simbizi *et al.* (2014) and Van Gelder (2010) are described below:

1. *Legal tenure security*: Private land owner having land ownership certificate to set the control and use of the resources, limited by the state regulation. The security protected against the compulsory eviction and removal without the consent of the land owner. Appropriate compensation is to be provided and no forced eviction occurs without expressing the proper reason written in the legal rules.
2. *De facto tenure security*: Actual control of the land and the property without the consideration of the legal status under which the land and property are legalised and controlled. De facto tenure security are measured in terms of the length of the time of the occupation, size of the settlements, level of the cohesion and homogeneity of the society and external support from the third party. However, the De facto tenure security is silent about the legal documentation of the land.
3. *Perceived tenure security*: The tenure security as perceived by the dwellers is a perceived. Perceived tenure security has high chances of the eviction, treats, conflict and social disintegration. The length of the time of the occupation and the social network is narrow than the De facto tenure security.

*Land tenure security during LR*: During LR process temporary land use rights are limited to the land developer within the construction period of LR, which means the temporary restriction on the land use right to the land owners (Karki, 2004b). Transferring the temporary rights to original owner takes time and it requires the cooperation of the land owners. In many country where co-ownership exist, it requires the court order and cooperation of land owners (Turk, 2007). Delay of LR project prevent the land owner from land use right is another problem of tenure security in LR (Schnidman, 1988), lack of appeal system and inadequate compensation in case of forced eviction are equally important to feel the tenure insecurity (Karki, 2004b). Land readjustment policy and laws are equally important to address the tenants rights and land owner having small parcel size (Lin, 2005).

*Tenure security for the relocation of squatters*: “Security of land tenure is a fundamental requirement for the progressive integration of the urban poor in the city. It guarantees legal protection from forced eviction... and is one of the most important catalysts in stabilizing communities, improving shelter conditions, reducing social exclusion and improving access to basic

*urban services*”(World-Bank, 2002). Unfortunately, the squatters are not spatially and administratively recognized, means the land owners are not belonging to squatter people thus the land tenure is not perceived secure. Therefore, relocation is essential to provide safe shelter place and relocation process requires the identification of real needy, adequate social housing, income generation sources and social integration with the people lived in land readjusted area (Hong *et al.*, 2007; Shrestha, 2013). Before relocating squatter people in land readjusted area recognition of the squatter settlements, landless people and real needy, their interest, assurance and the identification of the tenure security to the relocated people are an important aspects. According to the definition of the tenure security most of the squatter settlements in Nepal appears from perceived to de facto tenure security. The time length of the occupation is not less than twenty years in the case of the Shankhamul squatter settlement, they have the community and also supported by the external third party (Shrestha, 2010; Simbizi *et al.*, 2014).

### 2.7.2. Equity

*Equity during LR:* Higher percentage of land contribution ratio for LR projects makes small land owner landless. Similarly, the lower percentage of the participation of land owner marginalises the ignorant and small land owners. Therefore, the percentage of the land contribution and the participation of the land owners is to be justified (Li *et al.*, 2007; Rajkarnikar, 2002). Besides, the people in the back side of the developed plots are less benefited compare to the people having plots along the main roads of the land readjusted areas do, so the land contribution might be according to value and location of the land. Due to the variation of topography some land owner gets the flat and feasible land for construction, while other gets hilly and rocky land so it should be taken into consideration during redistribution of land to maintain equity. Most important aspect to implement LR is the expectation of higher value of the land after LR. Therefore, land value after LR should not less than before (Doebele, 1982; Yomralioglu, 1993).

*Equity for the relocation of squatters:* Access to land is an important to provide the shelter to urban poor and squatter people. Deficiency of investment on the land creates more poverty due to inequitable access to the land. People having less land and no land have to spend more time in daily wage for economic sources and consequently those people unable to join the social and political activities within the community (Bohannon, 1960). Unfortunately, the people living in the squatter are deprived from the access of the urban facilities such as health centre, water, sanitation, school. They are always beyond the social and political relation with surrounding formal settlers (Adhikari, 2006; Shrestha, 2013). The squatter people have no legal document of existing location so they are unable to participate for LR to get the equitable access of land for shelter. However, the relocation process of squatters into land readjusted area through the acquisition of the land for shelter with the integration of governance actors can meet the equity.

### 2.7.3. Participation

*Participation during LR:* Participation in the entire process of LR is equally important governance principle and should be considered because without participation of land owners, LR project cannot be initiated. Delays of LR projects are also consequences of lack of participation among the stakeholders which grew up the project cost and ultimately land owners might be evicted from land use rights on their land (Karki, 2004a). Participation of the land owners varies in different countries (Atterhög, 1995). Compulsory participation has been practised in Germany, two third of total landowners in Japan. 51% consent of land owner requires in Nepal (Hong *et al.*, 2007; Karki, 2004b; Turk, 2008). This reveals that the participation is necessary for the successful implementation of LR and sustainable urban development because neither the government alone nor the private sector can fulfill the comprehensive societal goal (Mattingly, 1996; Sorensen, 2005) .

*Participation for the relocation of squatters:* Relocation and legalization of land tenure of the squatter settlers do not require a big project and resources. It requires regulatory infrastructure development mechanism, institutional reform, implementation of proper land policy and sustainable long-term strategies. Every city



has the clear strategy where the governance actors are involved for providing services. The city plan must be attached with effective land management policies to manage future growth and to prevent the formation of squatters. PILaR approach is to be practised within the context of good land governance for the land development and sharing land values (UN-HABITAT, 2012, 2013a; World-Bank, 2002).

## 2.8. Governance Network

*“Governance network is a self-regulating horizontal articulation of interdependent but autonomous network of actors from the government, market, civil society and media, constructed to meet the common societal goal. This network is characterised by the normative, perceptive, regulatory and imaginary framework and derived by the process of participation, negotiation, responsibility and accountability of the governance actors”* (Sorensen, 2005). The governance network is voluntary rather than compulsory and the governance actors are horizontally integrated rather than vertically. Horizontal integration of the governance actors can able to address the voice of grass root people (Nyseth, 2008). Sorensen and Van Bortel have discussed governance network as particular type of network and governance having following characteristics:

1. *“Reasonably stable horizontal articulation of interdependent but operationally autonomous actors;*
2. *Governance actors interact through negotiations and cooperation via dialogue.*
3. *Negotiations among the governance actors take place within a regulative, normative, cognitive and imaginary framework.*
4. *The framework is self-regulatory within limits set by external agencies such as market, civil society group individuals, and media.*
5. *The framework contributes to meet the societal goals”* (Sorensen, 2005; Van Bortel, 2009).

Generally, governance network consist of government, private sector (market), civil society group, media and citizen. The government in the governance network play a leading, guiding and steering role in the policy formulation. The government provides the legal framework for creating peaceful environment through administrative, political and legal instrument. It has also an important role to implement, exercise and examine the decisions so that the implemented decisions either meet the societal interest under the legitimacy of the government. Actors from private sector are responsible to generate fund or budget through employment and revenue; private sector provides the economic strength and support the development process. Private sector involve in land governance in two ways: *“(1) internally, to know their business process and their activities in social life and (2) externally, trying to involve more shareholders in land governance to perform better in their respective fields”* (Auclair *et al.*, 2009). Whereas, civil society try to make a dialogue among the government, market, media and citizens to raise the problems of citizens (Graham *et al.*, 2003). According to UN-HABITAT (2013b), study on the governance network in urban LR is intended to review the existence of governance network to implement the LR in participatory approach including government, public, academia, civil society groups and private sector. Therefore, the term governance network is used to perceive the cooperation among different governance actors for decision making process to implementation of LR projects so that it might be supportive to address the weakness of conventional LR. The governance network is formed to move vertical form of decision making to horizontal form of cooperation and to share the power among the governance actors (FAO, 2007).

## 2.9. Land Policy

*“Land Policy consists of the whole complex of legal and socio economic prescriptions that dictate how the land and the benefits from the land are to be allocated”* (Van der Molen *et al.*, 2008). This definition is the integrated form of social, economic and institutional arrangement to relate the access to land and benefit from the proper use of land. Proper use of land is almost impossible without adopting the proper land development instruments, policy and legal prescription. Therefore, Land policy is essential for the equitable utilization of the natural resources and proper use of land to improve and reduce the globally increasing haphazard settlements and to reduce the poverty. If we take the land as the economic assets then land policy can be defined as *“the*

*rules for governing the access to land and distribution of the benefits from the economic assets*” (Van der Molen *et al.*, 2008). This definition implies that the land policy can be explained in terms of economic growth, poverty eradication, environmental sustainability and land governance. Good urban land policy can assist the process of change, include the sustainable land development schema and endorse the good governance (Doebele, 1982).

### 2.9.1. Policy Required for Land Readjustment

For the socioeconomic development and environmental protection; national land policy and land use policy play a vital role because land policy assist the government to exercise the power for proper management of land and natural resources. LR policy is a device to make interaction among the stakeholder to share the value gained from LR. LR policy is also used for the improvement of residents and to prevent the increase of haphazard settlements. Well defined LR policy might be useful to check the quality of infrastructure based on norms of urban plan and gain from LR (Hong *et al.*, 2007). On the other hand, land use policy is essential for the proper utilization of the resources according to land zoning. Unfortunately many underdeveloped countries still have not the proper land policy (Van der Molen *et al.*, 2008). The requirement of policy to implement LR is the prerequisite to address the forced eviction, to meet the future demand of readjusted land plots. It is essential to convince the land owner about security of land tenure, equitable access to land, participation of land owners and other land related stakeholders in each level of the decision making to implementation phase of LR (Dhakal, 2012; Karki, 2004a; Van der Molen *et al.*, 2008).

### 2.9.2. Policy Required for the Relocation of Squatter Settlements

The requirement of land policy is not simply support to the elite and politically powerful people but it might also be prerequisite for helping squatters and poor people. According to the interim constitution (2007) of Nepal; *“Every citizen shall, subject to the laws in force, have the right to acquire, own, sell, dispose of, and otherwise deal with, property”* (GoN, 2007). This means initially people can acquire the land from the government under the legislation of the government then it is legalised and documented by the government authority to get the use rights and ownership. However, for the case of the squatter settlers who are using the government land for a long time, they don’t have a spatial, legal and administrative document to address the land rights and tenure security. This seems the requirement of the policy to recognise the squatter settlements by the government and for the proper relocation of the squatters in the environmentally safe and secure places with the realization of the tenure security (Shrestha, 2013).

Some proposed land policy to upgrade the squatter settlements by the different African countries such as Namibia, Zambia, Tanzania, Uganda, Rwanda, Malawi, Cambodia, Swaziland, and Kenya are listed below.

1. *“Cooperation between the squatter settlements and private land owners.*
2. *Application of flexible tenure system may play supportive role for squatter upgrading.*
3. *To prevent the further increment of the squatter settlements identification of squatters, physical planning standards are necessary under the statutory tenure system.*
4. *Provision of the social infrastructure, income generating activities, priority to lowest poor income group in the social housing.*
5. *Proper land development methods, programs, training and capacity building for self-dependence, designing the planned area for low income group and social housing. Upgrading squatter settlements through the participatory approach.*
6. *Avoid forced eviction and if the compulsory relocation is required then the proper relocation site and time for relocation should be provided and provision of temporary rights till the time of relocation.*
7. *All the land development and building permits should be approved and quality maintenance.*
8. *Improvement of the formal land market and encouraging the informal settler to acquire the secure tenure from the formal land market”* (Payne, 2001; Van der Molen *et al.*, 2008).

The prerequisites for the relocation of the squatters such as economic generation sources for livelihood, environmentally safe place for the shelter, interest of the squatter settlers, social integration among the

squatter people and formal residents, type of tenure security provided to the relocated people are equally important (Pugh, 2000). These prerequisites are impossible without the formulation and implementation of proper policy, exercise of good land governance and selection of proper land development method. Therefore, review of the policy is intended for the relocation of squatters into the developed land for longer term (Minnery, 2013).

## **2.10. Summary**

In this chapter we have presented different theoretical foundations related the objective of this research to be achieved. Governance, land governance, urban governance and land readjustment process are reviewed initially to grasp the knowledge on these terminologies, their applicable field and importance. The research is more intended to assess the land governance principles in urban LR in the case study area with respect to the international good practices. Therefore, land readjustment process and land governance related to land tenure security, equity, participation and governance network from Germany and Japan are described as good practices. On the other hand, relocation of the squatter settlement into land readjusted area is intended to validate the urban LR in terms of its suitability to acquire the developed land plots in planned and environmentally safe area for social housing. Therefore, LR process for the relocation of squatters and governance issues are described. The land governance principles to be assessed in the real context of LR are described. The real context is to be analysed with the help of governance framework and imperial data collected from the case study area are described in following chapter 3 and 4. Land policy is an important pillar in the management of land and it is essential to formulate laws and acts related to urban land development. Thus, land policy required for urban LR is described. The policy required for the relocation of squatters is also described in this chapter. These basic foundations from the review of literature are summarised in this chapter so that the assessment of land governance principles in urban land readjustment can provide insight to find out the reasons, governance issues and fact violated in urban LR. The review of literature about squatters, land governance in squatters and LR process can be helpful for the relocation of squatter people into the land readjusted area.

### 3. LAND GOVERNANCE FRAMEWORK FOR LAND READJUSTMENT

#### 3.1. Introduction

Different types of governance indicators and dimensions are described in the Land Governance Assessment framework (LGAF) for the measurement of the performance in different thematic area of land governance, developed by Deininger *et al.* (2011). GLTN by UN-HABITAT has developed specific urban governance indicators (UN-HABITAT, 2004b) which are focused on effectiveness, accountability, equity concerning the service delivery from the public organizations and revenue collections by the local government. Voluntary Guidelines on the Responsible Governance of Tenure by Food and Agriculture Organization (FAO) has also developed the guidelines, aiming to improve governance of tenure of land, fisheries and forest. They have included some guidelines about land consolidation and land readjustment basically for the promotion of food security (FAO, 2012). A Framework for Reforming Urban Land Policies in Developing Countries developed by Dowall *et al.* (1996) focused on reform of urban land policy, land market problems and the government intervention to manage and develop urban land. Burns *et al.* (2007), has developed indicators for land administration performance measurement focused on governance principles efficiency and effectiveness of land administration system. These frameworks and guidelines do not address the land governance in land readjustment in terms of security, equity and participation. Therefore, developing the land governance is necessary to enable assessing the land governance principles in LR.

After the review of literature on land governance, land readjustment, governance network in the previous chapter, the objective of this chapter is to develop the land governance framework applied in urban land readjustment. The land governance framework is essential to define the limit of this study and base for the field work. This chapter has total ten sections. First section is about the general review on the assessment framework and indicators. Section (3.2) and (3.3) are related to the land governance framework, indicators and their importance respectively. Section (3.4) is about types of indicators. Section (3.5) describes the methodology for developing indicators. Governance aspects and key questions for developing the framework are described in section (3.6). Section (3.7) includes the final land governance framework with indicators and section (3.8) is about the validation of the indicators. Relocation of squatters in land readjusted area is described in section (3.9). Finally, section (3.10) is about concluding remarks.

#### 3.2. Land Governance Framework

The purpose to develop the land governance framework in this context is to shape the research and prepare a base for field work. The framework presented in section (3.7) includes three selected principles of land governance (tenure security, participation and equity) and governance aspects such as policy, process and structure supported by the indicators. Each selected governance principles are to be assessed in different aspects of the governance for the case of urban land readjustment. The prerequisite for the systematic formulation of the land governance framework applicable for urban LR is to review the international practices of LR and land governance. The international practices of LR and land governance are reviewed from Germany and Japan, presented in chapter two because the international success practice insights the process and progress at the particular instant of time. Therefore, the international success practices can be taken as good practice to assess the land governance principles in other places of the world for the sustainable urban land readjustment. Besides, the studies on international good practices, study on types of indicators and methodology to develop the indicators are equally important before developing the land governance framework to meet the requirement of the first sub-objective of this research.

### 3.3. Indicators and their Importance

Indicators are the “*index or standards, trend or scientific facts that indicates the level of change on the system, process and structure*” (UNDP, 2006). The functional definition given by the Research Centre of the European Commission (2002) reveals that the indicators are the part of the information that indicates what is happening in a system (Radaelli *et al.*, 2008). Indicators are often connected to the evaluation to a certain level of bench mark of success and failure. According to a study on bench mark, the benchmark is “*the process of comparing an organizations performance with some standard. The standard might be the based on previous performances, on the performance of other organization, on the best performer in a certain field of action or even on scientific fact*” (Van der Molen, 2002). “Indicators provide the precise contemporary information of the state of the system. Indicators are useful to measure the progress of action at a particular moment in different level of measurement based on the existing consequences” (Sudders *et al.*, 2004). Thus the indicators are used to identify the gaps to be improved. The indicators are the means used to measure whether the objective has been achieved within the limit of the benchmark (UNDP, 2006). Therefore, land governance indicators are important used to assess the land governance. “Although policy and regulation are exercised by the government, the evaluation of the decision taken by the government can be measured with the help of indicators by the external users and actors” (Basnet, 2012; UNDP, 2007). In addition, land governance indicators might be helpful to measure the effective, justified and sustainable LR (FAO, 2012).

### 3.4. Types of Indicators

Different types of indicators are developed by the scholars to measure the performance of the governance, economic improvement, pro-poor and gender issues and for project evaluation (Molden, 1998) but the type of indicators preferred depends upon the purpose of the assessment, data type and particular study area (Corner, 2005). According to methodological guide on social cohesion, indicators used by the Council of Europe (2005) (Kraay *et al.*, 2005; Radaelli *et al.*, 2008) are categorised as follows:

- a) **Individual Indicators:** Measures of the single performance and varies from the format Yes/No to sophisticated one. Individual indicators are the measures of the performance by the diffusion of complexity towards low level of sophistication. Statistical complexities are avoided.
- b) **Composite/Aggregative:** Composite indicators are the measures of the complex phenomenon with aggregate number of individual data through the statistical process with aggregating the individual results. According to Kaufmann *et al.* (2009), aggregative indicators are an average weight of individual indicators developed using statistical Unobserved Component Methodology (UCM). UCM methodology gives the aggregate indicators and has advantages over the individual indicators to know about more information on the unobserved governance than any individual data source.
- c) **Measurement Level and Data Used:** In this category the indicators are divided into three categories.

Indicators	Characteristics	
1. Quantitative and objective	Directly measurable	Number, percentage are used, e.g. percentage of the land contribution for LR
2. Qualitative and objective	Not quantifying, based on objectively variable response	Yes/No, e.g. whether LR policy able to led the legislative act
3. Qualitative and subjective	Perception based, opinion	e.g. Whether the LR incorporates the participation and consultation

- d) **De Jure and De Facto Indicators:** Some indicators are De jure and some are De Facto (De Nicolò *et al.*, 2008; Kaufmann *et al.*, 2009). The De Jure indicators are the rule based indicators and measures the policy, regulations, acts, procedure and code of conduct. On the other hand, De Facto indicators are



the process, outcome and or practical based indicators that measures the performance of general practise (Kaufmann *et al.*, 2009). The practice of LR is the combined of the De Facto and De Jure.

- e) **Input Indicators:** Input indicators are the environment and resource dependent that indicates the requirement of the policy, acts and institutions, physical and technical resources to get the output. Such as land policy, tenure system and security of land tenure, land registration system.
- f) **Process/Operation Indicators:** Process indicator determines the internal process and flow chart to achieve the targeted output. Such as process of data availability and governance integration.
- g) **Output Indicators:** Output indicators show the visible product and are affected by externalities like social and economic factors. Output indicator may determine the progress and prerequisites to improve the system. Such as social inclusion, recognition of real needy. Output indicator gives long term benefits. (Kaufmann *et al.*, 2004; Kraay *et al.*, 2005; Sudders *et al.*, 2004; UNDP, 2007).

#### **Reasons to Select the Types of Indicators for this Research**

After the review of different types of indicators de jure and de facto indicators are selected for this research. The reasons behind the selection of this type of indicator are:

1. *The de facto and de jure indicators are helpful to evaluate the policy, acts and process.*
2. *These types of indicators are helpful to indicate the real practice adopted in the particular case, useful to make remarks for improvement in the policy process, project and structure for the selected land sector.*

### **3.5. Methodology for Developing the Indicators**

The basic method of designing the indicators can be identified according to the data sources. There are different methods described by the scholars and have been used in different field of land administration and governance. These methods can be applicable to develop the indicators for the assessment of the land governance principles in urban land readjustment (UNDP, 2006). Some methods used by the scholars are summarised below:

- a) **Method of Key Question:** Formulation of key questions for the development of indicator requires both objective and subjective questions. The objective questions are developed to retrieve the answer based on survey and administrative records, constitution and treaty. Subjective questions aim to retrieve the answer from the case study and opinion of the respondents. Data sources might be archived, survey, interview and other. The indicators developed for this research are based on key question method. This method is quite close to the bottom up approach for formulating indicators: starting from long list of possible questions then narrowing down the questions up to key questions for the development of indicators on the basis of the meta –criteria or practical experience (Radaelli *et al.*, 2008).
- b) **Process Flow Chart:** process flow chart method is based on the flow chart which requires the continuous flow of action to be taken to get the answer of each question. It is used for the specific governance issues and measures the legal, institutional and political process. This method is based on the top down method (Radaelli *et al.*, 2008). In this method starting point begins from the selection of the objective, content and standards which we want to measure. The initial content is further divided into many dimensions and for each dimension; separate indicators are to be developed. Disseminating the land information from the LAS to the general public is an example. This requires the network of the system and up to date qualitative and quantitative data.
- c) **Integrated Indicator Matrix Method:** This method for the development of the indicator is helpful to assess the gap between too low and high level in a specific governance matter. It requires up-to-date data to evaluate the gap between the too low and high value of the discrimination. Besides the methods of developing the indicator to achieve of the goal or objective, other affecting factors such as availability and types of the data sources are the prerequisites for the indicators (Radaelli *et al.*, 2008).

### Reason for the Selection of the Key Question Method for this Research

Review of different methodologies to develop the indicator suggests that the appropriate methodology is essential for the development of indicators to assess the framework. Therefore, the key question method is selected for the development of indicator for this research. The reasons behind the selection are:

1. *It is based on bottom up approach, i.e. selection of key question to formulate the indicator among the long list of general question. Therefore, less chances to avoid importance of the boundary of the research.*
2. *This method does not require up to date data to assess the framework. Existing information can be helpful to assess the elements and indicators of the framework.*
3. *Data collection through interview and qualitative data and quantitative data are used to assess the framework.*
4. *This method can answer the objective and subjective questions.*

### 3.6. Governance Aspects and Key Questions Selected for Developing the Indicators

Land governance principles should be addressed by different aspects of the land governance such as policy, process and structure (FAO, 2007). Therefore, the land governance principles are to be assessed with the help of relevant indicators in following aspects of the governance for urban LR.

**Policy:** Land policy has the broad scope such as poverty eradication, economic development, governance and environmental sustainability. Lack of land policy and ineffective implementation of land policy according to the land use zoning will create the haphazard scattered settlements (Van der Molen *et al.*, 2008). Therefore, the existence of the land policy is crucial for the assurance of security of land tenure, land ownership, land rights and equitable access to land. Land policy is also used for the formulation of laws and also acts to regulate equal distribution of the benefits gained from the land and management of the land resources. *“Land management challenges may not result verified right and wrong answers but the land related stakeholders must satisfy themselves with agreement on common goal, responsibility, accountability and cooperation to do better to face the land management challenges”* (Palmer *et al.*, 2009). These elements might be incorporated in the land policy (Palmer *et al.*, 2009) for the evaluation and adoption of land development methods such as LR.

**Process:** Land governance concerned about the process by which land and natural resources are managed (Enemark *et al.*, 2009). The process includes the way to conduct the selected method for land management. For instance, LR process has the provision to secure the land tenure. The voices of the small land owners have to be addressed. The amount of the land contribution should be scientific, adequate compensation to the victim, appeal system and accessibility of land information should be addressed.

**Structure:** Third aspect of the governance is structure to conduct the LR project. Any project and system should be simple and understandable. It is not necessary that all the land owners knows about the benefit from the LR. Therefore, the users committee have the responsibility to convince and give adequate information to the users. In many countries, LR is decentralised which is a good practice because the local level knows better about interest of the land owners and their needs. Some key questions are listed in table (3-1) to develop indicators used in the land governance framework. The key questions are formulated based on bottom up approach i.e. formulation of long list of questions and then narrowing down up to key questions to aggregate the common opinion of the respondents.

#### List of Key Questions for the Development of Land Governance Indicators

<i>Governance principles</i>	<b>Tenure Security</b>	<b>Participation</b>	<b>Equity</b>
<i>Governance aspects</i>			
<b>Policy</b>	❖ Are there land policy acts and law related to LR to address the tenure security?	❖ What is the decision making process for implementation of LR?	❖ Does the policy address the equitable access to land?

	❖ Do the land developers guarantee the tenure security during LR?	❖ Does the LR work participatory? ❖ Is there existing governance network to implement LR?	❖ Is there anti eviction law ❖ Is there adequate compensation if eviction occurs?
<b>Process</b>	❖ Are the land documents complete and accurate? ❖ Is there easy access of land information?	❖ Who are the organization and what are their responsibilities? ❖ Are the landowners aware about LR?	❖ Is three justified land contribution for LR? ❖ What is the public interest about the benefit from LR?
<b>Structure</b>	❖ Is the legal provision to private sector to implement LR?	❖ Is there decentralised system to initiate LR projects? ❖ What is the structure of LR committee?	❖ Is the LR inclusive? ❖ What is the condition of land speculation?

Table 3-1: Key questions for the development of indicators

### 3.7. The Final Land Governance Framework with Indicators for LR

The framework includes altogether nineteen de jure and de facto indicators. All the indicators are developed with the help of key questions listed in the table (3-1). The final framework with the indicator is shown on the table (3-2). The aim of developing land governance framework is to shape the research and base for the field work to collect the data to meet the sub-objective two and three of the research.

<i>Governance principles</i> <i>Governance aspects</i>	<b>Tenure Security</b>	<b>Participation</b>	<b>Equity</b>
<b>Policy</b>	1. Existence of land policy, law related to LR 2. Assurance of tenure security during LR	1. Decision making process top-down/ bottom-up 2. Participatory LR 3. Governance network	1. Equitable access to land 2. Anti-eviction law 3. Compensation
<b>Process</b>	1. Accurate land document, 2. Access of land information	1. Responsibility of actors 2. Public Awareness and progress of LR	1. Justified land contribution for LR 2. Benefit from LR
<b>Structure</b>	1. Provision to private land developers for LR	1. Decentralised system 2. Structured of LR committee	1. Inclusiveness 2. Land speculation

Table 3-2: Land governance framework with indicators

### 3.8. Validation of Indicators

After the development of the indicators, they are to be validated and verified. Although the indicators are validated with the help of different groups; private sectors, managerial committee of LR projects, civil society groups, experts and academicians involved in land governance and LR. However, this method takes time to collect the validation report. According to Deininger, Selod, *et al.* (2009) validation of the indicator can also be done by the experts panel. Therefore, for this research the experts selected are the ITC supervisors for the validation of the indicators.



### **3.9. Relocation of the Squatters into the Land Readjusted Area**

Beyond the validation of indicators listed in the land governance framework in subsection (3.8), there remains a work to validate the urban land readjustment in any applicable field. For this purpose, relocation of the squatters in land readjusted area was selected. Relocation of squatters in land readjusted area came from the concept of acquiring the developed land from the land readjustment project. After the acquisition of land from land readjustment projects by the government agency or private party, that land can be used for the construction of social houses for the squatters to prevent further evolution of squatter settlements in urban areas. The aim of the relocation of squatters into land readjusted area is to meet the need of real squatters who are deprived from the minimum shelter rights. To meet this objective, it is essential to study the location of squatter settlements, their evolution and changing pattern, governance issues and interest of both squatters and the government for the relocation process into land readjusted area. Finally, provision of tenure security and land use rights to the relocated people are important to review. Otherwise, there might be more chances of squatters in LR area.

Besides this, the current rate on the progress of land readjustment projects and amount of developed land accessed by the government and private sector from the LR projects are important to know. If LR projects are not efficient and sustainable then there raised questions about how many LR projects and how long will it take to relocate the urban squatters in safe and developed areas. Therefore, to get the answer of these questions, this research further intends to review the relocation of squatters into land readjusted areas by constructing affordable multi-story social building based on vertical application of LR.

### **3.10. Summary**

This chapter is devoted to design and develop the land governance framework applicable for assessing the land governance principles in urban LR. In the land governance framework indicators are the fundamental points to perceive the practice of land governance in urban land readjustment. Study on different types of indicators are essential before the development of indicators such as individual, composite/aggregate, based on data type method, de facto and de jure as well as input, process and output indicators. These indicators are used to evaluate the land governance in the urban land readjustment with the help of lesson learned from international success practices of LR, land governance and data collected from the study area. De facto and de jure indicators are used in this research because the research is process based. So this method is helpful for such case. The methodology to support the development of governance indicators are described as key question method, process flow chart and the integrated indicator methods. Key question method is chosen to develop the indicators for this research based on the availability data and scope of the research. List of the key questions were formulated on the basis of bottom up approach i.e. formulating the long list of individual questions and then aggregate to meet the common response of the respondents. The final land governance frame work was developed with the help of indicators including three land governance principles that are aimed to assess in urban LR. The validations of the indicators are conducted through the ITC supervisors. Finally, the relocation of squatters into land readjusted area is described as the application of LR in the particular case of squatter resettlements. The assessment of land governance principles for urban LR and relocation of squatters are described in chapter five and six.

## 4. DATA COLLECTION AND CASE STUDY AREA

### 4.1. Introduction

After the development of the land governance framework presented in chapter three, next step is to discuss the collection of the data from the field. It is essential to assess the land governance principles mentioned in the framework to know whether the governance principles are applied in the real context or not. The real context chosen for the case study is urban land readjustment. Research methodology, sources of data and type of data (primary and secondary) required for this research are described in chapter one. The field work is important to answer the research questions through observation of the contemporary phenomenon within the specified context (Noor, 2008) applied in this research. The fieldwork was carried out from 20 September 2013 to 16 October 2013 at Kathmandu, Nepal. Case study methodology was chosen to collect the data from the study area. Method of data collection chosen was key informant interview supported by structured and open ended questions. To fulfill the requirement of sub-objective two four research questions are developed which are related to tenure security, participation equity and governance network. Similarly, to fulfill the requirement of sub-objective three two research questions related to tenure security, equity, participation issues and relocation of squatters into land readjusted area are developed. Therefore, to answer these research questions data were collected from the government agency, civil society group, LR committee member, private sector, experts, academicians, individuals and member of squatter federation. The key informant interview was conducted to perceive the common and diverse answers from the respondents essential for the assessment of land governance principles in urban LR and relocation of squatters.

An open workshop was conducted in the School of Arts by PhD candidate Ms. Reshma Shrestha, the MSc adviser and interviewer was participated. The basic objective of the workshop was to know about the governance principles such as tenure security, equity, and participation. Identification of location of squatter settlements, the environmental problems being faced by squatters and relocation of squatters in land readjusted area were discussed. Beyond this, different governance actors such as experts related to land sector, academicians, civil society groups, squatter federation member, LR project initiators and individuals were interviewed to know about adaptation of land governance principles in LR and relocation of squatters into land readjusted area.

A presentation on the research topic was made at the Kathmandu University, Nepal. This chapter also includes objective of the fieldwork discussed in section 4.2. Sections 4.3 and 4.4 describe the locational information of field study area and overview of the case study areas respectively. Pre-field work activities for data collection before going to the field are described in section 4.5. Moreover, list of respondents and corresponding organizations are listed in the annex-1. Fieldwork activities with sources and types of data collected from the field are included in the section 4.6 and post field activities are illustrated in section 4.7. Constraints during data collection are described in section 4.8. Method of data analysis and list of the software used for data analysis are included in the section 4.9. Finally, section 4.10 is about concluding remarks.

### 4.2. Objective of the Fieldwork

The main objective of the field work was to collect the primary and secondary data from the case study area to fulfill the requirement of the selected research objectives with the help of research questions and data collection method. Fieldwork provides an opportunity to gain first-hand knowledge from the real settings to solve actual problems and to determine the way to access appropriate information. It also helps to interact with the resource person and know about the practical problems in the field.

### 4.3. Field Study Area

The selected field study areas are situated in three different places of Kathmandu district, Nepal. Selection of *Bagmatinagar* land readjustment projects for field study was for the assessment of land governance principles on urban land readjustment. Other reasons behind the selection of this LR project for field study are:

1. The easy availability of the data from the ongoing project is one of the important reason for the selection of the project. Opinion of project implementing agency, member of user's committee and the land owners participated in LR project are essential to know as most often it is difficult to know project initiator, location and the member of users committee of the completed LR project.
2. Other supporting reasons are that if we choose the LR project area far away from the Kathmandu it would have been expensive and time consuming to travel and collect data within the given time frame.
3. The selected LR project was initiated by the governmental agency and the central office of the project is located in the city where it was easy to acquire the data related to the issue of land governance and land readjustment.

Second study area selected was the *Ichangu Narayan* land readjustment project. Reasons behind the selection of this LR project for field study are:

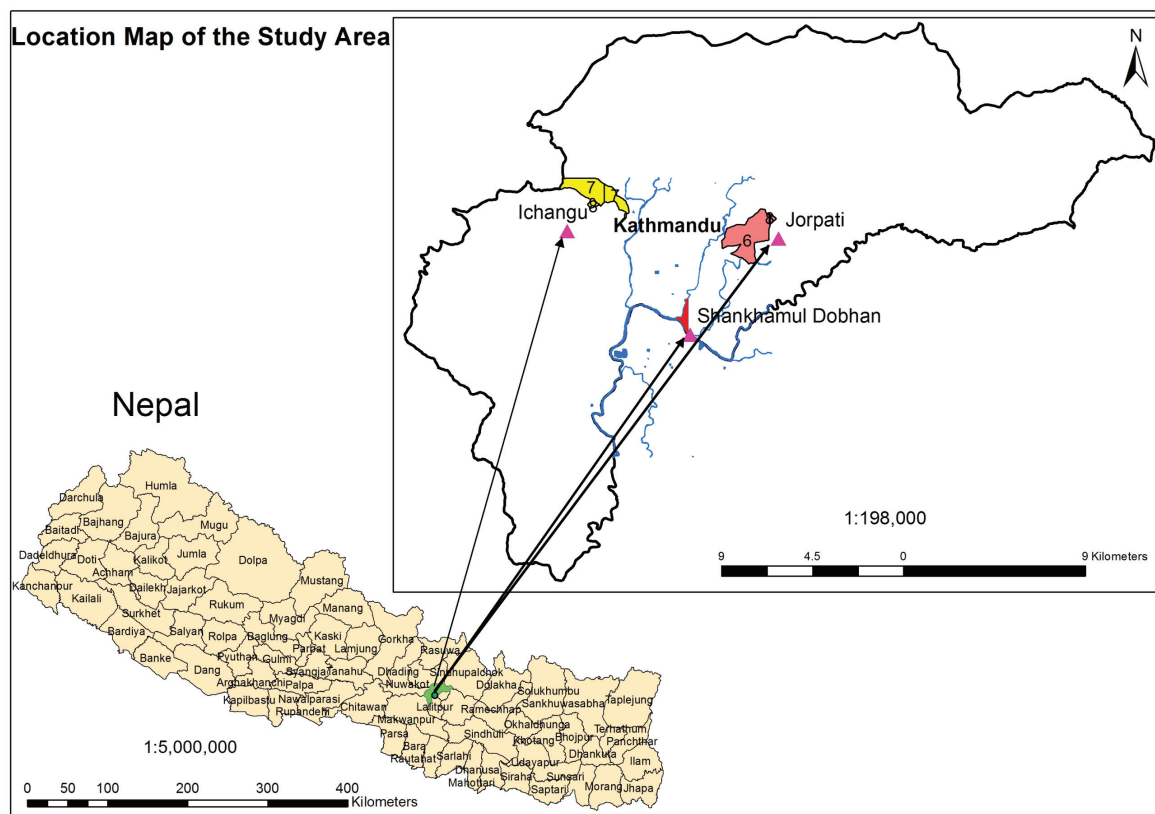


Figure 4-1: Location map of the study area, Data source: DoS

1. Some reserve plots were allocated for the construction of social housing to relocate the urban poor by DUDBC. Since one of the objectives of the research is to study the relocation of squatters to LR area. Therefore, the site was very appropriate for the study and to collect the data from ongoing project. It was also found initiated by the government agency, Kathmandu Valley Town Development Authority located at the Kathmandu. Therefore, easy to visit the central office of the project.

2. To collect the data about the perception of respondents; especially member of users committee on how the formal resident responds to the squatters. Because, it is difficult to collect the opinion of the members of users committee, government and individual if they are selected from previous project or completed project where the allocation of land for urban poor has not been practised.
3. To study on the mechanism about social housing concept and concerning agencies interested to relocate the squatters in developed area.

Another field study area lies in the same district at *Shankhamul*, where the squatter settlement is situated. The reasons to select this area for study are:

1. To know about evolution and changing pattern of the squatter settlement in this area. Perception of squatter settlers, problems faced by the squatter people, land tenure security, equity and participation of externals providing basic amenities and availability of space either it is suitable to develop through LR method as well as.
2. To know the interest of the squatters about relocation into land readjusted area rather than the existing location. Above figure (4-1) shows the map of the study area.

#### 4.4. Overview of the Study Area

*Bagmatinagar* LR project lies in Kathmandu Metropolitan, *Guheshwori* Ward No. 6 & 8. This project was started in 2003, initiated by the land owners committee and KVDA. The project boundaries are defined as: Towards East; Jorpati V.D.C., West; K.M.C. 7, Kumari Gal, K.M.C. 8, Guheshwori, Towards North; K.M.C. 6, Bouddhanath, South; Bagmati road. The total area of the project is about 63.44 hectares. Land owners population is about 821 and number of the plots developed are 2100. The project area of *Bagmatinagar* LR is shown

in figure (4-3). Majority of the people lived in this area are *Sherpa, Lama, Gurung, Tamang*; most of them are involve in agriculture and some are involve in army and business.

*Ichangu Narayan* LR project was initiated in 2002 with the cooperation of the land owners and KVTDA under the Ministry of the Urban Development. *Ichangu Narayan* land readjustment project is situated in *Ichangu Narayan* VDC ward No. 7, 8 “Ka” and ward No.8 “Kha”. The project area is 31 hectares. The study area is shown in figure (4-2).

Four boundaries of the *Ichangu Narayan* land readjustment project are as follows: North direction: *Nagarjun* Jungle; South; Direction: *Ghwong Khola*, Balaju ward no. 5 and 6; East direction: *Balaju* ward No. 16; West direction: *Balaju* Ward No. 8. Out of 31 hectares land, 4040 m<sup>2</sup> land was purchased by the DUDBC for the construction of social housing to provide

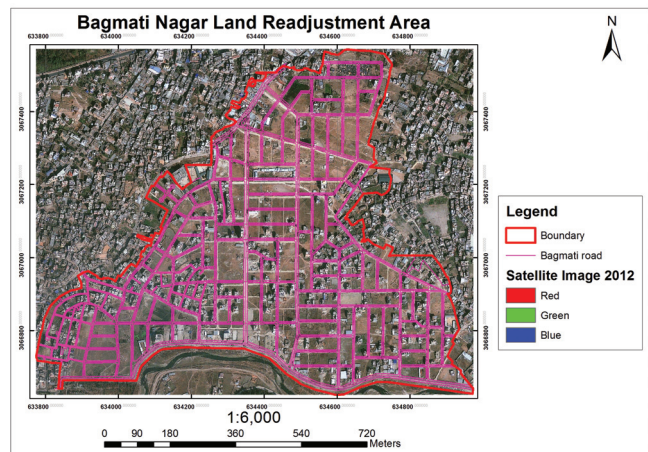


Figure 4-2: Bagmatinagar LR project, Source: NEST

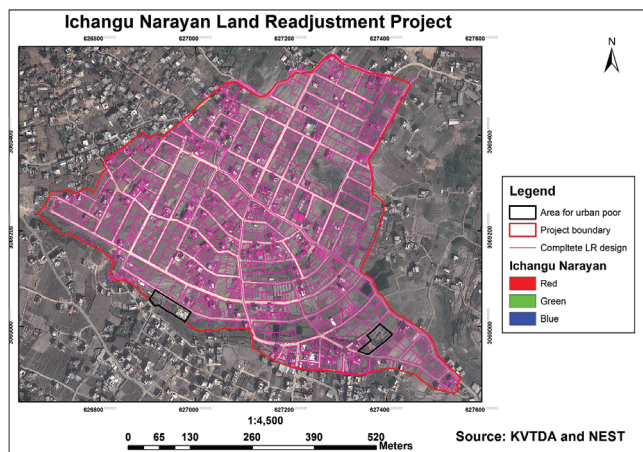


Figure 4-3: Detailed Map of the Ichangu Narayan LR



shelter for 200 families of the urban poor. Different ethnic groups like *Brahman*, *Chhetri*, *Newars*, *Janajati* are found in this project area. Most of them are involved in the agriculture and some them are working in the governmental job and business. The numbers of plots to be developed are 1625 and the existing numbers of landowners are 456.

*Shankhamul* squatter settlement denoted by the red polygon in figure (4-4) is located in the bank of the Bgmati River inside the Kathmandu district. The settlement extends on 54 *Ropani* equal to 2.75 Hectare land. There were total 110 households with 550 populations. The squatter people came from different districts of Nepal. The squatter settlement is mixed including small temporary houses to three story buildings. According to the master plan of the government, the area is designed for the protection of the greenery belt along the Bagmati River by constructing United Nations Park. Bagmati corridor link road and sanitation system to clean the Bagmati River are also mentioned on the master plan.

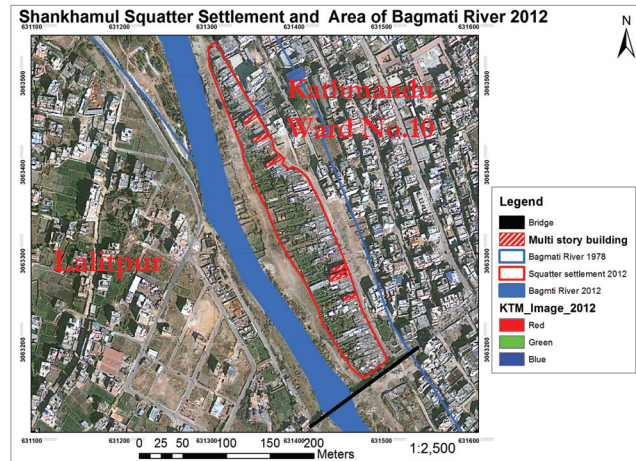


Figure 4-4: Shankhamul squatter settlement, Source: DoS

#### 4.5. Preparation for Data Collection

This is the primary phase before going to field for data collection. Preparation for data collection is divided into three phases. They are pre- field work, field work and post field work, described as follows.

##### 4.5.1. Pre- Field Work

In the pre-field work phase, the research objectives, research questions and approaches to collect data were identified through review of literature. The interview questions and relevant indicators for the governance framework were developed. Other necessary arrangements such as list of the organizations and name of respondents, schedule for interview, and location of the study area, arrangement for the accommodation, necessary equipment and official document were collected. To introduce the researcher to the respondents, an introduction letter from the university was prepared.

##### 4.5.1.1. Respondents for Data Collection

the detail of selected respondents for interview and other secondary data are shown in table (4-1). Selected

Respondents	Government officials	Academicians	Civil society groups, Private sector	LR project members	Squatter Federation Members
Numbers	14	4	4	4	2
Activities	Interview, collection of land acts, spatial data, reports	Interview, collection of Articles, reports	Interview, collection of spatial data	Interview, field visit	Interview, field visit

Table 4-1: List of respondents for data collection

respondents are involved in different governmental organizations, academic institutions, civil society group and private organizations, LR projects and squatter federation. Detail list of the respondents, their position and organizations are listed in the (annex-2) of this research. The respondents are categorised into three groups according to their involvement in particular organization for the interview:

1. Government employee: The respondents who are working under the civil service act and have an experience in their related field and also included the retired personals from the civil service.
2. Academicians: These are the persons working in an academic institution and are involved in the private as well as the governmental institutions but their profession is to provide the education.
3. Civil society groups, private organizations: Respondents selected for the interview were those who are involved in the land, squatter and urban sector; involve in NGOs, INGOs; also some retired personal from the government job but they are active in private consultancy, social groups, university and other sector to expose their knowledge and expertise in the different development activities.
4. LR project members: the respondents from the LR project including project in charge, user's committee member and some land owners.
5. Squatter federation members: It was difficult to get the data directly from the squatter people thus squatter federation member were selected to get the interview.

#### **4.5.1.2. Approaches for Designing the Interview Questions**

Selection of the appropriate data collection method is very important to reduce the error and redundancy (Ranjit, 2005). One of the methods employed for the collection of the primary data was interview questionnaire. Well designed and simple questions are helpful to get the answer related to the research questions. The complex and very difficult questions containing domain specific language are very difficult for the respondents to reply. Sometimes the domain word takes the time to explain to the respondents. According to the requirement of the research objective, structured and open ended questions were prepared to get the required data. To get the opinions, different group of people were selected according to their level of expertise, profession and the experience. The different sets of the questions were developed and asked to the respondents.

To meet the requirement of the research, the governance framework was developed. The framework has three governance criteria including three principles of the governance shown in the section (3.7) of this research. These principles of the governance are assessed in urban LR with the help of the indicators.

#### **4.5.1.3. Approaches for Data Collection**

Selection of the appropriate method for data collection is very important. Although the single method of the data collection might not appropriate for answering all the research questions, it depends on the availability of data sources and type of data required for the research. The data types used for this research are both primary and secondary qualitative and quantitative data to ensure the quality of the research.

A key informant interview technique was selected for primary data collection. The key informant interview is a technique of taking interview from the selected knowledgeable person who knows the content, reality, condition and the interest on the research topic. In key informant interview, the respondents has the freedom to describe the background of the case and related events (Ranjit, 2005). The purpose of key informant interview is to gather information from a wide range of people including professionals, experts, and community leaders of the particular field. The expectation is to get the first-hand knowledge about the particular problem and linked somehow with the research topic which is intended to investigate. Therefore, careful selection of the key informants was done by adopting following steps.

**First Step:** To meet the objective of the research, different people from policy level to implementation level were identified. A list of potential informants was made through purposive sampling method. It was targeted to get diverse set of representatives with different background and also from varying sector hoping that the diversity provides a broad range of perspective in terms of governance, land readjustment and the case of squatter people in particular.

**Second Step:** Review of the prepared list to identify one or two persons from each sector who can provide better information, hence narrow down the list made earlier. While doing so it was kept in mind that the



final list had diverse mix of key informants. The diversity in selecting the key informant is necessary because if they are chosen from a particular background only, there may be chance to end up with biased or one sided results. Hence it is essential to select informants from a wide range of sectors who know much about the issue and are both able and willing to share their knowledge that can provide varying perspectives. The collection of the data about squatter settlements was collected by selected respondent's interview. The selected respondents were the member of the squatter federation considering they know about squatter problems. Besides this, the data related to squatter were collected through the different civil society groups such as NGOs, local government and policy level personals.

#### **4.6. Fieldwork**

This is a very important phase of the research, a data collection phase. The primary sources of the qualitative data were collected from the interviews. The secondary data were from the reports, laws, regulations and other official document published and unpublished by the different land related governmental and non-governmental organizations. The spatial data were collected from satellite image, topographic data and cadastral map.

During the field work, an open workshop was organized in the school of Arts, by the PhD candidate, Ms. Reshma Shrestha and interviewer was participated in the workshop to discuss on problems of the squatters and alternative relocation options. A presentation on the research topic was also made in the Kathmandu University to discuss on the research topic.

##### **4.6.1. Sources of the Data**

The sources of the data collected during the field work are from the primary and secondary sources.

###### **4.6.1.1. Primary Data**

The method used for primary data collection was the interview. Some interviewees were selected before going to field and some were defined during the field work period. Most of the respondents were requested for the interview. Some respondents who were out of the field study area were requested to fill up the questionnaire via e-mail. In the workshop, some questions related to the squatter settlements were raised and discussed. Despite this, some academicians were requested to fill the questionnaire related to land readjustment process and the squatter problem. Other primary data were collected from the experts, social groups involving in the land readjustment and squatters. Academician and experts were interviewed focused on the LR and suitability of LR for squatter relocation. The government employees were asked about the tenure system, tenure security, participation and equity during LR process. Policy makers, experts and academicians were asked about their role and participation during the formulation of land use policy, land policy and integration among the different stakeholders. The LR user's committee were interviewed focused on their role and participation in LR. A small discussion with member of the squatter federation was organized to know the current situation of eviction, their rights and their opinion for relocation.

###### **4.6.1.2. Secondary Data**

Secondary data were collected from the different governmental and non-governmental organizations. The major types of the secondary data collected were spatial and non-spatial data.

###### **a. Spatial Data**

Spatial data collected were cadastral map of the land readjustment area, satellite image, digital topographic map, aerial photographs of different years; these data were collected from the Survey Department, KVTDA, Private Consultancy and experts. The location map of the squatter settlements was collected from the Land Management Training Centre.

#### **b. Non Spatial Data**

The non-spatial data such as land readjustment manual, urban shelter policy, land use policy, urban development acts and regulations were collected from the KVDA, DUDBC. The National Land Use policy, Scientific Land Reform policy and a report on High Level Land Reform Commission, was collected from the ministry of Land Reform and Management. Documents related to land rights, social housing, a report on the solution of landless problem (*Sukumbasi Samasya Samadhan Ayog*) were collected from the NGOs and INGOs; like: CSRC, Lumanti and UH-Habitat.

#### **4.7. Post Field Work**

This is the next phase of the research. In this phase all the data collected from the field are to be managed and codified. In this step all the interview recorded during the field work are transcribed, translated and arranged according to the research questions for further analysis. The spatial data are visualized through the purposed software. After this, extra relevant literatures will be reviewed to learn more on research topic to fulfill the objective of the research. In this step, the data collected from field are integrated with literature for further analysis to draw the conclusion. The technique and software used for the analysis of the field recorded data are described in section 4.9. All the data related to the research questions are transcribed being within the boundary of the time schedule mentioned in the proposal. Furthermore, in this phase the chapter of the research and table of contents are developed, managed and fill-up.

#### **4.8. Constraints**

Limitations during the field work observed were mainly to get the appointment. The interviewees selected for the interview were the key persons and they have the distinct position and experience of their concern field. Therefore, their expertise was very important for my research but due to their busy schedule, I have to wait a long time and even postponed the interview for next day. It was very difficult to take the interview from the squatter people. They reject to give the interview because they thought the interviewer is from the government and is getting the data for further forced eviction. Finally we took the interview going through the squatter federation member. On the other hand, to get information about LR process, its benefit and role of the LR committee member was very difficult. They have established the land readjustment site office in the project area but the office was closed. Most of the data from LR committee member were collected by contacting personally at their home or other places. Some governmental officers rejected to talk about the squatters issue even though they know about the reality. The tight schedule of field work was another important constraint faced during the field work.

#### **4.9. Data Analysis Methods and Software**

Qualitative data analysis means making informative conclusion from the raw data gathered from the survey using variety of sources such as interview, site observation and document (Caudle, 2004). Most of the data collected from the field work were the qualitative one. Qualitative data are analysed using text based analysis method as per required. The steps used for the qualitative data analysis are: transcribing the data and arrange according to the research questions, selecting the important things useful to the research, re-thinking and arranging the data according to the framework and finally summarize the information in text or graphical form (Seidel, 1998) using Microsoft office software. MsExcel is used for the analysis of category data. The spatial data are visualized through the ArcGIS software. End Note software is used for the citation of references.

#### **4.10. Summary**

Case study methodology for both primary data and secondary data collection are described in this chapter. To get answer of research questions relating to objective two and there case study methodology was

adopted. The purpose of field study was to collect first-hand knowledge from the real settings to know the issues related to land governance in urban LR and data about squatter settlements. Selection of the respondents was done according to topic focused including diverse sector to minimize the biasness. The interview questions were formulated as combination of open end and closed type are listed in the annex-4. The approach to select the respondents was key informant method because the research is process based and related to policy, process and the structure. Key informants method helps to get the in-depth knowledge in the particular field. The diversity of the respondents such as experts, local peoples civil society groups, government employee, private land developer were selected to get rid of the biasness and criticise. Therefore, the respondents for data collection are ranges from the policy maker to general land owners and squatter people. These are the main theme of data collection necessary to perceive the contemporary phenomenon in the real practice of LR and squatter problems. The varieties of sources of the data collected are the primary data from interview, secondary data and spatial data from the different sources. Constraints during the field work such as waiting for a long time to interview and time management are highlighted. Post field work activities such as data analysis method and software used are also described in this chapter.

## 5. ASSESSMENT OF LAND GOVERNANCE IN URBAN LAND READJUSTMENT

### 5.1. Introduction

The assessment of land governance principles in the particular land sector, system and method are necessary to measure the performance of land governance based on available existing land information. The assessment will help to the decision makers and implementer to make the strategy to achieve the certain goals (Deininger *et al.*, 2011; Molden, 1998). The scope of this assessment is determined by the scope of case, time and data sources. This research is conducted to study the land governance in urban land readjustment based on the data collected from the particular case study area. Basically the scope of the assessment varies from the local to global scale (Basnet, 2012; Bhatta, 2010; Kaufmann *et al.*, 2009).

Chapter there describes the land governance framework applicable for urban LR. Data collection techniques, data sources, approaches for selection of respondents were the major focus in chapter four. The purpose of this chapter is to assess the land governance principles in urban LR based on the land governance framework described in chapter three and data collected from the field, described in chapter four. Activities included in this chapter are different methods of assessment described in the section (5.2). Section (5.3) deals about land readjustment process in Nepal. Section (5.4) is about the assessment of land governance in LR. Section (5.5) is about the discussion on the assessment gap perceived in section (5.4). Finally, concluding remarks of the entire chapter is presented in section (5.5).

### 5.2. Methods of Assessment

Different methods of assessment are developed and used by international scholars to evaluate the governance in different land sectors and land administration system, some are described below.

**A) Comparative Evaluation Method:** Bandeira *et al.* (2010), has used the comparative methodology for the evaluation of national land administration systems (NLAS). This method of assessment based on setting the goal and necessary methods to achieve the outcome by fixing certain bench marks. The qualitative and quantitative data are required and different intermediate goal, bench marks are fixed. To achieve every goal, different methods and indicators are used and assessment is completed passing through the different bench marks. This methodology was applied in Honduras and Peru in order to evaluate the national land administration systems of both countries (Bandeira *et al.*, 2010).

**B) Mixed Method:** The Community Based Rural Land Development Project was launched to acquire the land in four pilot districts in rural Malawi. The aim of this project was to provide the land to the group of landless or poor households in group tenure system for agricultural production and food security. The evaluation was done by a mixed methods approach (Datar *et al.*, 2009). In this method both qualitative and quantitative data were used for the evaluation of the selected land project. The qualitative data were used to understand the real context of the project on the basis of existing opinion and project reports. The quantitative data shows the real impact on the progress of the project. However, this method does not give the idea to evaluate the policy, process and structure of the land governance.

**C) Logical Framework Analysis (LFA):** The logical framework analysis is a method, used to manage and evaluate the project. In this method the action plan, monitoring system and evaluation framework are used to manage the project. Most of the development projects are evaluated with the help of the LFA method. For instance, ADB, DFID, SIDA, FAO, World Bank, GTZ have used this method (Groenendijk *et al.*, 2003; Williamson *et al.*, 2010). In LFA method the project goal, activities and expected output are logically

linked to complete the project, based on the purpose of project with in the specified time and fixed resources. LFA method is done in policy, management and operational level (Steudler *et al.*, 2004).

**D) SWOT Analysis:** SWOT analysis method of the evaluation of any system and organization can be measured based on the weakness and strength. The weakness and strength are measured by the customer satisfaction. It helps to investigate the strategy to find new opportunity and way to tackle the threats from the outsider. The evaluation is required to sustain and widen the scope of the system. More effective services from the organization in a particular field creates the better opportunity to extend their services and network through the integration of other stakeholders (Groenendijk *et al.*, 2003).

**E) Good Practice Method:** Good practice method of assessment is done on the basis of the objective and approach of international success practices applied in the real context or case. The assessment is done by comparing the case with the lesson learned from the international success practices adopted by the international arena as good practice (Steudler *et al.*, 2004). The good practice method of assessment needs both qualitative and quantitative data from the study area and review of the international success practices (Bandeira *et al.*, 2010). For instance, assessment of the governance principles in LR in the case study area can be done by comparing the case with international success practices. The international success practices of LR from Germany and Japan are taken as good practices described in chapter (2), section (2.5).

After reviewing different methods of assessment, good practice method is selected for the assessment of governance principles in urban LR. The reasons to select this method for assessment are:

*The assessment is based on the qualitative data from interview and this method of assessment does not really need the accurate and up to date data.*

*The sources of data from interview and existing information can fulfill the requirement to compare the existing practice in study area with the international success practices (Sudders *et al.*, 2004).*

Germany and Japan have been adopted the following land governance principles in land readjustment listed below in table (5-1) (Hong *et al.*, 2007; Sorensen, 2000b; Yomralioglu, 1993). Therefore, the LR practices adopted in these two countries are taken as the good practices.

Germany			Japan		
Tenure security	Participation	Equity	Tenure security	Participation	Equity
German Federal Building Law Code 1902, Existence of LR policy, mandatory LR, Easy access to land information, LR initiated by municipality	Compulsory land owners, Decentralised system, Existence of network with stakeholders, Simple LR committee	No forced eviction, Adequate compensation, Appeal system, Land contribution ration not more than 30%	LR law 1954, Existence of LR policy, Easy access to land information, LR initiated by multi-sectorial, collaborative	Compulsory two third land owners participation, Decentralised system, Existence of network with stakeholders	No forced eviction, Adequate compensation, Land contribution ration not more than 30%, Access to land for public purpose

Table 5-1: Practice of land governance in LR in Germany and Japan

### 5.3. Land Readjustment Process in Nepal

According to the Town Development Acts 1988m from 1988, the government of Nepal took the step towards the LR process for urban development and access to the serviced plots in the urban area (MoUD, 1988). Land readjustment projects have been taken by the government through the Ministry of Urban Development and the Ministry of Local Development. In Nepal, LR can be implemented in the private and the government land where at least 50 families can live (Karki, 2004b). The process of LR in Nepal is

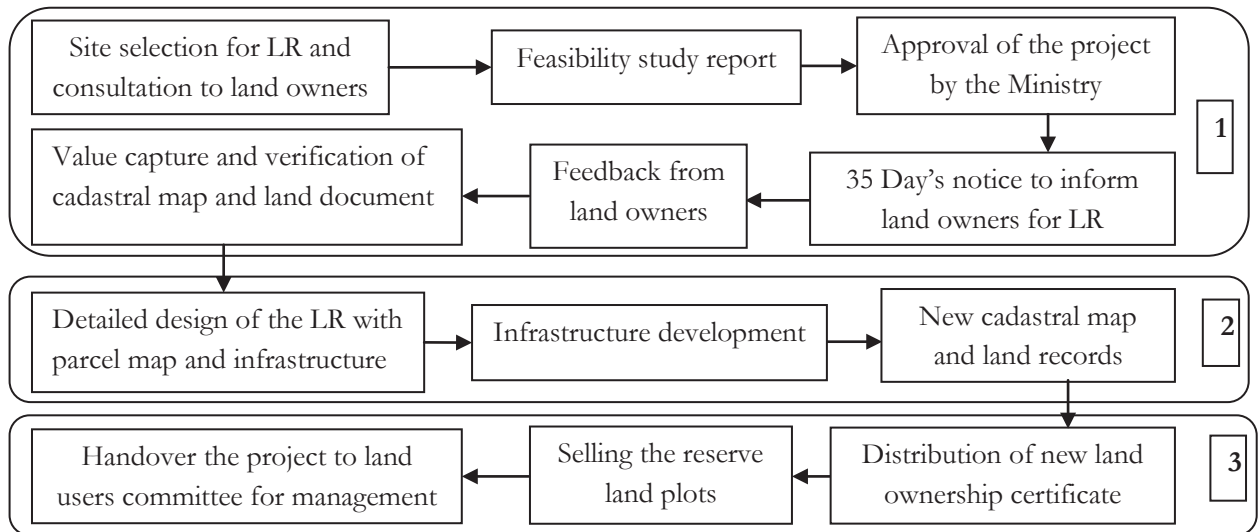


Figure 5-1: Land readjustment process rearranged from LR manual and (Karki, 2004b)

broadly categorised into three steps shown in the figure (5-1). According to (Karki, 2004b) and land readjustment manual prepared by the Department of Urban Development and Building Construction (DUDBC), the LR process is summarised below.

First step includes the site selection, feasibility study, approval from the ministry, public notice, feedback from land owners, value capture and verification of the land documents. The site selection and feasibility study is initiated by land LR agency and the land owners with at least 51% consensus of the land owners. This step also includes the formation of users committee and the management committee. These committees have the mandate to support and implement the LR project as mentioned by the Town Development act 1988. After the feasibility study, feasibility report is sent to the MoUD for approval of the LR project. The 35 days public notice about the LR project is announced in national newspaper and government bulletin after the approval of the project. Then the feedback from the land owners and tenants are collected, discussed and resolved. The site office is established, where the cadastral maps and land records are collected and verified within the purposed area of LR. In this step land contribution ratio for LR project by land owners, identification of land owners, location of the parcel after LR and quality of the infrastructure are defined. This step also includes the restriction for any kinds of physical changes up to two years (as mentioned in the Town Development Acts 1988). According to Karki (2004b), the contribution of the land for LR is up to 30% from each participated land owner; i.e. 20% for infrastructure, 7% for open space and 3% for cost recovery. However, the land contribution in some LR projects is up to 55%. In the study area the land contribution is about 30%; i.e. land for infrastructure is (17-21)%, cost recovery land (6-9)% and for open space (4-5)% of the total area of the land from each participated land owner.

Second step includes the activities such as preparation of detailed LR map, determination of minimum parcel size. After that infrastructure development started. With the completion of infrastructure development new land documents are prepared and send to the Survey office and Land revenue office for update, approval and achieve.

In the final stage, all the cadastral maps and land records are collected from the Land Revenue and Land Survey offices. New land ownership certificates and cadastral maps are then provided to the existing land owners. The open space, park are registered to the name of land users committee as public property. Other infrastructures such as road, drainage, electricity, drinking water and so on are registered to the concerned line agencies of the government. The reserve plots are sold through the bidding process and



notice for bidding is published in the national newspaper. Finally the completed project is handed over to the users committee for management and maintenance.

#### 5.4. Assessment of Land Governance in LR

Under this section, land governance principles such as land tenure security, participation and equity are assessed in different aspects of the governance such as policy, process and structure for urban land readjustment. The assessment is done with the help of the land governance framework, indicators developed in chapter three and with the help of the data collected from the field described in chapter four.

##### 5.4.1. Tenure Security

As reviewed from the literature, tenure security is not only assured by legal document like ownership certificate. Instead, protection against the forced eviction, possibility of selling, investment, transferring the land rights, access to mortgage and land development rights under certain condition are the criteria to realize the land tenure security (Augustinus, 2003). Therefore, tenure security in policy, process and structure are aimed to assess for urban LR with the help of indicators developed in chapter three.

##### 5.4.1.1. Policy:

###### (1) Existence of Land Policy and Laws Related to the Land Readjustment

Figure (5-2) shows that Nepal has not explicitly defined LR policy. However, LR projects have been initiated on the legal basis of Town Development Act 1988 and Kathmandu Valley Development Authority Act 1988. These acts state that the government can initiate the

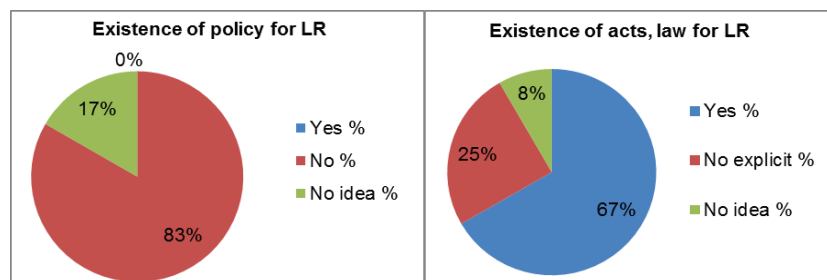


Figure 5-2: Respondents opinion on land policy, acts and laws related to LR

LR programs and prepare LR plan, approve the LR project. Further, National Land Use Policy 2012 has the provision for the adoption of LR but it is silent either compulsory or voluntary approach to be taken for LR. Unfortunately, since 1988 to 2013 all the LR projects have been initiated in the absence of land policy and land use policy. The incomplete land policy draft has the provision for the management of urban land but it does not explicitly defined the method to be adopted to acquire the land for urban infrastructure development (MoLRM, 2013).

###### (2) Assurance of Land Tenure Security during LR

The government has the leading role to provide the security of land tenure during LR through the Town Development Act 1988, Lands Act 1964 and Kathmandu Valley Development Authority Act 1988. Nevertheless, in the real practice, tenure security such as use right, development right and subdivision of the parcels were seen temporary restricted by the LR agency within the completion period of the LR project. According to section (12) of the Town Development Act 1988, the restriction on the land rights is not more than three years (MoUD, 1988). Surprisingly, from the figure (5-3), both LR project were delayed up to 7 years and still are not completed. The delays in the project increases the project cost and it prevent the land use rights to the land owners. Town Development Act 1988 has forced to the land owners to maintain the minimum parcel size 80m<sup>2</sup> after contribution of land for LR.

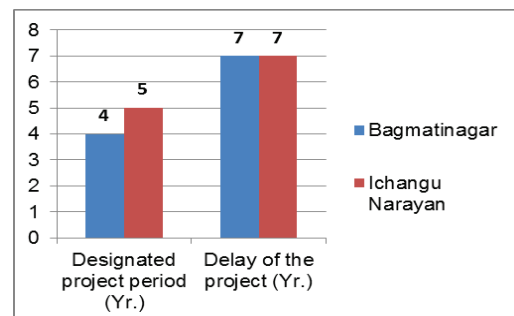


Figure 5-3: Delay of LR Projects

Land owners who have parcel size less than 80m<sup>2</sup> have to pay additional cost to the project. If they are unable to pay additional cost then they should sell the land to the project. Beyond this, land tenure was not seen secure for those land owners who have more land in ground than on land ownership certificate because LR in the study area has been conducted on the basis of the land ownership certificate. Similarly, tenants have seen more chances to lose the land use right and profession of farming (MoUD, 1988). In fact there was no legal provision to the tenants to build the house on the shared land of land owner; tenant's right was seen only for agricultural use not for development rights such as building the house for other purpose than the farming. The Lands Act 1964 is seems favoured to land owners than tenants and land law is silent for sharing land between land owners the tenants after LR. This shows the forced eviction (MoLRM, 1964; Shrestha, 2010) and inadequate explicit tenancy law. Table (5-2) shows that the land tenure for the mentioned criteria were not secure.

Tenure security during LR				Criteria measured for tenure security (✓ represent agree, × represent disagree)
14	4	4	4	
<i>Govt.</i>	<i>Civil society, private sector</i>	<i>Academician</i>	<i>Individual and LR member</i>	
✓	✓	✓	✓	Temporary restriction to the land rights
✓	✓	✓	✓	Long term delay to complete project
✓	✓	✓	✓	Loss of land by land owners less than 80m <sup>2</sup>
✓	✓	✓	✓	Loss of land when area of parcel in cadastral map and land ownership certificate are not matched
✓	✓	✓	✓	Tenant eviction, if tenant rights are not registered
×	×	×	×	One-stop shops for land information
×	×	×	×	Explicit laws to implement LR by private sector

Table 5-2: Insecurity of land tenure during land readjustment

#### 5.4.1.2. Process:

##### (1) Complete and Accurate Land Related Document for Land Readjustment

District Survey offices have the legal mandate for cadastral mapping, update and archive. In the study area, where LR projects are initiated were in agricultural lands. Most of the cadastral maps in the study area were prepared on paper using analogue instrument (plane tabling method) and area of parcel has to be also mentioned on the land ownership certificate too. However, LR design map has been prepared using digital instrument. Thus, there seems the error in area mentioned in the land ownership certificate provided by the Survey office and area calculated by the LR project. Unfortunately, LR projects have been used the area of parcel mentioned in the land ownership certificate. This is one cause of inaccurate land information. On the other hand, District Land Revenue office is responsible to provide the land ownership certificate mentioning the rights of land owners and tenants. According to the Lands Act 1964, legal documents showing the rights of tenants are provided by the Land Revenue office and tenant rights should mentioned in the land ownership certificate with the negotiation of the land owner and tenant (MoLRM, 1964). However, the Lands act 1964 is silent about the land rights of tenant after LR because the Act has the provision of use right for agriculture purpose to the tenants not for physical structures.

##### (2) Access to the Land Information

The public notice for the implementation of LR project is announced 35 days before the development work. The entire land owners of the project area working abroad or away from the LR area have less chance to get the information about LR but the LR projects have been initiated with the agreement of 51% of the land owners and tenants. On the other hand, during the LR land developer was found to be

the virtual land owner. If the original land owners need the cadastral map and other land information they should go through the LR project office with request letter to get the land information from Survey office and Land Revenue office. This indicates land information was not seen directly disseminated from the front door of the LR project office. It seems absence of “one-stop shops” system (FAO, 2007).

#### 5.4.1.3. Structure:

##### (1) Provision to Private Land Developers for the Implementation of LR

Land readjustment projects from the private sector were not seen exercised in the case study area; both LR projects were initiated by Kathmandu Valley Town Development Authority (KVTDA), a government agency, under the Ministry of Urban Development. Town Development Act 1988 has no legal provision for the implementation of LR by the private sectors. The Building Act 1999 has the legal provision to private sector for housing but not for LR projects. In the Kathmandu valley, from 1988 to 2013, total 13 LR projects were found initiated by different government

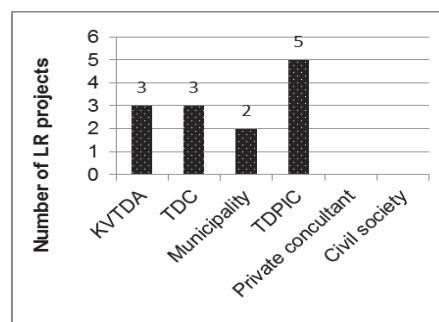


Figure 5-4: LR project initiator agencies

agencies till the date of data collection. Out of 13 LR projects, 3 projects were found initiated by KVTDA and equally from Town Development Committee (TDC), only 2 were from Kathmandu and Bhaktapur municipality and 5 were from Town Development Program Implementation Committee (TDPIC). There was found the gap of involvement of governance actors such as private sector, civil society group and private financial institutions from decision making process to implementation phase of LR project. Figure (5-4) shows the absence of multi-sectorial involvement in LR such as private sector, civil society groups. Thus, the assurance of tenure security by the private sector to the users (land owner) in LR is not obvious.

#### 5.4.2. Participation

LR project emphasize the community participation to pursue the legal, economic, political and social consent of affected land owners (Hong *et al.*, 2007). Therefore, under this section, it is aimed to assess participation in different aspects of the governance for urban LR with the help of indicators developed in chapter three. Following table (5-3) summarise the different criteria assessed for participation. It shows the participation for LR is not measured adequately from policy formulation to implementation of LR.

Participation for LR				Criteria to measure participation (✓ represent agree, × represent disagree)
14	4	4	4	
<i>Govt.</i>	<i>Civil society, private sector</i>	<i>Academician</i>	<i>Individual and LR member</i>	
×	×	×	×	Bottom up approach for decision making
×	×	×	×	Existence of participatory and inclusiveness LR
×	×	×	×	Existence of governance network
×	×	×	×	Public awareness programme by the project
×	×	×	×	Decentralised system for the implementation of LR

Table 5-3: Indicators measured for participation and governance network in LR

##### 5.4.2.1. Policy:

##### (1) Decision Making Approach for Land Readjustment

As emphasized by Palmer *et al.* (2009), land governance is fundamentally supported by the land policy where all the major issues related to tenure security, access to land and participation are discussed. The involvement of all stakeholders during policy formulation in bottom up approach includes the voice of all

stakeholders but in the top down approach grass root levels are neglected. Unfortunately, case study country has been adopted the top down decision making approach. Article (26) of the Town Development Act 1988 (TDA1988) has mentioned that the TDC has the power to formulate and launch the urban development policy, plan, projects and regulate the progress of the projects.

S. No.	Town development committee members involve in decision making process	
1	A person designated by the government of Nepal	Chairperson
2	Chief district officer or representative designated by him/her	Member
3	Chief of five district level offices	Member
4	One representative nominated by the district working committee, recognised by national political party	Member
5	Five persons nominated by the government of Nepal among the social workers having significant contribution in development of local area	Member
6	Chief of concern local body, municipality or village development committee	Member
7	An government employee designated by the government of Nepal	Member Secretary

Table 5-4: Town Development Committee members involve in decision making process for LR

The committee may acquire, sell, dispose or manage moveable and immovable property. TDC has also power to initiate LR projects and is different from the managerial committee of LR. Members of this committee listed in table (5-4) are belonging from central and local government. Most of the members in TDC were found high level government employee and some were social worker. However, the involvement of the private sectors, land evaluators and land owners are not included. This means, the interest and requirements of the stakeholders such as land owners and tenants at the bottom of the LR projects were not found incorporated in top down approach of decision making.

## (2) Participatory Land Readjustment

LR in Nepal has been initiated according to the demand of the users (land owners), urban development plan of the central government (KVTDC, 2011). Therefore, the beneficiaries were seen users in the project area and the government (government can collect tax and revenue from transaction of developed land). The opinion of the respondents and the secondary data shows that in the study area there was not found any project conducted by the participation of private sector, civil society group and the government. The participatory LR in terms of accessibility of developed land to small land owners, urban poor and squatter people were not addressed in TDA 1988. The developed land after LR has been sold on the agreement of the land owners and land developer. Only in Ichangu Narayan LR project, Department of Urban Development and Building Construction (DUDBC) has allocated about 4040m<sup>2</sup> land for social housing to settle 200 family of urban poor. However, there is no any compulsory system and criteria formulated to allocate the developed land plots for squatters. Figure (5-5) shows the beneficiaries from 13 LR projects implemented in Kathmandu valley.

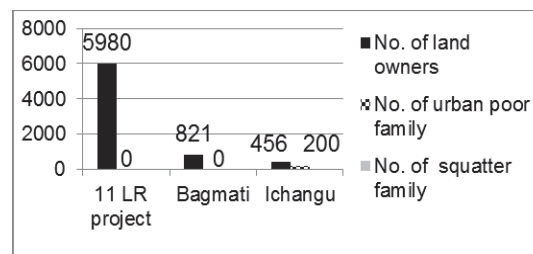


Figure 5-5: Beneficiaries from LR projects

## (3) Governance Network

In the case study country DUDBC, TDPIC and KVTDA have seen the leading role to decide the proper land development methods such as LR, site and services and Guided Land Development Program (GLDP) for the urban development (MoUD, 1988; Thapa *et al.*, 2008). Although, Kathmandu metropolitan city and Bhaktapur municipality had implemented two LR projects based on the central plan

of DUDBC. These aforementioned organizations have some common tasks but they performed independently on the basis of their annual target and vision. Figure (5-6) shows the absence of governance network among the governance actors. The private land developers and civil society groups were not found involved in LR. However, they agree for the necessity of governance network among land related stakeholders from policy making process to implementation of LR projects. According to the opinion of the respondents from the civil society groups, the government had provided the questionnaires for suggestion during preparation of national land policy but they were not sure how far their voices will be incorporated. There was not found any trace of involvement of local land owners, private sector in the policy and operational level. Although, the TDA 1988 articulates the institutional and organizational integration with land related stakeholders but it was not well practised. Financial institutions such as private Bank were not found involved in LR.

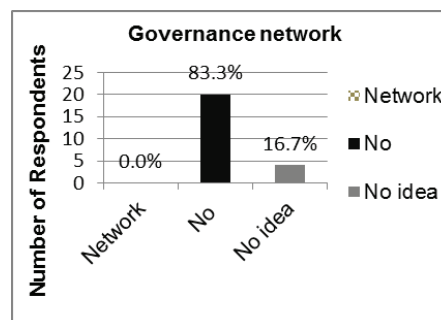


Figure 5-6: Governance network

#### 5.4.2.2. Process:

##### (1) Responsibility of the Actors Involve in LR

In the study area, the governmental agency, user committee and land owners were found as the main stakeholders. The government organizations DUDBC and KVTDA have the leading role to take the initiation for the implementation of LR projects and other administrative, financial and technical supports. Users committee member have the role to make participation among the land owners, involvement for the separation of land required for LR, selling the cost recovery land and management of infrastructure after the completion of LR. Other directly and indirectly supportive organizations and their responsibilities are listed below. From the table (5-5) it is clear that each organization have fixed mandate and responsibility so they pursue extra fund to deliver their services to the LR project.

Organizations	Responsibility
DUDBC	Provide legal framework, town planning and implementation of LR
KVTDA	Implementation of LR, management of urban land
Municipality	Implementation of LR, management, tax collection
Department of Survey	Approve and supply of cadastral map, boundary dispute resolution
DoLRM	Approve and distribution of land ownership certificate
Department of Road	Infrastructure development and maintenance
Water Supply Corporation	Water supply and management
District administration	Security and administrative support
Telecommunication	Telecommunication facility

Table 5-5: Concern organization and their responsibility for LR, Source: TDA 1988 and LR manual

##### (2) Public Awareness and Progress of Land Readjustment

For the successful implementation of LR, public awareness is essential. In the both study area most of the land owners were found farmer and few were seen conscious to the LR process, pro's and con's from it. In the Bagmatinagar LR project there were 821 land owners and 456 in Ichangu Narayan. These figures of land owners show the requirement of long time to convince the land owner by the user's committee member or by the project in-charge. Nearly a dozen LR projects have been implemented in the Kathmandu Valley (KVTDC, 2011) but these projects were delayed either insufficient public awareness about the benefit from LR, lack of justified land contribution, inaccurate land document and lack of initial



budget to complete the project (Karki, 2004b). Since 1988 to 2013, the progress of the LR in terms of the area of land developed by land readjustment projects, number of land owners benefited, time taken for the completion of the project and implementing agencies are shown in table (5-6).

S. No.	Project name	Project area (ha)	No. of owners	Implementation period	Designated project period year	Year taken for project completion	Delay of the project (Yr.)	Implementing agency
1	11 LR project in Kathmandu	239.55	5980	1988-2003	2-5	3-12	2-7	TDPIC, KVTDA, TDC, BM
2	Bagmatinagar	63.44	821	2003-2014	4	11	7	KVTDA
3	Ichangu	31	456	2002-2014	5	12	7	KVTDA
Total		334	7257	1988-2014				

Table 5-6: Progress and implementation agencies for LR, Source: (Shrestha, 2010)

Above table shows that from 1988 to 2013 about 13 LR project have been implemented by the government agencies with the consent of 7257 land owners in the Kathmandu valley including two LR project of study area. About 334 hectares land was developed within the time period of 26 years. The designated period of LR project was between 2 to 5 years but the entire projects were delayed up to 7 years and completion period of each project are seen between 3 to 12 years. On the other hand, if we compare the LR with the international practice of Japan, since 1945 to 2000, within the period of 45 years. The serviced land produced were more than 8000 Hectare per year but in Nepal from 1988 to 2013 with in the period of 25 year, the land developed were around 13.36 Hectares per year. Figure (5-7) raise the question on efficiency and sustainability of urban land readjustment in Nepal as compared to international practice.

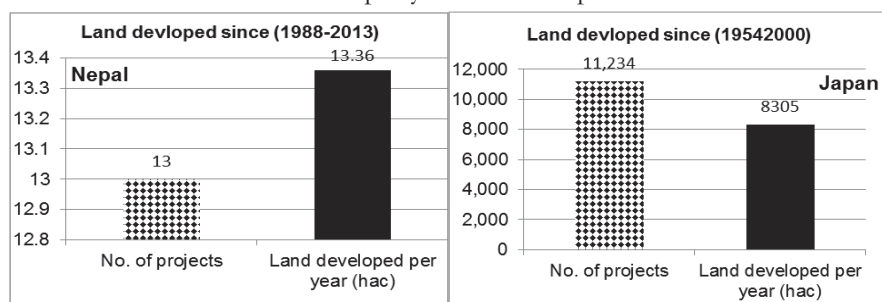


Figure 5-7: No. of LR project, land developed year in Japan and Nepal

#### 5.4.2.3. Structure:

##### (1) Decentralised System

In Nepal, LR has been found initiated by the government agencies such as DUDBC, KVTDA, TDPIC and only two LR projects were initiated by Kathmandu and Bhaktapur municipality. All 13 LR projects were found Kathmandu valley oriented. This seems the inadequate decentralised system to implement LR projects. The rights for the implementation of LR for providing serviced plots in the urban areas were found reserved under the government agencies. All the projects were found driven and controlled by the central offices of the government. LR projects in the study area were initiated by KVTDA. Table (5-6) shows the name of the project and their implementing organizations in the case study areas.

##### (2) Structure of LR Committee (Managerial and Users Committee)

These two committees (Managerial and users committee) are different from the Town Development Committee (TDC). The structure of the LR committee is divided into two categories. One is Users committee and other is managerial committee. According to the LR manual 2004, members of the users committee are selected from the land owners, tenants, representative from local authority, women and social workers. The users committee include minimum 9 members. Users committee is formulated under



the legal provision of Town Development Act 1988 (MoUD, 1988). It is a supportive committee and registered in the district administration office. It has a responsibility to make the cooperation, negotiation among the land owners, tenant and other social actors in the LR process. The users committee has to discuss with the land owners and other stakeholder through the meeting at least once per month. The other responsibilities of the user's committee member are to convince the land owners about the LR process, pro's and con's. It has the responsibility to sell the reserve plot for cost recovery of the project, management of the open space and other infrastructure after the completion of project. The activeness of the users committee can be evaluated by how successfully they build consensus among the land owners for LR. In the case study area, one cause of the delay of the LR project was seen due to the lack of activeness of user's committee member. In Ichangu Narayan LR project, the users committee was reformulated. This was due to the inability to convince the land owners by the former users committee. Table (0-2) in annex-2 shows the list of the members of the users committee and managerial committee.

The managerial committee members are belong to the different government organizations, urban planner, lawyer and others. The size of the managerial committee is up to 20 members. Managerial committee has the power to make decision about the approval of the feasibility of the LR project, monitoring and evaluation of progress as mentioned in the Town Development Act 1988 (MoUD, 1988). The managerial committee has the power to formulate the subcommittee i.e. land users committee. Nevertheless, the management committee was found a complex and big team with many members. Most of the persons in the committee member were found the chief of their organizations and related to different field than the urban development and land administration. This shows the necessity of attention how far the committee member knows about better implementation of LR. Besides this, the managerial committee is imbalance in terms of the absence of land evaluators, private sectors and civil society groups.

### 5.4.3. Equity

Equity is measured in policy, process and structure of the governance aspects for the case of urban LR. Following table (5-7), shows that the equity for the mentioned criteria were not perceived from the opinion of respondents.

Equity during LR				Criteria to measure equity (✓ represent agree, × represent disagree)
14	4	4	4	
<i>Gont.</i>	<i>Civil society, private sector</i>	<i>Academician</i>	<i>Individual and LR member</i>	
×	×	×	×	Front door land information delivery to users
×	×	×	×	Existence of anti-eviction law and appeal system
×	×	×	×	Compensation and contribution based on land value
×	×	×	×	Inclusive LR to express the voice of all land owners
×	×	×	×	Governmental intervention against land speculation

Table 5-7: Indicators measured for equity in LR

#### 5.4.3.1. Policy:

##### (1) Equitable Access to Land

Distribution of the land is not possible to every person but shelter is the basic right to all (TI *et al.*, 2004). One of the LR project *Kamerotar*, users committee and land owners of entire project have been restricted to sell the reserve land to the people beyond the LR area. It seems inequitable access to land by other people than the certain group inside LR area. The Interim Constitution of Nepal 2007 provides the legal right to access the land by the citizen for shelter everywhere entire the country. Unfortunately, lack of proper land policy and regulatory framework equitable access to land to all for shelter was not found

practised in LR. Town Development Act 1988 has forced to the small land owners for compulsorily selling the land to the LR project who are unable to preserve minimum land size (80m<sup>2</sup>) after LR. This is a kind of forced eviction and inequity. Equity also concerns the inclusiveness but above figure (5-5) in subsection 5.4.2.1 shows that the beneficiaries from the land readjustment projects were found existing land owners. Access to land for urban poor and squatter people is negligible. There was not found any policy and laws related to LR to support the access to land to the urban poor and squatter settlers.

## (2) Anti-Eviction Law and Compensation

Most of the LR projects in the study area were found initiated based on the international practices of LR. Interim Constitution of Nepal 2007 and Lands Act 1964 have given the provision to acquire, dispose, sell and transfer land and property by the citizen but there was not found the explicit anti-eviction law (MoLRM, 1964). According to the opinion of the respondents from the government, the land owners were not compensated in case of project delays because once the land owners are agree to participate in the LR project then they cannot go away from the project. Hence there was not seen specified place for appeal against the compensation and forced eviction during the LR. However, they can appeal at the civil court. Surprisingly, due to the absence of land court, the evicted land owner has to appeal at civil court but how far the problems of land owners are to be justified from the civil court is another part from the perspective of the jurisdiction but it is not concern to this thesis. The respondents again argued that when 51% of total land owner shows the agreement then it is supposed the majority consensus for the LR project. This shows remaining 49% land owner inside the project area should wait for the completion of the LR project. The land owners who cannot afford to maintain the minimum size 80m<sup>2</sup> of land has to sell to the LR project in the low price but the land price after the land readjustment grew up (300% to 600%) than the land price before the implementation of LR in the study area (Karki, 2004b). These circumstances indicate the forced eviction, lack of anti-eviction law and inadequate compensation system.

### 5.4.3.2. Process:

#### (1) Land Contribution for Land Readjustment

Land contribution listed in the LR manual is (15-25)% for road, (2-6)% for infrastructure and open space and about 10% for cost recovery of the project. The figure (5-8) shows the contribution of land for LR in the study area. In the both study area total amount of land contribution was found nearly 30% of the total land of land owners and land contribution method practised was area based rather than value based method. In some LR project, the land contribution was found up to 55%. This is the maximum percentage of land contribution compared to the current land value, existing infrastructure and benefit returned from LR. It appears that land contribution by big and small land owner was not proportionally fair because land contribution was not based on the land value, location and size of existing land. Surprisingly, there was not found justified and scientific method for land contribution based on land value and alternative option of land contribution such as monetary payment for the recovery cost of LR project.

International good practice shows the land evaluation based on land value is considered superior than the area based method because value based method for compensation appears justified method (Doebele, 1982).

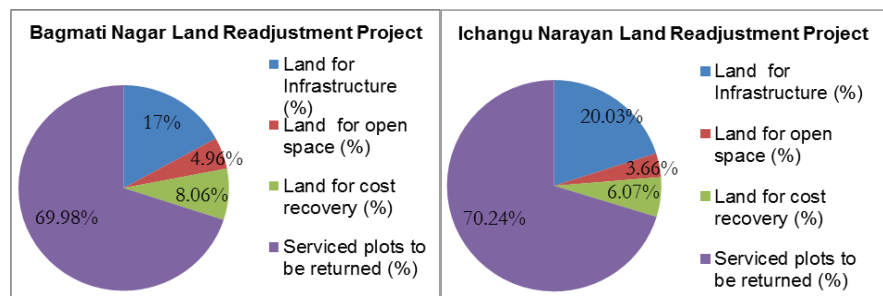


Figure 5-8: Percentage of land contribution in the study area

## (2) Public Interest and Benefit from LR

The public interests are always to get the better land value from infrastructure so that they intend to participate for land readjustment (Doebele, 1982). Data from the study area shows the land owners in the front side of project who are attached to the main road seemed more benefited than the back side. Land owners attached with the public land and existing road disagree to pay all the cost of the LR project but the land owners in the back side have to pay all the cost. On the other hand, the location of the land and quality of infrastructures determine the further increment of the land value after investment on the readjusted land. This shows the inequity of getting benefit from the infrastructure and location. In LR process there might be shift of location of parcel. Therefore, the abuse of power to determine the location of developed land might marginalise the ignorant land owners. In addition to this, both selected LR projects were found almost more than ten Km. away from the urban centre therefore the land owner's interest was found to join the readjusted area to urban facilities such as market centre, school, entertainment facilities and health post. However, land owners were found deprived from these facilities even contributing the maximum land for infrastructure development.

### 5.4.3.3. Structure:

#### (1) Inclusiveness

LR projects in Nepal have been seen supported to the big land owners than the small land owners. Small land owners have the chances to loss the land and shift from their existing location to elsewhere. This results the loss of sentimental value on the land and social relation where they are living for a long time. In Ichangu Narayan LR about 4040m<sup>2</sup> land was allocated for urban poor but not practiced in any other LR project. On the other hand, the social pattern in Bagmati Nagar LR project found that most of the land owners were farmers, army professionals and businessmen belonging to Rai, Sherpa, Tamang, Lama ethnic groups. There were few new settlements in their neighbourhood. These data shows the lack of inclusion of other social groups among the existing social group in the land readjusted area.

#### (2) Land Speculation

Land speculation is holding the land rights for a long time without making any kind of investment by the land owner and it creates the shortage of land in land market. The Lands Act 1964 has the provision to

	Land owner			Tenant	
	Maximum area for agriculture	Maximum area for residential		Maximum area for agricultural	
Location of the land			Location of the land		
Terai region	6.77 Ha.	0.68 Ha.	Terai region	2.71 Ha.	
Kathmandu valley	1.27 Ha.	0.25 Ha.	Kathmandu valley	0.51 Ha.	
Other hilly area	3.56 Ha.	0.25 Ha.	Other hilly area	1.02 Ha.	

Table 5-8: Maximum land ceiling Source: Lands Act 1964

purchase, use, sell, develop and transfer the land and property by Nepalese citizen with in the territory of the country. According to article (7) of Lands Act 1964, the maximum ceiling of land that can be acquired and used by each family of Nepali citizen either for agricultural or for residential purpose is listed in the table (5-8). Article 19 (2) of the Interim Constitution of Nepal (2007) states that except for social welfare, the state will not be acquire or exercise authority over individual property (GoN, 2007). There was not explicitly endorsed intervention by the government to force the land owners for selling the land readjusted plots within the limited period of time. Beyond this, the land acquisition may takes place under the Land Acquisition Act (1977), and it is exercised only to meet the necessity of the public needs such as road, hydropower, Airport, Conservation areas. These data shows the weak structure of land acts, policy and governance against the land speculation.

## 5.5. Discussion on Land Governance Assessment in LR

Assessment of land governance principles in different aspects of land governance shows that there are some governance gaps in terms of land tenure security, participation and equity in urban LR. This section summarises the assessment gap found in the case study area as compared to the international practices of LR. Discussion is on different aspects of the land governance such as policy, process and structure including the three selected principles of land governance and governance network. In each governance aspect, the land governance principles are discussed with respect to indicators developed in chapter three.

### 5.5.1. Policy

#### 1. Tenure Security

Land tenure security is assured by the socially developed system, guided by the policy, acts, laws and guaranteed by the legislation of the government (Dhakal, 2012; Simbizi *et al.*, 2014; Van der Molen *et al.*, 2008; Van Gelder, 2010). In the case study country according to the Lands Act 1964, General Code 1963, TDA1988 and Interim Constitution of Nepal 2007, land tenure security is granted by the government under the statutory land tenure system. However, there is not explicit land policy and LR Acts for mentioning security of land tenure during LR. The result from the table (5-2) shows the weak land governance to secure the land tenure for small land owners, land owners having inaccurate land document and tenants. No appeal system appears during LR. Prevention from the land use right due to delay of LR project is another cause of the tenure insecurity because having land ownership is not enough for tenure security; use right and development rights are equally important on the basis of time and land value. Therefore, issues related to tenure security such as anti-eviction law, accurate land documentation, strong appeal system, transparent and easy access to land information, equity for compensation are to be included in policy and laws related to LR before implementation of LR projects (Augustinus, 2003; Doebele, 1982).

#### 2. Participation

Decision making process in Nepal is based on top down approach but in the good practise it should be bottom up approach. Consequently, bottom up approach includes the social viability, participatory mechanism to address marginalised groups, their rights and obligations (FAO, 2007). LR projects as mentioned in the literature in Germany and Japan have been initiated on the basis of compulsory consensus of land owners and participation of land related stakeholder from policy making to implementation phase for the successful implementation of LR (Lemmen *et al.*, 2012; Muller, 2004). However, in the case study area land owners, private sectors, civil society groups, urban planners, lawyers and land evaluators are not seen participated in TDC during policy formulation for urban LR.

Participation of land evaluators, civil society group and private sector are not addressed in managerial committee of LR. However, involvement of multi-sectorial actors in decision making process through bottom up approach includes the consensus of participants and it can increase the sustainability of LR (Sorensen, 2000a). LR has to be practiced on the basis of participatory (UN-HABITAT, 2013a) but the beneficiaries in the case study area are seen land owners holding big land parcel. Therefore, access to land from LR to urban poor is not well practised. Ichangu Narayan LR project has allocated some land to urban poor but not practised in rest of the LR projects in case study area. Therefore, PILaR is to be necessary to address the interest of small land owners and urban poor (UN-HABITAT, 2013b).

#### 3. Equity

Equitable access to land for shelter is the human right (TI *et al.*, 2004). *Equity can be described in terms of input equity such as involvement of users in policy; process equity such as land contribution for LR and output equity such as benefit or gain from LR* (Doebele, 1982). However, in the case study area equitable access to land to the small land owners and tenants is not properly addressed by land laws because small land owners who cannot maintain minimum size of land have to sell the land to the project (MoUD, 1988). Similarly, land law doesn't seem to address the interest of tenants. There is absence of appeal system, anti-eviction law and

no provision of adequate compensation to the evicted during LR (Karki, 2004b). This shows the equity is missing. The international good practices show that evicted land owners and tenants are addressed by adequate compensation and a special land court for appeal during the entire LR process is established. Otherwise, in the absence of land court land owners have to wait for a long time for the decision from the civil court (Doebele, 1982; Hong *et al.*, 2007; Li *et al.*, 2007).

#### **4. Governance Network**

The governance actors such as government, civil society groups, market and public are seen isolated in decision making process. The urban plan and policy related to urban development are prepared by few government organizations under the Ministry of Urban Development. Local governments are seen initiating the LR projects based on the plan prepared by the DUDBC. Private sector, land owners and civil society groups are not seen involved in the policy formulation process and not found involve in TDC, who is the responsible for the preparation of urban development plan and policy. This shows the non-existence of governance network. Surprisingly, inter-governmental network is also missing to provide their services to other government organizations. Every organization are vertically accountable rather than horizontally. Above scenario justify that the isolated governance actors are rarely success to meet the common societal goal in the absence of governance network. Therefore, presence of governance network, power and rights are shared and results sustainable and efficient output from the LR (Van Bortel, 2009).

#### **5.5.2. Process**

##### **1. Tenure Security**

Inaccurate and incomplete cadastral map and land document bring the insecurity of the land tenure. LR projects have been practised in the case study area are based on land ownership certificate. Therefore, the land owners who have more land in ground than mentioned in land ownership certificate can loss extra land. Therefore, up to date land document, spatially correct parcel boundary and proper adjudication for the resolution of all kinds of land disputes before implementation of LR are the technical prerequisites. 35 days public notice about LR is not sufficient to make participation of the land owners of entire project who work abroad or away from the LR area.

LR manual has to be updated and revised because security also advocates the ease access of land information and enough information flow about LR process, benefit from the project, restriction by land developers against use of land during LR project. In the case study area, land information is not available from the front door of the LR project. However, from the international practices land information are freely and easily available adding only service charge either via online or from the front door of the LR offices (FAO, 2007; Turk, 2005). In addition to this, LR project initiated by private sector requires the conveyancer to transfer the old land ownership certificate to new one. This reveals involvement of lawyer in users committee (Doebele, 1982).

##### **2. Participation**

In the case study area, participated stakeholders are the KVTDA and the land owners. Besides, there are other organizations to support LR such as Survey Department, Land Revenue, Water Authority, Road Department, Municipalities and every organization have the distinct role. However, due to lack of integration among the aforementioned organizations they are isolated. Participation of 51% of the total land owners might not articulate the voice of minorities and ignorant land owners. International practices strengthen the compulsory consensus of all land owners and lease holders (Hong *et al.*, 2007; Sorensen, 2000a). The participation of the private sector, civil society group and financial institutions are not well addressed in the TDC and managerial committee. However, according to the UN-HABITAT, participatory LR is an approach to articulate the voice of grass root level who have small land or no land



(UN-HABITAT, 2013b). Principally, all the land related stakeholders should involve in the LR process for effective and sustainable LR for urban development. On the other hand, for the success of the LR project public awareness is necessary. According to Hong *et al.* (2007) member of users committee in Japan have been spent thousands labour hour for achieving the consensus of land owners. Therefore, the users committee should be simple structured and members of this committee are to be active and responsible to convince the land owner about pro's and con's from the LR project.

### **3. Equity**

In the case study area, area based method for the land contribution for infrastructure development has been adopted. However, in the international arena, value based evaluation method for land contribution and compensation is considered superior than the area based method (Doebele, 1982; Muller, 2004). The percentage of land contribution varies between 15% to maximum 30 % in Germany and Japan (Larsson, 1997; Schnidman, 1988; Turk, 2008) but in the case study area land contribution varies from 30% to 55%, which is not justified land contribution against the returned land value. The difference of equity between area and value based method of land contribution is described in annex-3. The result shows that equity is maintained better in value based method than area based method.

On the other hand, equity is equally related to public interest. The public interests are always towards the higher gain with less amount of land contribution and expectation of the better urban facilities (Doebele, 1982). However, in the case study area the construction of basic urban facilities such as hospital, school, shopping centre and recreational centres are not addressed in the LR manual and TDA1988 during the land contribution for infrastructure development. Further, the link road from the LR area to urban centre is not addressed. This shows the equity during LR process is missing (Doebele, 1982). Delays of project, lack of accurate land document and unable to meet the social integration are seen affecting factors to develop inclusive city. On the other hand, success practices of LR in Japan and Germany shows that LR is an alternative method to develop new cities and redevelop the demolished infrastructures in the cooperative and sustainable manner (Larsson, 1997). In contrast, in the case study area delay of the project and quality of infrastructure are affecting to maintain the requirements to establish the new cities.

#### **5.5.3. Structure**

##### **1. Tenure Security**

In the case study area, there is absence of legal provision to implement LR by the private sector thus there is not any law assuring the tenure security by the private land developer. According to international practices, land development rights are separated from the ownership right and consequently, the private land developer have the power to implement land development projects (Batley, 1996; Mattingly, 1996). The separation of the development right from the land owners may maintain the land use and urban beauty. It encourages the public private partnership to initiate LR and increase the trust to assure the security of land tenure by the private sector to the land owners. For example, any citizen can own any size of land in the Netherlands but he cannot build physical infrastructure by himself.

##### **2. Participation**

Decentralized system brings the decision maker closer to the local people and therefore better to address the local needs. Decentralised system can support to launch the integrating programs to address the land owners and stakeholders in grass root level. The community driven program boost the grass root and results the sustainable development (Robertson, 2002). In contrast, in the case study area decision making process, monitoring and implementation rights are centralised. Town development authority and some municipalities in Kathmandu valley are found the main organizations to implement LR and most of LR projects are valley oriented. The structure of the managerial committee is seen complex because the



participants are found from high level bureaucrats rather than land administrator and urban planner. Structure of the users committee does not include the land evaluator but in the international practice users committee includes the land evaluator, lawyers and it could be small, simple balanced and inclusive.

### **3. Equity**

From the assessment of land governance in LR it shows that the LR initiated in the study area is not inclusive one. The beneficiaries are always the big land owners and the government. Small land owners and urban poor are far from the advantages of LR. Minimum ceiling of the land may forcefully evict the small land owners thus it is more justified to avoid this restriction of minimum land parcel size while developing land through LR. Surprisingly the Lands Act 1964 and national land policy draft have strictly force the land owners not to acquire and subdivide the parcel area less than 80m<sup>2</sup>. To avoid such difficulty, it is better to apply the value based method of land contribution in urban area where land parcel are small and land value is high (Doebele, 1982). The monetary system instead of contribution of land for project cost may help small land owner to maintain minimum parcel size and prevention from forced eviction (Hong *et al.*, 2007; Schnidman, 1988). Lack of policy about the prevention of land speculation, the land owner can speculate the land for a long time but in good practice the land owners should have some limitations and government has some intervention strategy against the speculation of serviced land plots by adding extra tax (Karki, 2004a). Therefore, the governance structure has to be such that it encourages the users to use the land for housing and discourage them against holding the vacant developed land.

### **5.6. Summary**

The assessment result shows that the land governance principles are hardly taken into consideration in the different aspects of governance for urban LR. Respondents from the government, civil society groups and private sectors agree on the existence of some land laws providing legal mandate to implement LR by the central and local government bodies. Nevertheless, there is no explicit land policy related to urban LR and absence of legal provision to implement LR by other stakeholders rather than the government.

From the assessment, decision making approach is perceived top down. Participation of the land owners, private sectors and civil society groups are not found included properly during the decision making process in LR. Land loss due to inaccurate land information, insecurity of tenure in case of project delay and tenant rights are not properly addressed by the land related laws. LR processes are not driven according to decentralised system; this results in the avoidance of voice from grass root level. Adequate compensation and appeal system in case of forced eviction are not addressed. This reveals the insecurity of land tenure and lack of participation among the stakeholder. The land contribution for LR projects and compensation given to the evicted are seen on the basis of area method rather than value of land. Loss of land by small land owners shows the inequity during LR. The land contribution percentage for the urban LR appears (30 to 55)% and due to this high percentage of land contribution; the small land owners having land less than 80m<sup>2</sup> seems forced evicted. This shows the equity is not well addressed during LR.

The involvement of different governance actors such as private sector and civil society group are not found in TDC and managerial committee. This shows the absence of governance network to initiate and implement LR. Further, the public awareness and their interests are not properly addressed. TDC and managerial committee are complex and big team. The reduction of exclusiveness and land speculation are not addressed in policy, process and structure of LR. Therefore, participatory LR is to be practised for sustainable urban land readjustment. Land information should be made efficient, transparent and easily accessible. Delay of LR projects, inadequate compensation, eviction of small land owners and tenants are the gap perceived from the assessment of land governance principles in different aspects of the governance for the implementation of sustainable, participatory and inclusive urban land readjustment.

## 6. LAND READJUSTMENT FOR THE RELOCATION OF SQUATTERS

### 6.1. Introduction

Previous chapter analysed the land governance principles in different aspects of governance for the case of urban LR in Nepal with the help of available data and review of international success practices. This chapter examines governance issues in squatter settlement and validation of LR for the relocation of squatters into the LR area as an added value of this research. This chapter also discuss on the necessity of the relocation of squatter into other land readjusted area rather than the existing squatter areas. Section (6.2) is brief history about the evolution and changing pattern of the squatter settlements in Kathmandu. Section (6.3) is about the governance principles (tenure security, participation and equity) in the case of *Shankhamul* squatter settlements (SSS) area. Section (6.4) is about the review of squatters based on different time series images to grasp problems raised to develop the existing squatter area through LR and relocation of squatters into the land readjusted area. Finally section (6.5) and (6.6) are created to discuss the result and the summary of the chapter.

### 6.2. Evolution and Changing Pattern of Squatter Settlements in Kathmandu

There is not exact data found about the evolution of the squatter settlements in the Kathmandu valley but according to Shrestha (2010), there were only 17 squatter settlements in Kathmandu in 1985 and by the end of 2003 there were up to 64 squatter settlements. The increment of the population in these squatter areas since 1985 to 2003 is 2134 to 14500 with average household size (5-6) members. Out of 64 squatter settlements about 40% were found located in trust and public land. About 60% squatter areas were found

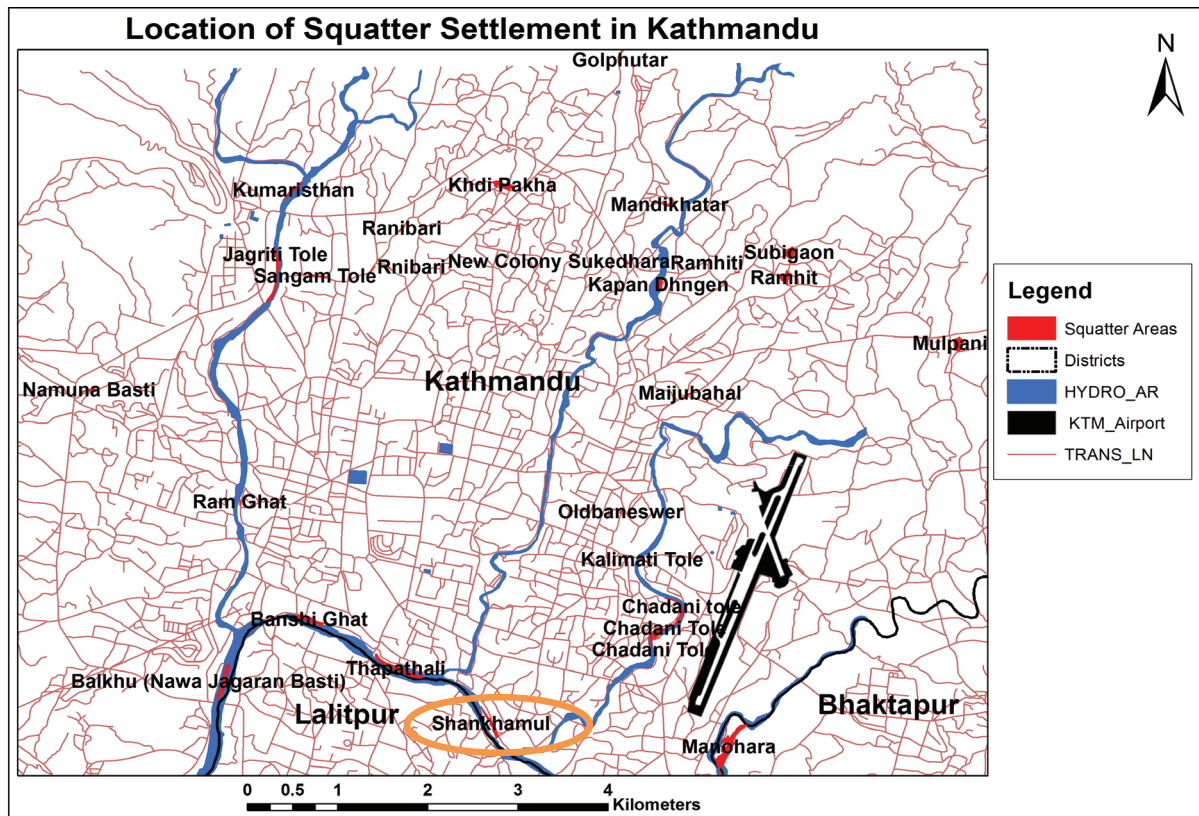


Figure 6-1: Location map of squatter settlement in Kathmandu, source: DoS and KU

located in the government land. However, occupation of the private land by the squatter people was few. For instance, some private land of *Manohara* squatter area was found registered to the name of private users. A report prepared by the student of Kathmandu University and verification of those settlement based on visual interpretation of satellite image 2012 shows that in the Kathmandu district and its periphery, there were 31 squatter settlements till the data of data collection 2013 shown by the above figure(6-1). These squatters area have 2405 household and 12,423 population (Bhandari, 2012). Out of 31 squatter settlements about 67% squatter areas were found located along the river sides.

One of the squatter area called Shankhamul Squatter Settlement (SSS) shown in figures [(6-1), (6-2)] has been located at bank of the Bagmati River in *Shankhamul* ward No.10 of the Kathmandu Metropolitan has 110 households and 550 population. The result of map analysis presented in figure (6-3) and figure (6-4) shows that the SSS has been emerged between the periods of eighties to nineties. The migrant in this settlement are from the peripheral district of the Kathmandu valley. The changing pattern of the population in this squatter settlement was found increasing due to population growth and additional inflow of low income group in this settlement. There might be other reasons behind the inflow of people in this settlement but some of the reasons perceived from the field data and review of literatures were looking for the job opportunity, urban facilities, difficult rural life, conflict and low agricultural productivity in rural areas (Paudyal, 2006). The economic sources of the people in this settlement were found daily wages such as construction work, housekeeping, restaurant and some of them have the small dwelling shops and few are taxi driver.

### 6.3. Governance Issues Percieved in the Squatter Settlements

*Shankhamul* squatter settlement area is analysed based on the data collected from the government sector, civil society groups, academicians and squatter federation members received through the interview questionnaires. Collected data were focussed on three governance principles to explore the perception of the respondents about land tenure and tenure security, participation and equity in SSS area.

#### 6.3.1. Land Tenure Security

*Shankhamul* squatter settlement is extended in 2.75 Hectare of the government land. The squatter settlers have no land related document claiming that their tenure over the land. The squatter settlers were found supported by civil society group squatter federation and political parties. Basic amenities have been provided by different civil society groups and ward committee of the municipality. The land tenure perceived in this settlement is De facto (Simbizi *et al.*, 2014). The criteria to say the de facto are the settlement is not



Figure 6-2: Building pattern in SSS, Source: Photograph taken by researcher

temporary type. The settlement was established more than 20 years ago with 73.19% houses were found self-constructed, 17.39% were purchased and rest were rented. About 3.3% of the houses were older than 20 years, 70.14% were 16-20 years, and 16.66% below (15 to 11) years, 6.60% were below (10 -6) years and 3.30% were below 5 years (Shrestha, 2010, 2013). They had established a community called *Budha marga Tol Bikash Samiti* in 2000 A.D. and a *Women's fund*. SSS was supported by the exteriors such as civil society groups and international agency of human rights against the forced eviction by the central

government. Figure (6-2) and (6-5) shows the multi-story building having no land related document to perceive the tenure security. The owner of the property was not registered and unable to get the mortgage. Surprisingly, primary data shows powerful people with an external support were using the government land frequently, constructing the multi-story building, giving to urban poor in rent and they were found forcing the government for registering their land and property in the legal system of the government. On the other hand, the squatter settlers are not facilitated from the financial credit, socioeconomic and political deprivation due to the lack of land ownership certificate and citizenship certificate. Without citizenship certificate land and property cannot be registered to the name of the citizen and no electric facilities are provided by the government of Nepal. Further, the squatter people were not recognised by the central government and they have no permanent postal address. Therefore, due to the lack of identity, squatter people were seemed to be losing the opportunity of government job and even vote rights. Besides these aforementioned issues of tenure insecurity, the area was seen insecure from the angle of hazardous zone and disaster prone area. It lies at the flooding plane of Bagmati River. The above scenario about the land tenure of squatter seems the requirement of systematic identification of the real needy and participatory approach for the formalization of squatter settlements.

### **6.3.2. Participation**

Social exclusion, lack of recognition by the central government, less economic opportunity, weak decentralised urban development system were perceived the major problems in SSS area (Shrestha, 2010). Squatter people were seen socially dominated by the formal settlers. The formal settlers refuse to make any social relation such as marriage relationship, community driven work because they think squatter people are outsider and landless, no residential address and belonging to low income group. This results the creation of moral harassment of the people living in squatter areas.

The participation to resettle the squatters does not demand the big project but the systematic relocation of landless and urban poor who are living in squatter settlements is necessary through the decentralised system (Sorensen, 2000a). To meet this requirement, it is perceived that the government has the responsibility to address her citizen for minimum shelter to contribute the Millennium Development Goals of United Nations (UN, 2013). Surprisingly, the government is exercising to evacuate the existing squatter settlements and is agree to provide the land to the landless and squatter settlers in their origin place of birth from where they became landless.

In contrast to this, the squatter people were not convinced to accept the land at their birth place because the squatter people had left their birth place many years ago and they felt difficulty to live in their birth place. They have some sort of economic opportunity in urban area so they want to contribute about 50% of their occupied land to the government for the infrastructure development and eager for the tenure security to remaining 50% of land instead of shifting from existing place. However, the government has no policy and plan to develop the existing squatter settlements. A *Report of High Level Land Reform Commission* reveals, the distribution of land to landless is impossible but the systematic housing development using proper land development methods and empowering decentralised system are supportive to address the landless and squatters (MoLRM, 2011).

Participation among the squatter people and member of squatter federation is cooperative and strong. The squatter federation was established in 1995 having 13 members. The responsibility of federation was seen to advocate the problems of squatters and make cooperation with the civil society groups, local government and other donor agencies for the basic amenities. LUMANTI, a civil society group has seen the strong supporter to the squatter people and urban poor and it has a concept to develop the social housing to urban poor. Beyond this, the training for economic generation sources for basic livelihood and motivation to acquire the land from the formal market for the secure settlements is necessary to prevent the further evolution of the squatter settlement in the urban areas (Van der Molen *et al.*, 2008).



### 6.3.3. Equity

Equity is met when the access to resources to the real needy. Unfortunately, SSS is seen mixed up housing condition from weak huts to multi story building. Out of 550 population in the SSS about 8.70% squatter people were found lived in the rented huts and houses of some elite group who have multi-storey building in the SSS (Shrestha, 2010). The income sources appear varies from daily wage worker to good monthly income from remittance and other sources like rent. This variation of the earning pattern was seen creating the inequity among the squatter people too. From the opinion of the squatter federation about 24 household have the cadastral map of their land but no land ownership certificate. However, the central mapping agency and other respondent from the government disagree that the government has provided any legal document related to squatter areas. This seems the inequity to the occupation of land among the squatter settlers and formal settlers. Equity in terms of accessibility of the urban facilities, health centre and school were not found established by the government in this area. Surprisingly, the community is searched and enclosed by the civil administrator and police when the crime takes place near the squatter settlement (Shrestha, 2013). Besides these issues of inequity, some squatter people have got the identity card by the government as a proof of landless to separate the real landless among others squatters who have land in outside than squatter area (MoLRM, 2011).

## 6.4. Study on Land Readjustment to Relocate the Squatters

This section includes the study on LR to relocate the squatter settlements into land readjusted areas. This raises the question why relocation is essential into other places rather than the existing location of squatter settlement. Therefore, first part of the study is about what are the consequences that force the squatters in other places and second part is study on relocation of squatters into the land readjusted area.

### 6.4.1. Problems Perceived to Implement LR in Existing Location of Squatter Settlements

Under this section there is the study on bottlenecks to prevent the implementation of LR projects in existing SSS area with the help of qualitative data and analysis of different time series aerial photographs and satellite images. The analysis result shows the changes of the river channel, buffer zone of Bagmati River, growth of Squatter settlement, changes in the occupation of land by squatter people.

#### 6.4.1.1. Analysis based on Qualitative Data and Aerial Photograph of 1978

The map shown by the figure (6-3) is derived from the aerial photograph of 1978 and shows white strip inside blue polygon which was sand area at the bank of river where now days the Shankmul squatter settlement is located. Blue polygon shows the flooding buffer zone of the Bagmati River at that time. The width of the Bagmati River was more than 100 m. but according to the satellite image of 2012, shown in figure (6-5), the channel is limited in a narrow strip up to 30 m. Instead of this, the Bagmati River has its own dynamism, ritual value and life. Many people and animals in the periphery of Kathmandu and Lalitpur used the river water as drinking, swimming and fishing purposes. Furthermore, as supported by the

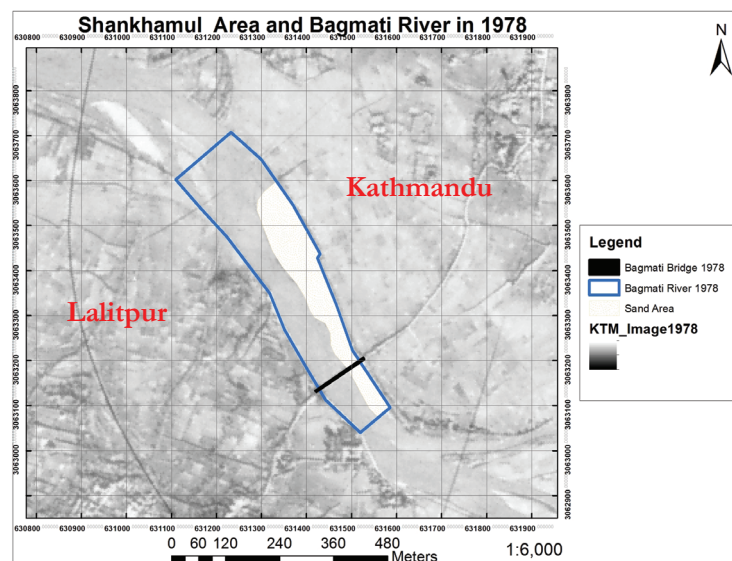


Figure 6-3: Bagmati River and its area in 1978, source: DoS

literature human civilization has been started from the river bank like Nile River, Ganges River. Therefore, according to the importance of the river and buffer zone of flooding plan, the SSS area was found to be used for maintaining the life of river.

#### 6.4.1.2. Analysis based on Qualitative Data and Aerial Photograph of 1998

Along with the change of time the channel of the river was shifted towards south from the existing squatter settlement and flowing into a small corridor. There remains the small strip of land where the SSS area is locating. The squatter people have been started to build small temporary congested houses after the eighties period with haphazard structure and weak materials. There is not seen free space between the walls of the houses. The map derived from the aerial photograph of 1998 in figure (6-4) shows that there is a small strip of squatter area attached to the river. The land behind the settlement is seen vacant. That was used

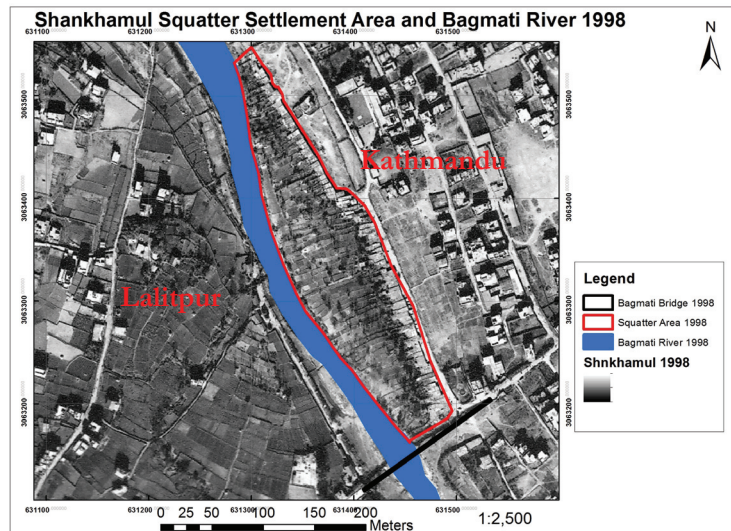


Figure 6-4: Shankhamul squatter settlement in 1998, Source: DoS

for farming by the squatter people. Squatters have not found facility for sanitation and still they have joined the sanitation pipe directly to the river. According to the Lands Act 1964, the ultimate owner of this land is the government because according to the Lands Act 1964 all the land left by the river is belong to the government. Therefore, the government has to formulate the policy and plan to develop the land for squatter settlers. However, the government has no aggressive action and plan to prepare the cadastral map and provision of land ownership certificate to the name of the squatter people. The government is looking for identification of the real needy who don't have any land for shelter. Surprisingly, some people living in squatter area have the valuable land outside the squatter settlements. They have constructed the permanent houses in squatter area without land ownership certificate and without receiving the building permit from the municipality. The initial documents necessary for LR are the land ownership certificate and cadastral map to determine the land contribution for the infrastructure development. Therefore, from the perspective of the government plan, space availability, identification of real needy and lack of legal land document; existing squatter settlement is challenging to develop with infrastructure.

#### 6.4.1.3. Analysis based on Recent Practice of LR and the Satellite Image Of 2012

The current practices of LR in the Kathmandu valley shows that the LR is initiated by the government with the participation of the land owners. This has seen two problems to develop the squatter settlement in the existing area. One is from the government because she has the legal mandate to develop the urban land using proper land development methods. However, the government was found to evacuate the existing settlement and it has already cleaned the land behind the squatter settlement which the squatter people have been used for farming, shown in the figure (6-5). Now days the squatter people have the area for congested houses. These circumstances show that LR is not feasible from the government side. Other problem is the sharing of land for infrastructure development to save the financial burden over the government. Unfortunately, there was not seen adverse possession agreement between the squatter settlers and the government. The ultimate land owner was found the government and the government was not interested to share it for the squatter settlers; this is the big problem from the perspective of the good land governance. There were few opinions from member of squatter federation and civil society group to



support the existing squatter settlement. They were found to share about 50% of their occupied land with the government for infrastructure development but unfortunately the government seemed strongly opposing to this deal because the government voice was that it is the government land and the government intend to protect the area for Bagmati corridor and greenery belt to maintain the natural beauty and importance of the river. The analysis result from the table (6-1) shows the implementation difficulties of LR in existing squatter settlements according to mentioned criteria.

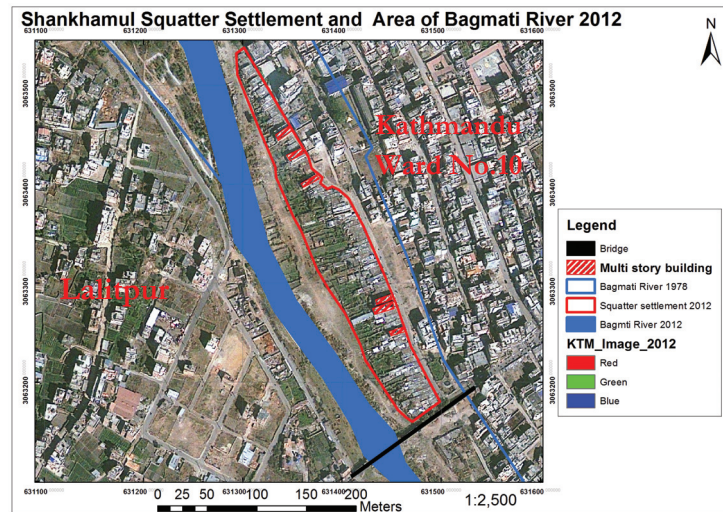


Figure 6-5: Shankhamul Squatter Settlement in 2012 Source: NEST

Problems for LR in the existing squatter area				Criteria to measure the difficulties (✓ represent agree, × represent disagree, ± represent not fully agree)
14	4	4	2	
Govt.	Civil society, private sector	Academician	Squatter federation	
✓	✓	✓	✓	Interest of squatters to develop the area by LR
×	×	×	×	Government interest to develop the area for squatters
✓	✓	✓	±	Protection of the Bagmati River and greenery
×	±	×	✓	Space availability
×	×	×	±	Environmentally suitable area
×	×	×	±	Equity having land and shelter in squatters
×	×	×	×	Land document related to squatters name
×	×	×	×	Governance network to implement LR

Table 6-1: Problems to implement LR in the existing squatters

#### 6.4.2. Relocation of Squatters into Land Readjusted Area

Figure (6-6) shows, the Ichangu Narayan LR project initiated by the KVTDA where about 4040m<sup>2</sup> land has been allocated by the DUDBC to relocate about 200 urban poor families through the concept of social housing. This is the one project which has shown the positive indication to support the urban poor. However, the criterion made by the government is that only identified urban poor from the squatter settlements are to be relocated in the social houses for a long term rent in reasonable price. On the other hand, from the history of the progress of the LR in Kathmandu as we discussed in earlier chapter shows that many projects were delayed up to 12 years. The

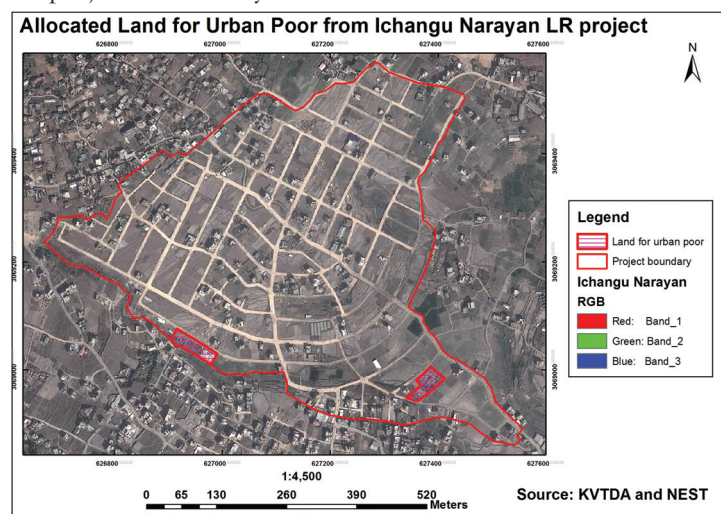


Figure 6-6: Land allocated for social housing in Ichangu LR project

Ichangu Narayan project has been taken almost 11 years but is still under the construction phase. The delays of LR projects can raise the question that how many LR projects and how long will it take to relocate more than 14 thousands squatter people of Kathmandu valley in the social houses through accessing the land by LR projects. According to Shrestha (2013) and Shrestha (2010), LR were initiated in 1988 under the Town Development Act 1988 by the government but the squatter settlements were found in early 1985 before the initiation of LR projects. This shows that there were no practices taken to relocate the squatter settlement in land readjusted area. Even though, the availability of the vacant land was more and price of the land was lower as compared to the present land price and value of the land. In the past there were more than a dozen of the LR projects were implemented from 1988 to 2003 in the Kathmandu valley but no one has shown the initiation to relocate the urban poor and squatters into land readjusted area. These circumstances show that the current practice of the LR process is not sufficient to relocate more than 14 thousand squatter people in the social houses at once without practice of good land governance.

#### **6.4.2.1. Land Governance to Relocate the Squatters into LR Area**

Primary data from the respondents shows that the land owners have been contributing almost (30 to 50)% of their land for infrastructure development. If they contribute the land to squatter people then what short of benefit they will receive and why the land owner should contribute their valuable land for squatters, were the major questions reflected from the government, users committee member of LR and academicians. However, LR is a method to allocate the land by the government and private developer from the cost recovery land but this method cannot enforce the land owner to share his/her land for squatter people. There is no any technical difficulties appears to relocate the squatters in the land readjusted areas but the fundamental problems perceived were the social, economic, administrative and political. The government have to show the interest to relocate the squatter people not only in the Kathmandu valley but there is an urgent need to develop the area where squatter people came from. Relocation of the squatters into the LR area is possible by acquiring the land from the LR project for the construction of social apartments but consensus of internal external users (land owners and squatters) is seen necessary.

Enactment of Joint Apartment Residence Act 1997 has a provision that an apartment can be constructed by the registered real state agency after receiving the permission from the concern legal authority. The real estate agency can allocate the land from formal land market to construct the multi-storey apartment (Acharya, 2013; Shrestha, 2010). The social housing concept is similar to the multi-story apartment. Land can be allocated by the government and any private agency from the LR projects. LR projects have allocated the land to recover the project cost and this land is sold by the users committee to the formal land market. After the allocation of the land by the concern authority for the social housing, the initial budget and initiation is important to build social houses. When allocated land is not enough to build different separate houses, the concept of multi-story social housing is similar to multi-story apartment.

After the construction social houses the flat of rooms are to be provided to the urban poor who lived in the squatters but the payment to purchase the flat or payment for rent is long term reasonable amount. The property use right goes to the users (relocated people) but the land ownership remains to the name of authorised agency or to the name of community who manage the social houses appointed by the government. Every user can use, sell, transfer the property to the other. However, once an apartment is provided to a family of relocated people then other family member can't get the apartment. The insurance of the property is necessary in case of physical damage and maintenance. Following table (6-2) shows the opinions of the respondents about land governance for the relocation of squatters into land readjusted area. Some positive opinion from the respondents about legal mandate for the joint apartment ownership, government initiation to relocate the squatters and the allocated land by the government for social housing shows the relocation of the squatters into land readjusted area is possible.

Land governance for the relocation of squatters				Criteria to measure tenure security, equity and participation (✓ represent agree, × represent disagree, ± represent not fully agree)
14	4	4	2	
<i>Govt.</i>	<i>Civil society, private sector</i>	<i>Academician</i>	<i>Squatter federation</i>	
✓	✓	✓	✓	Legal provision for joint apartment ownership
✓	✓	±	±	Interest of squatters for relocation
✓	✓	✓	✓	Initiation to allocate the land by the government
±	±	±	±	Identification of real needy for shelter
×	×	×	×	Existence of governance network
×	×	×	×	Inclusive and participatory LR
✓	✓	✓	±	Government initiation to relocate the squatters

Table 6-2: Land governance for the relocation of squatters into land readjusted area

## 6.5. Discussion on Land Governance Principles in Squatters

### a) Land Tenure Security

From the perspective of land governance, the problems of the squatter settlers are globally common. The evolution of the squatter settlements in urban areas are seen consequences of rural-urban migration, inadequate supply of affordable houses, because of poverty, difficulty to access the land by proper land system and rapid growth of price of land and property (Shrestha, 2010). The land tenure security perceived to the squatters varies from de facto to perceived depending up on the evolution time, community formed and support from exteriors (Payne, 2001; Simbizi *et al.*, 2014). Squatters used their occupied land with the support of civil society groups, politicians and human right agencies. These groups are advocating against forced eviction by the government but it is not long-lasting. Thus, squatter settlers are eager for the security of the land tenure and urban facilities. However, land is limited scarce natural resource so that increasing rate of formation of new squatters could be solved through the proper land policy, land development methods, social inclusion and economic empowerment with incorporating the good land governance principles (Pugh, 2000; Shrestha, 2013; Van der Molen *et al.*, 2008; World-Bank, 2002). Although, occupation of the government land through the illegal manner is against the land administration system but the forced eviction is also not justified solution from the perspective of good governance (FAO, 2007). Role, responsibility and restrictions are mentioned in the theory of the land administration and should follow by the users in the good land administration system (Williamson *et al.*, 2010). However, illegal capturing the government land and using it for a long-term by the squatters and doing nothing by the government seems both responsibility and restriction are missing from both sides. This shows that the tenure should be defined and legalised under the system of the government to assure tenure security.

### b) Participation

Participation is a crucial factor for the sustainable urban development. Sustainable urban development means “the improving quality of life in a city” (Muller, 2004). The cooperation among the government, civil society, private sector, formal settler and squatters may enhance the socioeconomic development. In the squatters, it appears that participation is missing from the governance actors. Participation among the governance actors, selection of proper land development method and decentralised system are to be sustainable and efficient to prevent the further formulation of squatters in developed cities (Mattingly, 1996; Paudyal, 2006). Therefore, PILaRP with good land governance, participation of governance actors and squatters might be supportive to articulate the voices of squatters (UN-HABITAT, 2012).

### c) Equity

Equity is another important principle of the good land governance. It can help to make the social inclusion through the sharing of existing available natural resources. Recognition by the central

government is another issues for the verification of the landless and urban poor lived in the squatter settlements (Shrestha, 2013). The social discrimination by the formal settlers is another issue so that the squatters are seen living in the form of island. Economically rich people have the permanent houses in the formal settlements but poor are living in the rented huts in the squatter settlements. Therefore, the governance actors have to formulate the proper land policy to address real landless assuring the shelter through the concept of social housing in the long term reasonable rent and skill development program. Equity is also concern to provide the basic shelter because providing basic shelter to her citizen is also responsibility of the government.

#### **6.6. Discussion on LR to Relocate the Squatters into Land Readjusted Area**

The existing squatter settlements are not emerged spontaneously. They were evolved before 1985 but the site and service, GLDP has been initiated since 1980. LR has been implemented since 1988 (MoUD, 1988; Shrestha, 2013). Surprisingly none of the method has been seen supported to the squatters. From the perspective of disaster area, flooding plane, importance of the river and space availability; the SSS area is not simple to develop through RL. The area is located at the bank of river and is planned for Bagmati corridor and greenery along both side of the Bagmati River. There are other squatter areas in the Kathmandu valley located far from the river bank. Thus for those settlements LR is technically possible but it needs the support from the government, squatter people and other governance actors. Beyond the technical viability; LR requires the special government approval based on feasibility report (Doebele, 1982). If the land owner is the government and the government do not show the interest to develop the area for squatters then adoption of LR method in the existing squatter settlements will be problematic.

On the other hand, relocation of urban poor and low income group into developed area were practiced through the *Kuleshwar* Site and services project in early nineties but due to lack of management and abuse of power by the elite group and politician that project was unsuccessful to support the real needy (Rajkarnikar, 2002; Shrestha, 2013; Thapa *et al.*, 2008). Recently the DUDBC has allocated some developed plots for the urban poor in Ichangu Narayan LR area but it is not sufficient to relocate more than fourteen thousands squatter people at once. Therefore, the fundamental problem is the allocation of sufficient land for social housing and identification of urban poor (real needy) who are living in squatter areas. According to Hong *et al.* (2007), vertical application of LR as applied in Hong Kong seems the suitable approach to relocate many people in a single apartment in the common land with group ownership on the property. In Nepal, Joint Apartment Residence Act 1997 has given the legal provision to construct the multi-storey apartment, use and transfer. Therefore, application of the 3D cadastre could be helpful to relocate the squatters in affordable multi-story apartment to feel the tenure security and equitable access to shelter (Acharya, 2013; Stoter *et al.*, 2013). Besides this, the institutional and economic aspects are equally important to explain before relocation of squatters because the relocation needs the budget for allocating land, for the construction of social housing and for the realization of tenure security.

#### **6.7. Summary**

This chapter explored and examined the existing governance issues related to tenure security, participation and equity in the existing squatter settlements of Kathmandu; especially the field study area (SSS) and review the relocation of squatters into land readjusted area. The governance issues perceived are the lack of land documentation to the name of squatter settlers, forced eviction from the government, disastrous area and the unavailability of the open space for the infrastructure development. The participation of governance actors is not found to show the initiation to develop the existing squatter area by implementation of LR. The government has a plan to develop the SSS area for the Bagmati corridor and to maintain greenery. This shows the lack of participation among the government, squatter settlers and



other stakeholder to address the shelter problem of squatter people. The existing social discrimination, inequitable land use and abuse of power are seen as the inequity problem of the real landless.

It is a challenging task to develop the existing SSS area using LR method in the existing squatter areas. The major problems are space unavailability; there is not enough space to develop infrastructure and residential plots. The area is vulnerable because it is located on the flooding plain of the river. Coordination among the government and squatters and importance of the land are to be considered before resettlement of the squatters in this area. Another problems perceived from the respondents is that the identification of the beneficiaries and the interest of the land owner because the land owner is ultimately the government. Further, the river is the symbol of civilization and the key necessity for our life and other animal. It has own life and dynamism and natural value. Thus from the perspective of environment, river are to be protected and prevent river from the liquid and solid disposal from squatters and formal settlements.

Finally, relocation of the settlement into LR area does not have technical problem. It requires the social inclusion, sufficient acquisition of land from LR projects and governance network to take the initiation towards the solution of shelter problem of the squatters. Therefore, proper relocation of squatters into the land readjusted area is possible through the sustainable LR with the vertical application of LR using 3D cadastre and joint apartment system. However, social integration, identification of real needy, responsibility of the governance actors and economic aspects are equally important for the sustainable urban development and prevention of the further evolution of the squatters in the urban area.

## 7. CONCLUSION AND RECOMMENDATION

### 7.1. Introduction

This research assesses the land governance principles with special emphasis in sustainable urban land readjustment taken as one of the efficient urban land development method. The assessment has been done in different governance aspects; policy, process and structure. At each aspect of the governance the main focus is on the security of land tenure, participation and equity. The governance framework was developed to shape the boundary of assessment and requirement of existing information and it consist of the governance principles and the indicators. Each indicator has been intended to address the selected governance principles. Finally the validation of the land readjustment is taken as the added value of this research which is carried out in the case of relocation of the squatters into the land readjusted area. The overall conclusion drawn from this research and recommendation for further research which this research is unable to concentrate are described briefly in the following section.

### 7.2. Conclusion

The conclusion of this research is drawn based on the three sub-objectives of this research developed in earlier chapter one.

**Objective One:** *To develop the land governance framework for tenure security, equity and participation applicable for LR*  
The land governance framework for the urban LR has been developed with the help of different nineteen indicators to assess the tenure security, participation and equity in three governance aspects such as policy, process and structure for urban LR. Different de jure and de facto indicators were developed based on the bottom up approach of preparing key question method from a long list of general questions. The developed framework has been validated with the expert's opinion. Besides the validation of the indicators, validation of LR has been reviewed in the case of relocation of squatters into LR area.

**Objective Two:** *To assess tenure security, equity and participation in LR*

The assessment of the governance principles is carried out based on the international good practices and accompanied by the case study. The final assessment result shows the absence of the explicit land policy and Acts related to LR. Surprisingly, access to the land information from “one-stop shop” and appeal system are not found during LR. Delays of the LR projects for a long term have been seen the users are restricted to use their land. Lack of the explicit tenants laws too, the rights of tenants after completion of LR are not found obvious. There is no explicit law for the provision to implement LR projects by the private sector so the tenure security by the private sector in not obvious. These issues related to tenure security in urban LR are seen as the consequences of weak land governance.

Equity in terms of involvement of users in decision making process is not well addressed because 51% participation of the land owner is considered to initiate the LR project and it can isolate the minor groups. Equity to access the land to urban poor has been seen negligible from the existing LR projects. None of the project has allocated the land for urban poor except Ichangu Narayan LR project. Inadequate compensation and absence of anti-eviction law to addresses the evicted users are seen the consequences of weak governance. The contribution of land for LR has been adopted based on area which is about (30 to 55) % of the total land area. However, from the international success practice, the value based method of land contribution and compensation are considered justified. The public interests on the urban facilities and its connection to LR project area are not well addressed. Social integration is not well realised in the LR areas because the existing formal settlements in LR area are dominant by the economically and socially rich people. Lack of the government intervention against the land speculation has evolved the surplus



vacant developed land rather than construction of the residential apartment. Therefore, from the result of analysis in urban LR input, process, and output equity are missing due to weak land governance.

Top down approach of decision making process has been adopted in Nepal. Thus the ignorant land owners and minority groups as well as private sector and civil society groups have not been addressed and incorporated in the policy formulation process for urban LR. The participatory LR is not practised. The centralised system of the government has legal power to initiated LR by the government agency. Public awareness programs are not launched by the users committee. From the international success practices LR committee has spent thousands of labour hours for building public consensus. However, in the case study area involvement of bureaucrats rather than land administrator and urban planner are seen in the TDC and managerial committees.

LR projects have not been practised as decentralised. The centralised governing and planning system has control over the LR projects. Lack of multi sectorial integration and weak inter-organizational network are found weak point to deliver their services to LR project. The involvement of civil society groups, private sectors are not seen from policy making to implementation phase. This reveals the absence of governance network to initiate LR.

**Objective Three:** *To study LR for the relocation of squatters.*

Obviously, tenure security has not been assured to the squatters. The land has been documented on the name of the government but the squatter people have been using it since more than twenty years. Based on the community formed and time of evolution, the land tenure security is perceived as de facto. The government has no plan and policy to provide the land tenure to squatted shelters and the government is trying to identify the real needy or landless, evacuate the area and built the Bagmati corridor and greenery belt. Civil society groups and international human rights agency are supporting the squatter people against the forced eviction by the government but it is not substantial. Similarly, shelter and basic livelihood amenities are temporarily provided by the local agencies and civil society group. Equity among the squatter people is diverse because of their earning pattern, building type, having and not having land and houses. However analysis revealed that tenure security, equity and participation can provide significant contribution for the sustainable improvement of the squatter settlements.

On the other hand, the suitability of LR to develop the SSS area with infrastructure is challenging due to various issues such as undefined land tenure and interest of the land owner (land owner is the government), space availability, vulnerable area (flood plain), importance of the river and its life. Environmental, political and administrative problems are more pronounced than the technical to develop the infrastructures in existing squatter settlements using land readjustment method.

Relocation of the squatters into land readjusted area through allocation of cost recovery land from LR project for social housing is feasible but from the current progress of the LR, it is questionable how much land could be available from the LR project and how long will it take to relocate more than fourteen thousands squatters into land readjusted area. In addition to this, the interest of shifted people, economic sources, social integration among squatter and formal shelter is important. Finally, multi-story social housing with joint apartment ownership right could be useful to relocate the squatters into the social houses in land readjusted area.

### **7.2.1. Overall Conclusion**

The overall conclusion drawn from this research is that there are some issues like absence of explicit policy related to LR, lack of appeal system, delays of LR projects and forced eviction to the small landowners and tenants. Similarly, absence of *one-stop shop*, insufficient participation of users, non-existence of governance network, inadequate compensation and unjustified land contribution appear to lessen the tenure security, participation and equity from policy formulation to implementation level of urban land

readjustment. However, exercise of good land governance and participatory LR can be supportive to allocate land for the relocation of squatters into land readjusted area with the construction of social houses. Government can enforce intervention strategy with necessary policies and methods in order to guarantee the provision of shelter in favour of the real needy living in squatter areas.

### **7.3. Recommendations**

It has appeared from this research that the urban land readjustment is efficient and sustainable with the incorporation of principles of land governance. Some inaccessible areas untouched by this research are mentioned as recommendation for further research:

- Identification of institutional and economic aspects for the relocation of squatters into LR area.
- Investigation on land evaluation based on land value method for compensation to the evicted and land contribution during LR to maintain the equity.
- Investigation on 3D cadastre for the construction of multi-storey apartment to upgrade the squatters.
- Necessary intervention to prevent the further squatters in urban area.



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## ANNEXES

**Annex 1. List of the Respondents for the Collection of Field Data**

Date	Activities	Name of the respondents	Position	Organization	Place	Transportation
20/09/2013	Enschede to Amsterdam to Tribhuwan Airport					Train, Airplane
21/09/2013	Tribhuwan Airport To Lagankhel					Taxi
<b>Week 1</b>						
22/09/2013	Appointment for interview	LR member, government employee, Squatter federation, Civil Society		KVTDA, Survey Department, Lumanti, CSRC, DUDBC, NEST	Kathmandu, Lalitpur and Bhaktpur	Telephone, Taxi, e-mail
22/09/2013	Interview, LR committee member	Umanatha Rijal, Harka Raj Rai	Associate professor/land owner	Trichandra College, LR project, Manohara	Kathmandu/Bhaktpur	Taxi
23/09/2013	Interview, Topo map collection,	Ganesh Prasad Bhatta	Chief survey officer	Survey Department	Minbhawan, Kathmandu	
23/09/2013	Interview CSRC Member	Jagat Deuja	Program Coordinator	Community Self Reliance Centre	Dhapasi	
23/09/2013	Find the additional literature			Lumanti	Kalimati	
24/09/2013	Interview, UN-Habitat, Nepal	Raja Ram Chhatkuli	Project coordinator	UH-HABITAT	Hariharbhawan, Lalitpur	
25/09/2013	Interview, Land Use Project	Narayan Chaudhari	Project chief	Land Use Project	Old Banewsor, Kathmandu	
26/09/2013	Interview, KVDA	Karuna Ratna Shaky	Senior divisional engineer	KVTDA	Kesharmahl	

26/09/2013	Interview the DUDBC/Appointment	Suroj Raj Rajkarnikar	Division chief	DUDBC, Division Office	Putalisadak, Kathmandu	
27/09/2013	Presentation at Kathmandu University	Land governance, LR, Squatter		Kathmandu University	Dhulikhel, Kavre	
27/09/2013	Discussion on presentation	Land governance, LR, Squatter		Kathmandu University	Dhulikhel, Kavre	
27/09/2013	Interview, LMTC	Janak Raj Joshi	Director	LMTC	Dhulikhel, Kavre	
28/09/2013	Interview, Squatter federation	Hukum Bahadur, Hari		Squatter Federation	Shankhamul	
<b>Week 2</b>						
<b>Date</b>	<b>Activity</b>	<b>Name of the Respondents</b>	<b>Position</b>	<b>Organization</b>	<b>Place</b>	<b>Transportation</b>
29/09/2013	Interview, Land Revenue Office	Gopal Giri	Land Revenue Officer	Land Revenue Office	Dillibazar, Kathmandu	Taxi
29/09/2013	Interview, Survey Office	Bijaya Mahato	Survey Officer	Land Survey Office	Kathmandu, Dilli bazar	
30/09/2013	Interview, Academician	Dr.Sagar Sharma	Academician	Kathmandu University	Hattiban, Lalitpur	
30/09/2013	Workshop on squatter and land issues			School of Arts	Hattiban, Lalitpur	
30/09/2013	Interview/ Additional literature review	Punya Prasad Oli	Managing director	ERMC	Old Banewor	
01/10/2013	Interview, DOLRM	Tej Raj Pandey	Director general	DoLRM	Babarmahal, Kathmandu	
01/10/2013	Interview/Document collection	Shree Chandra Shah	Director	DoLRM	Babarmahal, Kathmandu	
02/10/2013	Interview, Land readjustment	Suroj Raj Rajkarnikar	Chief Officer	DUDBC, Division Office	Putalisadak, Kathmandu	
02/10/2013	Interview, Land readjustment document		Civil Engineer	LVTA	Lalitpur, Manbhawan	
03/10/2013	Interview, Land Use Project	Prakash Joshi	Chief Survey	Land Use Project	Old Banewor,	

				Officer		Kathmandu	
03/10/2013	Interview, LR Project In charge	Sudhir Gautam	Civil engineer	KV/TDA	Jorpati, Bagmati land readjustment project		
04/10/2013	Interview, Experts	Bijya K. Shrestha	Experts	Town Development Fund	Old Banaswor, Kathmandu		
04/10/2013	Interview, MoLRM	Krishna raj BC	Joint Secretary,	MoLRM	Singha Darbar, KTM		
04/10/2013	Interview, Municipality	Bimal Rijal	Senior Urban Planner	Kathmandu Metropolitan	Kathmandu Metropolitan, KTM		
04/10/2013	Aerial photo collection	Mahendara Aryal	Survey Officer	Survey Department	New Banaswor		
<b>Week 3</b>							
06/10/2013	Interview, Experts	Bauram Acharya	Former secretary		Thamel		
06/10/2013	Interview , Ichangu land readjustment	Bal Bh. Lama, Krishna Paudel	President/ member LR	Ichangu site Office	Ichangu, Kathmandu		
07/10/2013	Interview, Land Readjustment	Kamal Ghimire	Chief Survey Officer	Survey Department	New Banaswor, Kathmandu		
08/10/2013	Satellite image collection	Sudip Shrestha	Survey officer	Survey Department	Godawar, Lalitpur		
09/10/2013	Bagmati LR spatial data			Bagmati site Office	Jorpati, Kathmandu		
10/10/2013	Ichangu LR Cadastral map, Satellite image collection	Ragindra Rajbhandari	Managing Director	NEST Consultancy	Shankhamul, Kathmandu		
11/10/2013	Interview, Private Agency	Private land developer	Gyan Bh. Thapa, Rajan Shrestha	Shree housing company	Kalaknki, Kathmandu		
13/10/2013	Field Visit				Bagmatinagar LR Project		
14/10/2013	Land use data collection	Janak Raj Bhatta	Survey Officer	Land Use Project	Old Banaswer, Kathmandu		
15/10/2013	Interview	Kumar Raut, Samir	Financial Officer	Nepal Rastra Bank	Thapathali		
16/10/2013	<b>Return to Netherlands</b>						Acroplane

Table 0-1: Detail of respondents and organizations



## Annex 2. List of the Members Involve in the Users Committee and Managerial Committee for LR

S. No.	Users Committee for LR	
1	Ward president or VDC representative, 1 member	Chairperson
2	Ward member, 1 member	Member
3	Land owners, 3 members	Member
4	Tenant, 3 members	Member
5	Social working group, 2 members	Member
6	Women's representative, 1 member	Member
S. No.	Managerial Committee for LR	
1	Head of local authority, municipality/District working committee	Chairperson
2	Representative from Town Development committee	Secretary
3	Section District Officer	Member
4	Chief of District Land Reform and Management office	Member
5	Chief of District Survey Office	Member
6	Division chief of Department of Urban Planning and Building Construction	Member
7	Chief of Road Department	Member
8	Chief of Drinking Water Supply	Member
9	Ward Chief or village representative	Member
10	Representative from land owners	Member
11	Representative from Tenants	Member
12	Lawyer from the Justice Office	Member
13	Urban planner, Architect or Civil engineer	Project Chief
14	Others if necessary from trust committee, land management office	Member

Table 0-2: List of the members in users committee and managerial committee for LR

### Annex 3: Land Evaluation Methods to Check the Equity in LR Process

#### 1. Evaluation method Based on land value

Let us consider that  $A_i$  is the initial area of land plots of  $i^{\text{th}}$  land owner and  $a_i$  is the current land value before the LR. Where  $i$  run from 1 to  $N$ ; equal to the number of land owners belonging to individual land plots.

Principally land owner's expectation is an increased land value by an amount ( $y$ ) after LR. But if land value remains constant before and after the LR then  $y$  is equal to 1. Therefore equity formula is that:

$$y.A_i.a_i = B_i.b_i$$

Where  $B_i$  is the size of  $i^{\text{th}}$  land plot after LR and  $b_i$  is the land value after LR.

Although the land plot size decreased due to the land contribution to LR but it is expected that land value will be increased. Therefore the land contribution ratio  $R$  can be defined as:

$$R_i = (A_i - B_i) / A_i, \text{ where, } R_i \text{ is the land contribution by } i^{\text{th}} \text{ land owner}$$

Total land contribution ratio is defined as:  $R = (A_i - B_i) / A_i$ , where  $R$  is the total land contribution ratio

$$R = (1 - \sum B_i) / \sum A_i$$

Where  $B_i$  should satisfy the condition that  $(B_i = y.A_i.a_i / b_i)$  to meet the equity and there are the conditions to meet the equity are as follows:

- Urban area where land value already increased and high expectation of further land value.
- Based on quality of infrastructure already existed and the quality of infrastructure to be installed
- Connection to the urban centre

But this formula is not applicable in rural area where expectation on the increase of land value is low and existing value of land and adequate vacant land. Land evaluation based on area method is applied in rural area where the expectation of increased land value is less and areas of parcels are not precise.

#### 2. Evaluation method based on area

$$R = R_1 + R_2 + \dots + R_n$$

Where  $R$  is the total land area to be contributed in LR and  $n$  is the total land plot before LR belonging to  $n$  number of land owners. Then the area remains after LR is

$$B_i = \sum (A_i - R_i), \text{ where } i \text{ varies from 1 to } n \text{ because } n \text{ are total land owners in the selected LR project.}$$

Where  $B_i$  is the individual land plot after LR and total land area remains  $B$  after LR is:

$$B = \sum (A_1 - R_1) + \sum (A_2 - R_2) + \dots + \sum (A_n - R_n)$$

The expectation of land owner is higher after contributing certain percentage of land to LR project. To meet this expectation certain barrier are existing in second method such as:

- It is not scientific method used in urban planning
- Not suitable if there is already determined minimum land ceiling criteria by the government
- If the land scape is irregular shape; some part plain and some undulating.

Thus to meet the equity in land contribution, to provide compensation and getting benefit from LR; value based method is considered the superior than the area based method for the sustainability and effective land readjustment (Doebele, 1982; Hong *et al.*, 2007).

## Annex 4: Check List of the Interview Questionnaires

### A. Government organizations: DUDBC, KVTDA, DoS, DoLRM, Local Government

#### How tenure security implies in LR?

1. Do you have information about land pooling or land readjustment (LR)? If yes, LR is initiated by the government or land owners committee or private sector or through the cooperation of all if necessary?
2. During the LR process people can use their land?
3. Does there existing land policy related to LR? A. No B. Yes C. Not explicit
4. Does the existing LR initiated by law and acts? A. No B. Yes
5. How long time land owner are restricted from the physical changes in their land?
6. Land owners are compensated or not for the delay of LR project?  
A. Strongly Compensated B. compensated C. No idea D. No compensation D. Strongly not compensated
7. Small land owner can get their land back or they have to move from their land after the contribution of the land for LR?
8. People have a right to appeal if they do not get their land back in the specified time after the completion of LR?  
A. Strongly no appeal system B. Less chance to appeal C. Neutral D. appeal is an optional E. Strong appeal system
9. Could people speculate land readjusted plot for a long time without constructing building in land readjusted areas?  
A. Strongly speculate B. Normally people can speculate C. No idea D. Normally cannot speculate E. Legally people cannot speculate
10. Could land owner get the credit from the financial institution from their land during the LR project?

#### Does LR incorporate the equity?

1. Does the land policy include provision of land and shelter to landless people from the LR project?  
A. Absolutely no provision B. Less provision C. No land policy D. Provision E. Strongly recognised in land policy
2. Implementation of LR should be compulsory to fulfill the demand of land for the use of reserve land to the low income group/ Squatter people?
3. Does LR support the access of the land to those who are willing for the land in affordable price?
4. Do small land owner lose more land than big land owners in LR process?
5. What is the percentage of the land to be contributed during LR?
6. Are small land owners forcefully evicted by the land developers?  
A. Eviction is strongly not allowed B. No eviction C. neutral D. Eviction E. Strong eviction
7. Do the tenants and land owner get the equal right on the land after readjusted?
8. Equity in term of getting the land ownership certificate by land owners and tenants within the given time is fair?  
A. Absolutely not fair B. Not fair C. No idea D. Fair E. highly fair
9. Equity to get the access of the reserve land by land less people is affordable?  
A. Highly expensive B. expensive C. Neutral D. Affordable E. Easly affordable

#### Does the participation imply in LR?

1. Does there participation of local government, civil society and individuals in decision making process for the implementation of LR?
2. Decision making process for formulating policy is? Top-down B. Bottom-up C. Mixed up
3. Does the policy include the participation of the land owners for LR?
4. Is there legal mandatory about the fixed percentage to participate in LR?
5. Your opinion about the delay in land readjustment projects?

6. Lack of participation of small and big land owner affect the project?
7. The occupation of the land more than mentioned in land ownership certificate is the matter to deny for participation in LR?
8. Does the lack of participation of tenant affect the LR project?

**How effective is LR in terms of governance network?**

1. Who are the responsible actors/ stakeholders or party involve in LR?
2. Are private land developer involve in LR?  
A. Yes B. No C. No idea
3. Civil society's members, private land developer, NGOs, INGOs are the supporter to implement LR?  
A. Strongly agree B. Agree C. No idea D. Not agree E. Strongly not agree
4. Do the government organizations are horizontally integrated to provide their services during LR?
5. Is there financial support by financial institutions?

**How tenure security, equity and participation do contribute in the squatter settlement?**

1. Squatter people can claim on their occupied land and property if government or other people forcefully capture their land and property?

A. Strongly agree B. Agree C. Neutral D. Not agree E. Strongly not agree

2. Squatter people can receive another land if their land captured by the government?

3. Is there any document about the identification of the squatter people?

4. Squatter people have any document against forced eviction? A. Yes B. No

5. Can squatter people use their occupied land for a long time?

.....Equity.....

1. Are there road, water, health and education services in the squatter? A. Yes B. No

2. Squatter people can access the land for shelter on the government land?

3. Government has to provide readjusted plots to squatter people for shelter?

A. Strongly agree B. Agree C. Neutral D. Not agree E. Strongly not agree

4. Can LR makes the access to land for squatter people for shelter?

A. Yes B. No

5. Equitable access to land for shelter is a human right. Therefore, the land occupied by squatter people should be developed and return to squatter people?

A. Highly impossible B. Impossible C. Neutral D. Possible E. Highly possible

.....Participation.....

1. Local government and land developer has a plan to develop squatter through LR? A. Yes B. No

2. Local government and land developer has a plan to relocate squatter people in LR area? A. Yes B. No

3. Upgrading the squatter areas is achieved by participation of governance network?

A. Strongly agree B. Agree C. Neutral D. Disagree E. Strongly Disagree

4. Do you have an experience about the participation for upgrading and relocation of squatter settlements? A. Yes B. No

**Can LR be applied to upgrade squatter settlements?**

1. Do the government agree to develop squatter settlements through LR?

A. Strongly agree B. Agree C. Neutral D. Not agree E. Strongly not agree

2. Are the private developer and central government showing the interest to upgrade squatter areas through LR?

3. Does any LR project are initiated for squatter upgrading by the government? A. Yes B. No

4. Could LR be implemented in squatter settlements? If not any alternative to relocate squatter people.

5. The concept of the group ownership/group rights can help to upgrade squatter areas through LR?

A. Strongly agree B. Agree C. No idea D. Not agree S. Strongly not agree

6. What is your opinion about group ownership /group right to develop squatter?

**B. Academic/Experts group**

**How tenure security implies in land readjustment (LR)?**

1. Do you agree people have a right to use, develop and make investment on their occupied land during the LR?

A. Strongly not agree B. Not agree C. No idea D. Agree E. Strongly agree

2. Can people claim for compensation if the government acquires the land owned by the land owner for LR?
3. Is there a chance to be landless while contributing land for LR by small land owners?
4. Your opinion on the percentage of the land contribution for LR?  
A. Fully agree      B. Agree      C. Neutral      D. Not agree      E. Fully not agree
5. People have a right to appeal if they do not get their private land back in the specified time after the completion of LR?
6. Land owner can make a claim if the forced eviction occurs?      A. Yes      B. No
7. Land owner can make the investment on their land during the LR project?

#### **Does LR incorporate the equity?**

1. LR should be compulsory to fulfill the demand of land for the use of reserve land to the low income group/Squatters?
2. Does LR support the access of land to those who are willing for land in affordable price?
3. Are small land owners forcefully evicted by the land developers?
4. A. Eviction is strongly not allowed      B. No eviction      C. neutral      D. Eviction      E. Strong eviction
5. After LR, can reserve land is used for land less, housing or just used by the government, land developer for benefit?
6. Contribution of the land in the LR is proportionally equitable?

#### **Does the participation imply in LR?**

1. Is there participation of local government, Expert group and individuals in decision making processes for the implementation of LR?
2. Does the policy include the participation of the land owners and experts group for LR project?
3. Is it mandatory (fixed percentage) about the participation of land owners in LR?
4. Your opinion about the delay in land readjustment projects based on participation of land owners is....
5. The occupation of the land more than mentioned in the land ownership certificate is the matter to deny for participation in LR projects

#### **How effective is LR in terms of existing governance network?**

1. Who takes the initiation to implement the LR?
2. Do private land developer involve in LR?
3. Your opinion about the existing network of stakeholders to implement LR? Integration exists or not?
4. Land developer invites experts for meeting or not for land development process?  
A. Yes      B. No
5. Do the department of urban development and building construction is responsible to make integration of stakeholder and the experts for urban land development?
6. Is there any project implemented by participation of land owners, private, government and civil society and experts group?

#### **How tenure security, equity and participation do contribute in the squatter settlement?**

##### **Tenure security**

1. Squatter people can claim on their occupied land and property if government or other people forcefully capture it.  
A. Strongly agree      B. Agree      C. Neutral      D. Not agree      E. Strongly not agree
2. Will squatter people be compensated after forced eviction or not?
3. Can squatter people receive another land if their land captured by the government?
4. Do all the people living in the squatter settlements are land less?
5. How could we separate real needy persons living in squatter settlements?
6. Does the area occupied by the squarer people is environmentally danger?      A. Yes      B. No
7. Can squatter people use their occupied land for a long time?      A. Yes      B. No
8. Is there any program for providing the use right to squatter people?      A. Yes      B. No

##### **Equity in terms of access to land for shelter**

1. Are there road, water, health, Sanitation and education services in the squatter?      A. Yes      B. No
2. Squatter people can access the land for shelter on the government land.  
A. Strongly agree because it's human right      B. Agree      C. Neutral      D. Not agree
3. The government has a plan to provide readjusted plots to squatter people.



- A. Strongly agree    B. Agree    C. Neutral    D. Not agree    E. strongly not agree
4. In your opinion LR is used to develop squatter areas?
  5. Squatter people should be relocated in land readjustment areas?
  6. LR can make access to land easy for squatter people? A. Yes    B. No
  7. Equitable access to land for squatter people for shelter is human right. Therefore, the land occupied by squatter people should be developed and return to squatter people.  
A. Highly impossible    B. Impossible    C. Neutral    D. Possible    E. Highly possible

#### **Participation**

1. Ministry and local government have a plan for infrastructure development in squatter? A. Yes B. No
2. Local government and land developer has a plan to develop squatter through LR? A. Yes    B. No
3. Local government and land developer has a plan to relocate squatter people in land readjusted area?
4. Upgrading the squatter areas is achieved by participation of government, civil society, experts and private developer?
5. What is your opinion about the participation for upgrading and relocating squatter settlements?

#### **Can LR be applied to upgrade squatter settlements?**

1. Do you agree to develop squatter settlements through LR?  
A. Strongly agree    B. Agree    C. Neutral    D. Disagree    E. Strongly disagree
2. Are the private developer and central government showing the interest to upgrade squatter areas?
3. Does any LR project are initiated for squatter upgrading by the government?
4. Do the people agree to settle squatter people into LR areas?  
A. Yes    B. No
5. Could LR be implemented in squatter settlements? If not any alternative to relocate squatter people.
6. What is your opinion about group ownership/group right to develop squatter?
7. Your opinion, recommendation about the suitability of land readjustment for relocating and upgrading squatter settlements.

#### **C. Civil Society**

##### **How tenure security implies in LR?**

1. Small land owner can get their land back or they have to move from their land after the contribution of the land for LR?
2. Is there a chance to be landless while contributing land for LR by small land owners?
3. Your opinion on the percentage of the land contribution for LR?  
A. Fully agree    B. Agree    C. Neutral    D. Not agree    E. Fully not agree
4. People have a right to appeal if they do not get their private land back in the specified time after the completion of LR?
5. Could people speculate land readjusted plot on a long time without constructing building?  
A. Strongly speculate    B. Normally people can speculate    C. No idea    D. Normally cannot speculate    E. Legally people cannot speculate
6. Land owners can get compensation or not if they get problematic land than they already have?
7. Land owner can make a claim for compensation if the forced eviction occurs? A. Yes    b. No
8. Is the percentage of the land contribution for LR is reasonable?

##### **Does LR incorporates the equity?**

1. Is the land policy includes provision of land to landless people?
2. Do you have an idea about LR?  
If yes
3. LR should be compulsory to fulfill the demand of land for the use of reserve land to the low income group/Squatters?
4. Is LR supports to access the land for those who are willing for land in affordable price?
5. Do small land owner lose more land than big land owners in LR process?
6. Are small land owners forcefully evicted by the land developers?  
A. Eviction is strongly not allowed    B. No eviction    C. neutral    D. Eviction    E. Strong evecton
7. LR is long term process during this period can land owner use their land?

A. Yes      B. No      C. Readjusted area can be used

8. After LR, can reserve land is used for land less, housing or just used by the government, land developer for benefit?

**Does the participation imply in LR?**

1. Is there participation of local government, Expert group, civil societies and individuals in decision making process for the implementation of LR?
2. In the decision making process there is integration between governmental employee, academia experts, civil society and individuals?  
A. Highly agree      B. Agree      C. No idea      D. Not agree      E. Strongly disagree
3. Your opinion about the delay in land readjustment projects based on participation of land owners is?
4. Are experts, civil societies and private actors participated in LR projects for urban development or not?
5. The occupation of the land more than mentioned in the land ownership certificate is the matter to deny for participation in LR projects?      A. yes      B. No
6. In your opinion about participation.....

**How effective is LR in terms of governance network?**

1. Who takes the initiation to implement the LR?
2. Are private land developer involving in LR?  
A. Yes      B. No.      C. Some projects      D. All the projects
3. Experts group, civil society members, NGOs, INGOs supports LR?
4. Is there participation of the civil society for implementation of LR?      A. Yes      B. No
5. In your opinion governance Actors should be horizontally integrated or vertically?

**How tenure security, equity and participation do contribute in the squatter settlement?**

1. Squatter people can claim on their occupied land and property if government or other people forcefully capture?  
A. Strongly agree      B. Agree      C. Neutral      D. Not agree      E. Strongly not agree
  2. Is there any documentation about the member of squatter people living in squatter?
  3. Squatter people can construct building in squatter areas?      A. Yes      B. No
  4. The area occupied by the squarer people is safe from the forced eviction?      A. Yes      B. No
  5. People living in squatter have to get the land use right for shelter?      A. Yes      B. No
- .....*Equity*.....
1. Are there road, water, health and education services in the squatter?
  2. The provision of utility facility in squatter areas is responsibility of.....
  3. How the equity in terms of access of land to squatter solved?  
A. Developing their occupied land  
B. Alternative reallocation  
C. Affordable social housing in land readjusted areas by the government and civil society  
D. Other option
  4. Equity in terms of shelter to all is implemented for the case of squatter people?  
A. Yes      B. No
  5. LR projects can be a supportive method to get the easy access of land to squatter people and develop the squatter areas?  
A. Neutral      B. Agree      C. Strongly agree      D. Disagree      E. Strongly disagree
  6. Government has to provide readjusted plots to squatter people?  
A. Strongly agree      B. Agree      C. Neutral      D. Not agree      E. Strongly not agree
  7. Squatter people should be relocated in land readjustment areas?  
A. Strongly agree      B. Agree      C. No idea      D. Not agree      E. Strongly not agree
- .....*Participation*.....
1. Do the civil society groups participate in LR project?      A. Yes      B. No
  2. What is the role of civil society in LR?
  3. Are you participated in the policy formulation about the rights of squatter people?  
A. Yes      B. No      C. No idea about LR
  4. Civil society has a plan to build social housing for squatter or not?
  5. People from formal residents help squatter people if municipality threatens the squatter people?

6. Local government and civil society has a plan to develop squatter through LR?  
A. Yes                      B. No
7. Local government and land developer has a plan to relocate squatter people in land readjusted area?  
A. Yes                      B. No
8. Upgrading the squatter areas is achieved by participation of government, civil society, experts and private developer?  
B. Strongly agree    B. Agree                      C. Neutral                      D. Disagree                      E. Strongly Disagree
9. Civil society, municipality and squatter federation have to discuss about utility facility?  
A. Strongly agree    B. Agree                      C. No idea                      D. Not agree                      E. strongly not agree

**Can LR be applied to upgrade squatter settlements?**

1. Do you agree to develop squatter settlements through LR?  
A. Strongly agree    B. Agree                      C. Neutral                      D. Disagree                      E. Strongly disagree
2. Does any LR project are initiated for squatter upgrading by the government?  
A. Yes                      B. No
3. Do the people agree to settle squatter people in LR areas?  
A. Yes                      B. No
4. Could LR implemented in squatter settlements? If not any alternative to relocate squatter people.
5. Are the squatter people agree to develop their area by LR if the permission given by government?  
A. Strongly agree    B. Agree                      C. Neutral                      D. Not agree                      E. Strongly not agree
6. What is your opinion about group ownership to develop squatter?

**D. Squatter federation member**

**Tenure security**

1. How long have you been here?
2. Are you living in your own land or in rent?
3. Did you get this land from parental property or did you buy from another?
4. If you had brought the land from third party then did you transfer from government office or mutual agreements?
5. Do you pay tax for this land and house to municipality? A. Yes                      B. No
6. Do you get the financial loan from bank showing your property? A. Yes                      B. No
7. When you are leaving the house and return back after long time could you get the property or not?
8. If any third party forcefully lives in your house in your absence, could you make claim against him?
9. Do you have a document from municipality and Cadastre mentioning that the land is belongs to you?

**Equity**

1. Are you getting the road and facility to reach market center? A. Yes                      B. No
2. Does the municipality provide the sanitation, electricity and water facility? A. Yes                      B. No
3. Do you get the citizenship certificate from the address of squatter? A. Yes                      B. No
4. Can you get the governmental job?  
A. Very difficult    B. Difficult                      C. Neutral                      D. Easily                      E. Very easily
5. Does the social relations exist to formal society or not such as marriage and community?
6. Could you live in this area without threat from central government and municipality?

**Participation**

1. What do you think in case the government wants your land for developing infrastructure, would you participate or not? A. Strongly participated    B. Participate    C. No
2. Do you think it's also your responsibility or only the government responsibility for all activities related to urban infrastructure development and squatter upgrading?
3. What do you think if you receive alternative land for shelter in developed areas that the state provides you after infrastructure development?  
A. No                      B. Receive                      E. Depends on squatter community opinion
4. Do you agree if your houses will be demolished during infrastructure development and you are shifted in other developed area?

- A. Strongly agree    B. Agree    C. Neutral    D. Disagree    E. Strongly disagree
5. Do you agree to share your occupied land for developing infrastructure in squatter areas?
- A. Strongly agree    B. Agree    C. Neutral    D. Disagree    E. Strongly disagree
6. Do you agree if group ownership given by the government for squatter development?
- A. Strongly agree    B. Agree    C. Neutral    D. Disagree    E. Completely disagree

### E. Interview questions related to LR committee members

## Security

1. How long have you been involve in the LR committee?
2. How long time taken by LR project to give land owners land back?
3. Do the land owners have the restriction to use your land during LR?
4. Do the land owners have the restriction to sale their land within certain period of time or can occupy long time?  
A. Strong restriction      B. Restriction      C. No idea      D. No restriction E. Completely no restriction
5. When the land owners are abroad then how you disseminate the information about the LR to the land owners and tenants?

## Equity

1. Do the land owner can get the land in previous location or different? If not, the location is sloppy, rocky or flat than pervious?
2. Does the same proportion of land is shared by the big and small land owners?  
A. Proportionally equal      B. Equal      C. Not proportionally equal
3. Do you get the facility of utility, school, health post, open space after LR?  
A. Strongly agree      B. Agree      C. Neutral      D. Not agree      E. Completely not agree
4. Do you agree with the increased land value after losing the land for infrastructure?  
A. Completely agree      B. Agree      C. Neutral      D. Not agree      E. Completely not agree
5. Do the landowner in commercial site and residential site have contributed the same proportion of land? If yes are you agree with this?
6. Do you agree with the portion of reserve land for infrastructure is fair?  
A. Very fair      B. Fair      C. No idea      D. Not fair      E. Completely not fair
7. If you have land less than 80 m<sup>2</sup> then how did you get your plot return back?

## Participation

1. Was the LR project in your area completed within the specified time period? A. Yes B. No
2. Does the LR project where you are now living was implemented by government or private developer?  
A. Government B. Private
3. Both small and big land owners' were participated in LR? A. Yes B. No
4. Do the LR authority invites you for LR meeting or not? A. Yes B. No
5. How often you attend the meeting?  
A. Regularly B. Occasionally C. Not participated
6. Did you feel free to put your and land owners voice in the meeting? A. Yes B. No
7. Do you know about the causes of delay of the project?
8. Do you support the urban poor in your society?

### F. Private land developers

## Participation

1. Who are the land developers to implement the LR government, private, or both?
2. Is there involvement of private sector during policy formulation to decide the implementation of LR?
3. Is there legal mandate to implement LR from private sector?
4. Private land developers agree to construct social housing in the reserve land for low income group?

A. Strongly agree   B. Agree   C. Neutral   D. Disagree   E. Strongly disagree

**How effective is LR in terms of governance network?**

1. Is LR supported by the government, civil society and private sector?
2. Who are the responsible actors/ stakeholders or party involve in LR?
3. Is there existing governance network to implement LR?

**How participation does contribute in the squatter settlement?**

1. Private land developer agrees to develop the land occupied by the squatter?
2. Is there any document about the integration among the governance actors for implementing LR to upgrade squatter areas?
3. Upgrading the squatter area is achieved by participation of government, civil society, experts and private developer?

A. Strongly agree   B. Agree   C. Neutral   D. Disagree   E. Strongly Disagree

**Can LR be applied to upgrade squatter settlements?**

1. Do you agree to develop squatter settlements through LR?  
B. Strongly agree   B. Agree   C. Neutral   D. Disagree   E. Strongly disagree
2. Are the private developer and central government showing the interest to upgrade squatter areas?
3. Does any LR project are initiated for squatter upgrading by the government with help of private sector? A. Yes   B. No
4. Could LR implemented in squatter settlements? If not any alternative to relocate squatter people.

**G. Financial institutions, Banks**

**Does the participation imply in LR?**

1. Financial institutions are participated in LR  
A. Strongly agree   B. Agree   C. Neutral   D. Disagree   E. Strongly disagree
2. Do you have policy to provide low interest rate for land readjustment projects? A. Yes   B. No
3. Does the government give any subsidy for providing low interest credit to land readjustment projects?  
A. Yes   B. No   C. Neutral
4. Do you provide the financial loan to squatter people? A. Yes   B. No

**How effective is LR in terms of governance network?**

1. Do you agree to participate in land readjustment projects with government, civil society?  
A. Strongly agree   B. Agree   C. Neutral   D. Not agree   E. Strongly disagree
2. What is your opinion about participation with the government?
3. Is there existing governance network to work together in the development process?