

To My beloved mother



Neera Sharma (1954-1996)

My eternal source of inspiration...

Abstract

This research is about a case of Land Sharing in Sankhamul squatter settlement, located on a public land along the banks of Bagmati River in Kathmandu. In the fiscal year of 2007-2008, the Government of Nepal announced a squatter upgrading program, as a part of which, Lumanti, an NGO working with squatters, proposed a "land sharing" project in Sankhamul to provide secure housing tenure to the squatter inhabitants. The idea was to share the land among owners and occupants and use a part of it for formal housing to squatters and the other part for access to government use. This was seen as a win-win strategy where both the stakeholders could retain the use of land. But this initiative was eventually rejected by the government and squatters despite much planning effort and a year-long negotiation.

This study thus identifies abandonment of the proposed Land Sharing project as a major problem and examines the reasons behind it. In doing so, the research aims to assess if Land Sharing was an appropriate tool in the context and consequently recommend measures for future of Land Sharing as a policy tool for squatter upgrading in the country.

The research uses case study analysis as a strategy to investigate the issue. It gathers related data through survey and interviews performs qualitative and quantitative analysis to assess the findings with reference to theories. By studying the nature and process of Land Sharing from literature, the study gathers six prerequisites necessary for successful implementation of a Land Sharing project. The research then goes on to evaluate if these preconditions were opportunities or constraints in the case of Sankhamul. The findings show that in fact three of the preconditions are actually constraints- the proposal was technically not feasible, role of intermediary was not effective and due to lack of fear of eviction, community consensus did not favor implementation of land sharing. The study also explores if the stakeholders find any other upgrading tools more relevant than Land Sharing in the context and indeed reveals that on-site upgrading is felt more appropriate than Land Sharing in Sankhamul by the stakeholders. The results conclude the reasons behind abandonment of project are absence of three essential preconditions and inappropriateness of Land Sharing tool in the context. Therefore Land sharing appears to be a wrong choice of approach in this particular case likewise Sankhamul was not the best pilot project for Land Sharing.

The research also reveals some unique circumstances of preconditions for Land Sharing in this case; which is clarified in this paper and is a contribution to literature for future reference on Land Sharing. Further on, this paper discusses possible scenario of upgrading in Sankhamul squatter settlement hereafter as well as makes recommendations for future of Land Sharing as a squatter upgrading tool in Nepal.

Key Words:

Squatters, Squatter Settlement, Squatter Upgrading, Land Sharing, Preconditions for Land Sharing.

Abbreviations

ACHR Asian Coalition for Housing Rights
BMA Bangkok Metropolitan Authority

CEQ Close Ended Questions

CESCR Covenant on Economic, Social and Cultural Rights

COHRE Centre of Housing rights and Eviction

CPB Crown Property Bureau

DUDBC Department of Urban Development and Building Construction

FDG Focus Group Discussion
GSS Global Shelter Strategy

ha Hectare HH Households

HPBCIDC High Powered Bagmati Civilisation Integrated Development

Committee

KPB King's Property Bureau

LS Land Sharing

MDG Millennium Development Goals

MoEYS Ministry of Education, Youth and Sports

MPP Municipality of Phnom Penh

NBBSS Nepal Basobas Basti Samrakchan Samaj (Nepal Settlement Protection

Society)

NGO Non Governmental Organisation
NHA National Housing Authority

NMES Nepal Mahila Ekata Samaj (Nepal Women's Unity Society)

NPC National Planning Commission

NTNC National Trust for Nature Conservation

OEQ Open Ended Questions
PAT Port Authority of Thailand
SDI Slum Dwellers International
UCD Urban Community Development

UDLE Urban Development through Local Efforts

UNCHS United Nations Centre for Human Settlements, UN-Habitat

Exchange Rates:

1US\$=63.9 NRS

As per the rates obtained from Nepal Rastra Bank for date of land sharing proposal i.e. February, 2008. Unless stated elsewhere all currency figures refer to Nepali Rupees.

Acknowledgement

This paper is an outcome of not only my personal effort but also guidance and support from many who were involved at various stages of this work. I would like to express my gratitude to:

- Mr. Paul Ewoud Rabé, my thesis supervisor, whose extensive knowledge and personal research on the subject was the backbone of this thesis. Thank you for your ideas, experiences and encouragement to build up a research which shall go beyond the extent of this paper. I am highly grateful.
- Mr. Carlos Morales-Schechinger, land specialization coordinator, who persuaded me to choose the topic. I highly appreciate your time, suggestions and intense discussions which stirred a growing interest within me towards land issues.
- IHS lecturers for passing on your knowledge and guiding in the right direction. My special thanks goes to Mr. Alonso Ayola, course coordinator, for the many relevant reading materials you provided, to Mr. Nigel Browne for your ever enthusiastic support and to the staffs of Course Bureau for being there at dire times.
- My seniors, Jeanette Calder and Mansee Bal for your special "tips" on writing the paper and Aruna Tandukar for your material support from Nepal.
- Thesis sharing group- Biddy, Melis and Sheena your critical comments were extremely helpful in shaping the final outlook of this paper.
- Computer wizard, Bibhu dai for your technical support throughout the year all the way from Australia. Special mention to Sanjaya Chalise for introducing me to the research area and helping me locate the respondents and to Rabindra Lamichanne for fieldwork support.
- Respondents of Sankhamul community and officers of the following institutions for your time and supportive response-DUDBC, Lumanti, HPBCIDC, NMES, NBBSS, 'Squatter Problem Solving Committee', NEST and UN Habitat-Nepal.
- My flat mates Luna di and Anika for spending time, sharing ideas and helpful suggestions, encouraging to stay up longer, exciting tours, lovely food and everyday moral support. Hearty thanks to Dhammika, for being such a caring "mommy" and Frances for your sweet "didi" reference, which always made me feel at home. Thank you all for the warm family vibe.
- Sujata, Samjhana, Sushma, Srishti and Rejina for all the online hours. Your time, your wishes and cheering on has always been a positive support.
- My beloved family and Parikshit for encouraging me to participate in this program.
 Your love and faith in my ability is what motivated me to put my best into this research work.

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Chapter 1: Introduction

1.1 Proposal for Change

After several years of ignorance, inaction and threats of eviction towards squatter inhabitants of Kathmandu, the government of Nepal finally made a stance in December 2007 through a Three Year Interim Plan (07/08–09/10). It made a commitment for providing safe and economical housing facility by developing organized habitants under the notion of –'shelter for all' (NPC 2007, pp.43-72 and Tanaka 2009, pp.157). Based on this policy, the government allocated US\$ 2347417 (15,00,00,000 NRs.) to Department of Urban Development and Building Construction (DUDBC) with responsibility for upgrading one of the squatter communities located along the river banks in Kathmandu. DUDBC collaborated with Lumanti, a concerned NGO, to utilize the assigned budget. Lumanti then conducted a study with technical support from Asian Coalition for Housing Rights (ACHR) and proposed a "land sharing" project for upgrading one of the squatter settlements within the city and providing secure housing tenure to its inhabitants (Lumanti 2008 pp.1-8 and Tanaka 2009, pp. 157).

Through Land Sharing, the disputed river-side which is a public land would be divided into two parts and shared – one for retaining public use i.e. commercial development and green space and the other for accommodation of existing squatters in an upgraded manner with tenure security. The latter would be redeveloped with construction of apartment housing including facilities such as electricity, water supply, sanitation etc. required for the better living conditions. This would not only provide formal housing and eliminate the possibilities of forced evictions but also improve the surrounding river area. The commercial buildings would provide cross subsidy for construction of housing making the project financially self-sustainable.

For implementation of the project, "Sankhamul Squatter Community" along Bagmati River was chosen by the government. This selection was based on a survey conducted jointly by concerned NGOs (Lumanti, UDLE/GTZ and HPBCIDC in 2008) as well as on subsequent assessment of physical conditions, socio-economic conditions and cohesion among squatter inhabitants which established "Sankhamul" as the most feasible squatter settlement for land-sharing.

These were the collaborative efforts towards the to-be first "land sharing" project in Nepal.

1.2 Problem: Abandonment of Proposal

Despite the detailed plans and rigorous negotiations for about a year, there were doubts among the stakeholders about implementation of Land Sharing in Sankhamul. Each stakeholder had their separate opinions regarding feasibility and necessity of the project. Squatters had little faith that the new plan would be beneficial to them. Involved parties made consistent efforts for convincing, yet the squatters were hesitant to participate. Government on the other hand faced certain institutional constraints which made it difficult to start the

implementation. Due to time constraints the negotiations could not be stretched longer than a year and ultimately the project was abandoned.

Desertion of the project has discouraged any further upgrading projects in the concerned area as well as the rest of such communities within the city. Unfortunately, with population growth, the squatters are continually growing; creating congestion, environmental problems and various health and safety issues. Due to lack of security of tenure, the inhabitants continue to live in fear of eviction. This stops them from investment for improving their housing conditions. On one hand this creates dire situations for urban poor; on the other hand growing squatter settlements negatively affects the environment and image of the city. Lack of interventions from the public sector only increases the severity of the problem. Such inaction of government or NGOs upon failure of the first pilot project is hindering further implementation of upgrading projects. There is an utmost need to understand the shortcomings of the first attempt and make a new approach in an appropriate manner.

The core problem of this scenario and motivation of the research is abandonment of the Land Sharing project in Sankhamul squatter settlement. This research, thus, identifies the underlying issues that hindered the implementation of squatter upgrading through Land Sharing project by examining the case.

1.3 Research Area: Squatter Settlement of Sankhamul

The Sankhamul squatter community, settled along the banks of Bagmati River is one of the oldest squatter communities developed in Kathmandu, with some of the families living there for 37 years. It is located 3.5 km away from the city core in a rapidly growing urban pocket. The neighborhood surrounding this settlement also shares the same name "Sankhamul" which at present is a mixed residential and commercial zone. Also there are monuments of historic importance facing this settlement on the opposite bank of the River.

The settlement has a configuration of a tightly laid row housing having 105¹ houses, stretched over the entire length of the land and occupies about 35,452 m² of land (Lumanti and ACHR 2008, pp. 3). A black topped road along the stretch of front facades provides easy access to each household. Each house though appears only as a small shack from road side, is a long narrow structure extending up to 20 m towards the river at the back. Interestingly, the portion of land, behind the built structures towards the river, has been separated out as a green belt by the community. Majority of households have small vegetable gardens at the back, sometimes for marketable production. Most of the families have toilets, electricity and water supply.

¹ A recent survey done by NEST consultancy in 2010 shows the households number to be 107 since 2 of the joint families separated and built their own homes at the back yard space. But this paper considers the no. of houses during the time of land sharing proposal i.e. 105 HH.

Picture 11: Location of Sankhamul Squatter Settlement in Kathmandu



Source: Google earth, 2010

Note: Red dot represents the Sankhamul squatter settlement.

Yellow dots represent other squatter settlements along Bagmati River and its tributaries.

Picture 22: Sankhamul Squatter Settlement



Source: Google earth, 2010

Box 11: Basic socio-economic information of Sankhamul Squattter Settlement

No of Households	105
Total Population	503
Average household size	5
Average nousehold size	5
Average Monthly Income of the Households	Min:25 cents
	Max: 175 US\$
Total Literacy rate of the community	79% of the total population
_	
No. of households by construction type of house	Permanent-1
	Semi Permanent-104
	Temporary-0
Demonstrate of the second of t	Samia 210/
Percentage of households by main occupation	Service-21%
	Small Business-13%
	Daily Wages-39% Others-27%
	Others-27%
Percentage of households by main sources of	Tap Water (Stand Post)-12%
drinking water	Tube Well-88%
Percentage of households with and without toilet	Household without toilet-3%
	Household with toilet-97%
Percentage of households with/without electricity	Without Electricity-6%
facility	Electricity with meter-71%
	Electricity without meter-23%

Source: Lumanti, 2009 + Updates from field observation, 2010

Apart from one recently constructed house which is permanent in construction, all buildings are semi permanent structures constructed of bricks and mud mortar. These have corrugated zinc sheets as roofing material. Most of the houses are single storey, but few who have started to take loans from the cooperatives, have refurbished their houses to semi-permanent double storied structures, without any consultation from technical expert. Due to the small width of each house (average of 4m wide frontage) rooms are aligned one behind the other which is rather inconvenient. Although flooding of river water in summer does not have severe consequences, few houses at the end of the stretch which are closer to the river face problems of water entering the rooms.

1.4 Research Objectives

This research has two underlying objectives.

Firstly, having recognized abandonment of the project as the main the problem, the research explores reasons behind the failure of implementing Land-Sharing program in Sankhamul. It examines the process of implementation of Land Sharing in the context and identifies the perceptions of stakeholders regarding relevance of Land Sharing as compared to alternate tools for upgrading the community, through which the research can **assess if land sharing** was in fact applicable in the context.

Secondly, after understanding the reasons of failure of land sharing this study is able to analyze the nature of Land sharing as a squatter upgrading tool. Through this understanding, the research is able to **recommend policy measures for implementation of Land Sharing as slum upgrading tool** in future in the squatter communities of the city.

1.5 Significance of Research

The paper starts with a project story in Kathmandu of how a genuine effort towards improving the conditions of squatter community ended up in failure and draws attention to the major shortcomings of the approach. The government of Nepal has always faced criticism due to ignorance and inaction towards the squatter community, but strikingly even when the government committed itself to act upon the matter; it failed to launch the project. The reasons behind this failure have not been explored yet and therefore appropriate means of approaching the issues of squatters is not yet known in concrete. This paper therefore attempts to address the very gap in understanding of what went wrong and how to make it right.

This thesis can be relevant reference material to the following:

Squatter Associations: Findings of this study will be most significant to the habitants of the squatter communities and their associations who have been struggling for right approaches to be made for improving their housing condition and tenure status.

Department of Urban Development and Building Construction (DUDBC): This research in particular is relevant to the present national context where this government body is currently revising the Shelter Policy in favor of the urban poor. Findings from this result can contribute to policy formulation for successful implication future upgrading projects.

Lumanti: Which is a non-governmental organisation majorly involved in squatter upgrading projects and was the third party intermediate in the land sharing project can take the recommendations from this research for further research and implementation of similar projects.

Academicians: This paper can also be relevant to academicians interested in theories and practice of land sharing.

1.6 Research Questions

It is mystifying to think why a good intention of upgrading the squatters ended up being rejected. Hence, the research tries to answer the underlying question: What were the reasons for the abandonment of the first Land Sharing program proposed in a squatter community of Kathmandu?

Further on the research examines whether the proposal was abandoned because the six necessary prerequisites² were in place or not; it also examines whether there was an alternate tool more relevant than Land Sharing for upgrading the squatter settlement. The study therefore poses following specific research questions:

- Which preconditions were opportunities and constraints for application of Land Sharing project in Kathmandu?
- What are the stakeholders' perspectives regarding relevance of Land Sharing as a squatter upgrading tool in Sankhamul Squatter Community?

1.7 Thesis Structure

The above mentioned framework of research has been composed in chapters as follows:

Table 11: Structure of Thesis

Chapter 1	Introduces the core issue and problem statement of the research. It clarifies the significance of research and presents question that need to be answered through this research.	Introduction
Chapter 2	Reviews the concepts and views about squatter settlements, role of secure tenure and consequently changing approaches of squatter upgrading. Defines LS as an upgrading tool and reviews its concepts and practices.	Review Of Literature And Practice
Chapter 3	Sets the strategy to- gather valid and relevant data and analyze findings in a consistent manner so as to focus strictly on answering the questions.	Research Design And Methodology
Chapter 4	Elaborates the background of formulation of LS proposal in the institutional context of the country and also explains the details of the proposed project.	Context
Chapter 5	Presents the collected data and analyses the findings to explain details of the issue.	Findings And Analysis
Chapter 6	Provides an overall assessment of the findings to answer research questions as well as makes policy recommendations for future approaches.	Conclusion And Recommendation

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² Six prerequisites necessary for successful implementation of LS, as mentioned by Rabé 2009, pp.126-127

Chapter 2: Review of Literature and Practice

This chapter presents the views regarding squatters, analyses the importance of tenure security and changing approaches towards squatters. It then presents land sharing as a tool for improving squatter settlements and defines related concepts based on various literatures and practices.

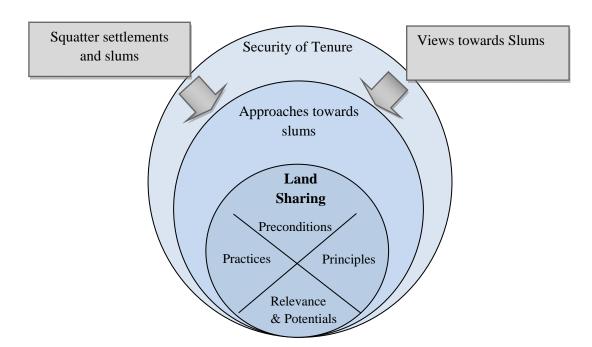


Figure 11: Structure of Literatures Discussed

2.1 Squatter settlements and slums

Squatter settlements are often referred as slums and the distinction between them is a matter of perception. Slums are defined as "heavily populated urban areas characterized by substandard housing and squalor" (UN-Habitat 2003, pp. 8). These are crowded housing pockets in core or peri-urban areas occupied by low income residents, with or without legal titles. Squatter settlements are also slums by nature but are specifically illegal ones; in other words squatters are specific types of slums without legal titles to land. The term "slum" defines living condition whereas squatter settlement focuses in the legal status.

Slums have been classified into two groups by UN-Habitat and named as "slums of hope" and "slums of despair". "Slums of hope" are most likely the squatter settlements that are new, self-built residential communities, mostly illegal in tenure and gradually growing and developing. These types of slums have chances of improvement over time. Whereas "slums of despair" are slum communities whose environmental conditions and services are degrading (UN-Habitat 2003, pp. 9). This distinction in definition is applicable to Nepal, where the term "slum" officially refers to "slums of despair" with inadequate housing within inner city cores

that were healthy earlier on but are deteriorating gradually over time. Likewise "squatter settlements" in Nepal refers to "slums of hope" with new communities that migrated from elsewhere and squatted on vacant urban areas without legal landholding. Squatters in Nepal are named as "sukumbasi" which literally means landless dwellers.

The key feature of a squatter settlement is the absence of ownership of land parcel which squatters have occupied. These are vacant lands either public or private and mostly marginal areas like railway setbacks, marshy lands or risky areas prone to some catastrophe. Due to their unproductive and undesirable nature they are often left vacant by the owner and are taken advantage and appropriated by squatters by holding it illegally. Similar has been the case of Sankhamul, which is a river setback area prone to occasional flooding and poor soil conditions. Due to risk for construction in the area, it was left vacant by the public body and was later squatted upon.

Squatter settlements are residential pockets inhabited by lower income groups in urban areas which have emerged and grown upon illegal squatting without formal claims to the land and/or permission from the concerned authorities to build. However, it has also been found that not all slum dwellers are poor (Smolka 2002, pp.2-4). Although most possess very few assets due to low level of education and working skill and therefore depend on informal jobs, some of them also hold formal jobs and earn considerably. "Even though most slum dwellers work in the informal economy, it is not unusual for them to have incomes that exceed the earnings of formal-sector employees" (UN-Habitat 2003, pp.28).

Due to illegal or semi-legal status, squatters have difficulty in access to infrastructure and services such as water supply, sanitation, electricity, roads and drainage, schools, health facilities, markets etc. Even if present, these services are below the standard or below "adequate" levels. Services may be completely absent or availed through alternate means. For instance, water supply may not be provided by the municipality but availed illegally from city networks or alternatives like hand pumps and wells may be used. Similar variations of level of service may exist for other facilities through informal means (Srinivas 2009, pp.1-2).

Basically, squatters are considered to have low level of tenure security due to their non-legal status. However, after a longer period of squatting, there may be second or third generation of squatter who believe that they own the land and therefore they tend to claim rights over it. "For squatters who have lived in a settlement for many years, their perceived security of tenure may be indistinguishable from households living in legal housing" (Payne 2002, pp 13). For instance, when squatters reside in a location over a long period of time, they tend to claim de facto ownership of land through adverse land possession or legal payment for just the services and not land or housing. In such cases, squatters may have substantial degree of legal protection. There are also cases where original land owners may rent their land to low income families for a nominal fee through informal or semi-legal arrangements. This creates categories of "squatter-owner" and "squatter-tenant" within non-formal tenure.

2.2 Views about Slums

Gradual changes in views towards slums and squatter settlements have lead to changes in approaches towards them from negative to positive. Consequently there have been changes in urban policies of many developing countries including Nepal. Some of these views that have had an impact on policies are discussed below.

2.2.1 Views against slums

Generally, the term "slum" holds a negative meaning and portrays a fiercely negative image of a city. These areas are perceived as diseased, depressing, dirty and dangerous areas where criminality is high and moral standards are low. Existence of slums are considered to highlight the poverty of the city itself and therefore often ignored or not considered as a part of the society as such these communities hold a stigma of being blight.

Box 22: Summarized views against slums

Deprived: low income, illiteracy, unskilled, inadequate housing, low level of infrastructure

Depressing: poverty, social segregation, stigma

Diseased: unhygienic, epidemics **Dirty**: irregular pattern, blight of city

Dangerous: illegal, criminality, low moral standards

This disparity over slum conditions has emerged from a theoretical perspective which views slums are pathological condition. This conception towards slums has had two major effects-on one hand the social stigma has hindered the ability for slums to improve and on the other hand they are subjected to forced evictions. In other words, this view sees slums as parasites and therefore argues that the city should get-rid-of slums (Rabé 2009, pp. 198-215).

In Nepal too, such has been a widespread view and policy makers often tend to disregard the existence of squatters and slums in their plans. Although the problems of squatters have existed over five decades in the country, it has only been a decade since policies have addressed the issues. General public too views slums with loath and disgrace and raises voice for clearance of squatter settlements from city areas now and then. Settlements like Sankhamul along the Bagmati River are considered as reasons of river pollution and are under constant criticism of general citizens.

2.2.2 Views in favor of slums

Another set of view favors the slums and attempts to give solutions instead of ignorance. Such a view started evolving from 1960s onwards when perception towards slums started getting less vicious. There was a new form of discourse in support of slums arguing that they are not just a problem but also a solution to housing problems in developing countries. This school of thought saw squatter settlements as an initial step towards entering and staying in a city for the urban poor as they provide minimal level of shelter affordable and accessible to them. These settlements offer the only means of housing amidst dire poverty in urban areas. Since

these communities grew on their own organically fulfilling their needs without demanding much investment on services and infrastructure, their existence in a way can contribute to sustainable development of a city (UN-Habitat, 2003 pp.xxxi).

Slums also contribute a large portion of labour force necessary in cities for increasing economic productivity. Most slum dwellers are migrants who enter the city in search of better financial opportunities offered by the city. They hold an attitude to survive and succeed, despite the challenges of competition, poverty and stigma. Such a mind-set enables them to gradually gain access into enterprising parts of the city- mostly informal, and make a living as they struggle to uplift their economic conditions. The informal sector substantially contributes to the formal sector by providing particular goods and labor services at a reduced cost. As a result the informal and formal economies become largely dependent on each other and in the existence of slums (UN-Habitat 2003, pp.65-70).

Squatters within slums have high level of social cohesion amongst themselves. According to socialist Fischer Claude, neighbourhood unity can be observed in communities which face external threats. "The residents, called favelados, in Brazil are treated as outcasts by their national governments and are thus forced to rely on their own communal resources for providing necessary public services. That cooperation along with battles against authorities, creates cohesion where non had existed" (Fisher,1984, pp.132). Due to much externalization slums form close communities with strong community leaders who stand up for the needs and interest. Although diverse, slums have strong representation (Nawagamuwa & Viking, 2003).

Socially, slums are diverse communities that consist of inhabitants from varying cultural, religious, occupational and geographical backgrounds. Jane Jacobs 1961 relates the chaos and diversity of organic neighbourhoods to be liveliness and that slum are inherent part of an urban fabric. According to her theory slums can be classified into two categories-'unslumming slums' and 'perpetual slums'. 'Unslumming slums' are slum areas that have existed over long period of time and have gradually improved with improvement in inhabitant's financial situation. These are eventually become respectable areas in the city. "Perpetual slums" on the other hand are settlements often designed by the state and planners to cater to housing problems such as relocated settlements, low-income housing or social housing that gradually deteriorate into slums over time due to poor maintenance. Jacob's theory elaborates how sometimes organic growth within slums can be more positive than restricted vision of policies.

In general, such views look at slums as victims of urbanisation and inefficiency of governments in provision of affordable housing to urban poor. This perspective therefore lobbies for need to act upon the problems and bring in solutions in a pragmatic manner rather than trying to ignore or clear the slums. Influence of such views as prescribed from the international bodies has lead to approaches other than eviction. In fact the approach of land sharing is a consequence of favoring attitude towards the slums.

2.3 Role of Secure Tenure

With increasing positive outlook towards the slums and squatters in the world today, there has been a growing realization of the need to provide secure tenure to these inhabitants. Security of tenure is today, considered the main component of the right to housing. Secure tenure provides the authority to reside in a place without threat of forceful removal or eviction (UN-Habitat, 2003 pp. 168-169).

Secure tenure is established when there is guarantee for individuals that they will not be forced out of their homes. According to Payne 2005, pp. 137, such guarantee of secure tenure can vary from a simple moratorium on relocations and evictions, to temporary occupation licences, communal or individual leases, community land trusts, communal ownership, customary tenure, etc. The duration of such tenure forms may be short or long term. They may provide the option of extension or upgrading to more formal tenure systems over time, or compensation for investments made. The main objective here is to maintain or increase accessibility for urban poor to locations where they can increase their incomes.

Some school of thoughts such as that of Desoto suggests that, legal title is the best way of assuring tenure security. According to this concept most low income people in developing countries have all the resources, skill and networks necessary to improve their living conditions except for legal titles which deprive them of insecure tenure, which is the main obstacle for maximising the use of their assets (Desoto, 2000). Others however disagrees that legal title alone can assure actual security by explaining, "...urban land tenure and property rights of squatters are far more complex than the conventional black and white, legal/illegal, or formal/informal distinctions may suggest... The vast majority in between live in a grey area whereby they can claim some degree of de facto rights" (Payne, n.d., pp.1). Even without legal title holdings, squatters may have sufficient property rights to exercise their claim over land. According to UN-Habitat 2003, pp 168-169, there exist so me informal arrangements of tenure system which can provide sufficient security such as a customary system. This effect is due to various historical, cultural legal and economic dimensions of tenure system varying degree of complex system of property rights (Payne 2002, pp. 1-2)

Lack of security is definitely an obstacle to any possibility of uplifting the conditions of poor. Tenure insecurity hinders attempt to upgrade housing conditions for the urban poor, undermines long-term planning. It has a direct impact on access to basic urban services and on the absence of investments at settlement level, thus fuelling social exclusion and poverty (Durand-Lasserve and Royston 2002, pp 3-4). Security of tenure is fundamental for the integration of urban poor in the city as it allows right to housing, incentive to improve shelter conditions and safe environment for investment in home-based enterprises leading to social inclusion and poverty alleviation. As such "... secure tenure forms the foundation on which any effort to improve living conditions for the poor has to be built" (Payne 2002, pp. 3).

2.4 Approaches towards Squatter Settlements

Governments, world over, have dealt with the problem of squatters in different ways. Initially, the slums were seen as eyesores to a city and policies tended either to ignore them or wipe their existence. However, with growing size and their significant impact in informal economy, these settlements could not be simply bulldozed or ignored. "National approaches to slums, and to informal settlements in particular, have generally shifted from negative policies such as forced eviction, benign neglect and involuntary resettlement, to more positive policies such as self-help and in situ upgrading, enabling and rights-based policies" (UN-Habitat 2003, pp. xxvi). Government approaches gradually changed with changing dynamics of the situation as explained below.

2.4.1 Forced evictions

One of the earlier ways of reacting towards squatter settlements was "getting-rid-of-them". According to the United Nations Human Settlements Programme UN-Habitat,2007, at least 2 million people in the world are forcibly evicted every year, while millions are threatened with forced evictions. This involves clearance through violent force and large scale slum demolition without any alternative or choice of population. Individuals, families and entire communities are displaced temporarily or permanently families and entire communities against their will, from their homes, land, and businesses in the pretext of beautification of city or environmental hazard. This process of approaching the slums leaves them homeless and hopeless aggravating the circle of poverty, discrimination and social exclusion. "These evictions take place in virtually all countries and are, more often than not, directed at poor and vulnerable communities living on the edge of legality under informal tenure arrangements, who are evicted against their will, without consultation and without compensation or alternative housing" (Plessis 2005, pp. 123).

Forced eviction is the most brutal way of dealing with problem of slums. During the course of eviction, assets such as property, social networks and livelihood assets are destroyed and access to basic services is hindered. Instead of being a solution, it creates larger gap between the poorer and the rich and increases social exclusion. Most critically, it triggers negative psychological and traumatic affect on the victims, which is more severe for extreme poor groups and requires years to recover from. Forced eviction is therefore inhuman and unjust (Plessis 2005, pp. 124-125). International Covenant on Economic, Social and Cultural Rights (CESCR) advocates international housing rights law and states that forced eviction without consultation with those that are being cleared or without provision of housing alternatives and compensation is illegal. The General Comment no. 7 on the right to housing specifies, 'the State itself must refrain from forced evictions and ensure that the law is enforced against its agents or third parties who carry out forced eviction" (CESCR 1997). This recommends protective measures to the evictees in case of exceptional circumstances where evictions cannot be avoided. Nepal has signed this covenant along with 150 other countries.

2.4.2 Clearance and relocation

Another response to improving areas occupied by slums is their relocation. This process involves clearance of the settlements which are usually located in the centre of the cities and movement to a new location usually miles away from their original location. After clearance the sites are redeveloped for higher use value. The problem with this approach is that the displaced inhabitants cannot find work near their new residences. Daily transportation costs become burden to low income dwellers of relocated sites who prefer staying close to the jobs in centre. "Resettlement practice requires more attention to transport and access dimensions in order to reduce accessibility problems for the poor" (UN-Habitat 2003, pp.174). As such the expenses and resources borne by the governments- in clearing slums and resettling inhabitants as well as in financing facilities like public transportation to ease the access from new location to employment areas in the central city is high. In some cases residents are disposed of their homes only to realize that the relocation sites do not exist. Such are forced eviction in subtle disguises. Consequently, this approach does not work as effectively as expected (Mehta and Dastur, 2008).

However, there are certain circumstances, under which this approach might be appropriate. For instance, when slums are constructed in environmentally hazardous zones, or along public rights of way like roads, railway line or rivers, it is for the social good of the entire city that these areas be cleared out. One such example of relocation was undertaken in Kathmandu under the name of Kirtipur Housing project. Squatter-settlement was cleared for construction of road in the occupied site and 44 squatter households re-housed in a location slightly farther away from the city. The project was considered successful since the despite the distance from the city centre due to good quality housing, active community participation and avoidance of gentrification (Sengupta and Sharma 2009).

2.4.3 Clearance and on-site redevelopment

A third approach is clearance and on-site redevelopment. It means temporarily moving the slum residents elsewhere, clearing the land and constructing new housing for them on the same site. In such projects, high-rise buildings are often proposed s to house more people. Building multi-storey houses are sometimes justified when commercial uses on the same site can subsidise the cost of residential space. For instance, families can live above the commercial businesses on the ground floor.

High rise buildings are often proposed in order to alleviate the issues of density. But, they are not preferable or practical since they do not provide adequate ground-level space required by low-income families to operate small businesses to supplement their incomes. In developing countries where bulk of the urban economies are rooted in the ground-level built space of slum settlements, shifting families to higher level up-roots the very basis of their livelihoods and also questions the significant economic structure of the city. In slum communities ground level social network helps to build community cohesion, self-organization and emotional support systems, high-rise buildings can lead to community disintegration and disorientation

(World Bank, 2001). Also, the commercial uses are not sufficient for subsidies required to construct or maintain new housing. Moreover, the newly developed housing may rather attractive to higher income groups and susceptible to gentrification. Thus, redevelopment may help in urban renewal and improvement of living conditions but is a costly option with several risks attached.

2.4.4 On-site upgrading

Upgrading is a popular alternative to shifting people or replacing their residence. According to UN-Habitat 2003, pp.174-175, on-site upgrading, rather than eviction or redevelopment, can go a long way towards addressing the issues of slums. On site upgrading mainly includes provision of new or improvement of existing infrastructure, such as water supply, sanitation, drainage system and electricity, up to an adequate standard. Generally upgrading does not involve construction of new building, but it can offer loan schemes for improvement of houses or merely assurance of tenure security. Further on upgrading program may include capacity building, awareness towards environmental hazards, providing trainings for community organization and management as well as the construction of basic health or education facilities.

A key feature of upgrading is transference of tenure rights to the occupants at prices they can afford. Consequently this motivates occupants to invest in their own homes. Practices indicate that after feeling considerably secure about their ownership, squatters tend to invest more than twice the amount of investment made by public bodies on upgrading the infrastructure (World Bank, 2001). This is a much sustainable option as it does not demand huge capital or subsidies and encourages participation of residents in improvement of their living conditions. Upgrading also minimizes the disturbance to the social and economic life of the community since changes are not too drastic.

Upgrading approaches have been quite common in squatter settlements of Nepal. However, it has been limited to provision of infrastructure and has not confirmed tenure security. As such upgrading cases in Nepal has not provided much incentive for poor to improve their living conditions.

2.4.5 Site and Services

Another provision which was initiated around 1980s is the site and services often known as a proactive approach which can prevent future housing problems. Under this approach the government provides incoming migrant with surveyed plots with basic level of affordable services and in some cases basic building materials. Communities then build their own homes on assigned sites plots. As the income of the community increases over time, they can progressively invest in their homes and communities. As the income of the city increases, it incrementally upgrades the level of service provision to the communities. This option allows government to gradually allocate infrastructure an resources to a larger population and at the

same time allowing the communities can access to land and housing in an affordable manner (Mehta and Dastur, 2008).

Although it was extremely successful in some cases, sites and services programs also had some shortcomings. The areas assigned to communities were often far away from employment opportunities. This had the same effect as that of relocation since lack of affordable transportation option encouraged the low income housing to squat in the city centres where they would be closer to job and social services. In some projects the standards used for service provision were high and as a result the sites were not affordable to the intended beneficiaries. Land assigned for site and services was quickly appropriated by wealthier investors and the poor households would be left out.

Yet there are some important successful examples, where such programs have been tremendously effective. It is worthwhile to consider how to revive interest in this option, especially by adapting their approach so that potential shortcomings can be anticipated and effectively managed on a case by case basis.

2.5 Land Sharing

Land sharing is yet another new approach towards squatters for providing secure housing, which is increasingly being adopted by policy makers in the recent years. "Land-sharing means that the owner of a plot of land and the occupants of that plot (either squatters or tenants) partition the land so that the landowner can develop his portion to the best possible advantage and residents can use their share of land to build their houses with full security of tenure" (UNCHS 1986 in Islam and Yap 1989, pp.1). This approach, which evolved in Bangkok can be considered as a combination of on-site upgrading and on-site redevelopment. The possibility of redevelopment attracts landowners whereas the anticipation of upgrading and regularization attracts squatters, and therefore, land sharing holds the potential of upgrading not just public lands but private lands as well. Rabé explains "land sharing has attracted interest among housing professionals as a form of redevelopment for its ability to accommodate development without displacing existing residents, mainly by agreeing to divide ("share") a plot of disputed land, so that a developer is given the right to build on one portion of the site and land occupants are rehoused on another portion, with a promise of secure tenure on their new plots" (Rabé 2009, pp.1). The biggest appeal of land sharing is that it provides a "win-win" solution for land occupants and land owners who intend to develop, without the need for costly and unpopular forced evictions.

Land sharing can be an appropriate solution for providing housing to poor communities especially in locations with active land dispute between the two parties- squatters and landowners- be it private or public. Usually these are areas where the land has some value and the owner wishes to obtain some immediate commercial gain and where slum dwellers have occupied the land for a long duration and so are perceived to have some right of occupancy. In such cases, the government can basically make two approaches. First option is to act as a mediator between landowner and squatters and persuade the landowner in selling the plots to

the occupants at nominal prices. This however is not agreeable to the land owners in most cases as they have to make financial compromises and also because they claim the legal rights to possess the land. Second option can be relocation of the squatters with compensation, subsidy or through social housing. Usually peripheral areas are chosen for resettlement which is expensive for the poor to commute to their income areas in the city. Many evidences reveal that the relocated group opts to squat elsewhere within the city itself rather than in secure place away from the city, making them vulnerable to eviction once again. In such cases, land sharing can be an alternative approach where both parties can compromise to partial occupation of land (Angel and Boonyabancha1988, pp.108-109).

2.5.1 Principles of Land Sharing

According to Yap 1992, pp.16-17 Land sharing is a justifiable approach in principle, considering that it allows squatters the right to live within the city unlike eviction or resettlement and also the right to share in the increased value of land that they have invested during their term of stay. In a way, land sharing formalizes the perception tenure security gained by squatters after long term of stay in the land by formalizing their claims over land.

The four inherent characteristics of land sharing, according to Angel & Boonyabancha 1988, pp.109 and Yap 1992, pp.16 are:

Negotiation: Initial steps of land sharing involves negotiations between landowners and squatters who are both willing to share certain potion of the occupied land in order to maximize their benefits. This requires a binding agreement to partition the land. Usually the land parcel with the best development potential is allocated to the landlord. Third party intermediation from government or NGOs is often necessary in this process to mobilise the community and settle any disputes or conflicts that may occur.

Densification: Resettling the same number of squatter households in a smaller portion of the initially occupied land requires increased residential densities. The occupants are housed in a smaller area, as part of the land is taken over by the owners usually for commercial use. If the density of existing settlement was already high, new density will be even higher unless some dwellers are relocated or excluded within the scheme. In order to accommodate sufficiently, apartment housing are often proposed, which is often not preferable to poor (Banarjee, n.d., pp.3).

Reconstruction: Since a portion of the land needs to be cleared for landowners and the other portion requires increased density, reconstruction is essential. Often for this purpose squatters may have to be located temporarily. However, if the settlement has low density with vacant plots in between that can be filled, clearance or temporary relocation may not be necessary. Rebuilt houses are usually permanent constructions with better quality materials for upgrading the quality.

Capital Investment: The process of demolition, temporary relocation and reconstruction requires capital investments partially borne by land owners through subsidies or cross-subsidies and partially by saving schemes established by the squatters themselves. For economic feasibility, cross subsidies generated from surplus of commercial developments must be maximised and external subsidies must be minimised.

2.5.2 Preconditions for land sharing

"Land sharing is an approach which can only be applied under specific circumstances" (Yap 1992, p.22). Certain set of circumstances are required as incentives to bring the land occupants, landowner and the government to the negotiation table. These six set of preconditions for implication of land sharing as stated by Rabé 2009, pp.126-128, are discussed below:

• Well-established communities:

Squatters of new communities may not want to become owners or long term lease holders of a plot of land that is offered by land sharing. They may prefer a short-term lease contract with considerable flexibility and a low rent rather than a freehold or long-term leasehold contract which links them to that particular piece of land at a relatively high cost. Most squatters, who pay certain amount of informal rents, agree to a rental contract with the landowner since they seek temporary occupation of land. When served with an eviction notice, they vacate the land and accept any compensation offered to them, even if it is not enough to resettle them elsewhere. However, inhabitants of a well-established community prefer not to be evicted from the location find the concept of permanent houses through land sharing as a good alternative.

Apart from choice of residence, an older community has can thrust more rights over the disputed land which puts them into favorable bargaining position. According to Rabé 2009, pp.126, this may be because of legal rights acquired over time, or because of less tangible factors, such as increased political connections or alliances built up by residents with people's organizations, non-governmental organizations, human rights groups, political parties, and other types of organizations over the years.

• Booming property market

Economic boom and raise in land values attracts commercial developments. As a result, the landowners seek to gain benefit from new developments and tend to push the squatters out of their land. At the same time, increase in land prices creates incentives for squatter communities to participate in formalisation through land sharing which allows them to benefit from shared land values. In such a scenario, Rabé 2009, pp.126 explains, "... a booming land market may also push landowners to make concessions with occupants on developable land—provided that a compromise will enable them to develop right away on a portion of the desired land".

Sometimes the attraction of a booming property market leads to negative after affect upon implementation of the project since it creates anticipation of formalization to capitalize the market value of land. As seen in many case of any regularization process, low income households seek for instant money and as soon as they obtain formal assets by selling it in the formal market. Similar is the case with land sharing. A strategically located land will eventually succumb to market forces. The intended use of land for low income housing then becomes a vain attempt. Lower income groups gradually get pushed away from the city by higher income groups. "The sale of land to outsiders from the higher-income groups or to commercial developers obviously defeats the objective of land sharing: land to house the poor in the city." (Yap, 1992, pp.70).

• Financial feasibility:

A land sharing agreement is financially viable if residents can afford the new housing and titles, the developer and landowner benefit from the arrangement, and where relevant, the amount of public subsidy is not excessive (Rabé 2009, pp.127-128). To be economically, feasible, land sharing projects cannot simply rely on massive subsidies and must have arrangements for payments through savings from poor households as well. These arrangements are unique to each case and must be confirmed through detail negotiations.

Lack of capital investment can sometimes hinder the process. Demolition, clearance, temporary relocation, site servicing and reconstruction process that goes into land sharing is quite expensive. The community may not only have to pay for the reconstruction of the houses, but also for the development (land-fill) and servicing of the land especially if the landowner leaves the community with the worst portion of land which often excludes the poorest from the settlement (Islam and Yap 1989, pp.122).

• Physical/technical feasibility:

Physical conditions such as availability of land, site conditions, density of settlement, status of existing houses, design assistance and participation are often critical aspects in design of land sharing programs. Land must be adequate for sharing for both parties in a way that disputes do not arise during demarcation of partitions. This division may not necessarily be able to house all the existing inhabitants. In such conditions, criteria must be drawn as to who stays and who leaves or if high rise apartments is acceptable to all. These design decisions must be in tune with existing regulations of land uses. The new configuration of the shared land area must be "commercially interesting to developers, while at the same time attractive enough for the re-housed residents" (Rabé, 2009, pp.127).

Land-sharing is only possible if land is sufficiently large to accommodate commercial or public use for landowner as well as housing for the community. In many cases, it will be impossible to resettle the entire community on the portion of land acquired by the slum dwellers, because land is not large enough to resettle the entire community. As such higher densities must be created by vertical expansion. Multi storey flats need to be designed, which is not preferable to the residents (Banarjee,n.d., pp.3) as it limits their income generation

sources as well as creates ambiguous land ownership. Squatters often anticipate ownership of over their own piece of land apart from housing upon regularization. But construction of apartment housing does not allow individual freehold of land which is not preferred by most. Another technical problem is associated with selection of beneficiaries. Concrete records of original land holders are necessary prior to allotting plots and housing. If all squatters cannot be accommodated into new development, then specific criteria must be outlined to decide the process of excluding and including the beneficiaries which is essential to avoid conflicts and failure of project.

Land sharing is technically a time consuming and tedious process of negotiation as it needs to invole community participation (Banarjee, n.d. pp. 3). "...reaching a land-sharing agreement is time-consuming and requires intensive involvement by a large and very committed staff" (Islam and Yap, 1989, pp. 122. It is a process of mutual compromise and understanding where if the landowners and the occupants are in a conflict situation, it takes longer to bring them agreement.

Lack of supporting policies and regulations can be a huge obstacle for implementation of Land Sharing project. Negative notion over squatters still exists deep in the society. Level of commitment required to initiate and sustain any approach towards these squatters is extremely high. Investments required for awareness of positive perceptions and implementation of regularisation programs such as land sharing needs to be sourced from governments, development partners and communities. Government needs to reinstate its policies before implication of land-sharing program. Especially if the land sharing is to be done over public land, the government can face severe opposition from general public which can hinder any further progress. Regulations of land and housing, building codes and policies on tenure and housing rights must be in place. It is thus essential to have a strong political will and policies that back up such initiations.

• Third party intermediation:

From the initial stages of negotiation to implementation of land sharing, intermediation of a third party is necessary to overcome certain conflicts. Reflecting on the experiences in Bangkok, Islam and Yap 1989, pp. 123 point out that "it is important for the community to mobilize outside support". Such outside parties are usually public organizations when the disputed land is private holding and in case of public land holding it is the concerned non-governmental organizations. This intermediary must be able to bring all parties to a table in attempts to consent upon necessary compromises as well as benefits of all parties and ensure that agreement is enforced on all sides (Rabé, 2009, pp.127).

• Community organization and consensus:

Squatter communities need to organize themselves for land sharing so as to can negotiate in one voice to counter the threat of eviction. A land sharing project requires considerable cooperation among slum dwellers, who often have different interests in the land. This is particularly a problem while allotting plots and houses (UN, 1995). "Strong and cohesive

community can resist eviction by presenting a more unified front to the landowner during negotiations where as a weak and fragmented community may encourage landowners or developers to exploit differences among residents and attempt to buy off certain members, until those resisting eviction are outvoted or otherwise out-maneuvered" (Rabé 2009, pp.126).

2.5.3 Land sharing practices

"The land sharing technique has been carried out in a small scale in a relatively ad hoc basis in several urban settlements in Bangkok since the 1980s" (Rabé, 2009, pp.1). In recent years, this approach has reappeared in more Asian cities as a means for secure housing to low-income communities within the city centers. These land sharing experiences have mixed stories to tell. Some of the exemplary cases have been projects in Bangkok which have been models for other Asian countries like Cambodia, India, Sri Lanka and now attempted in Nepal.

Land sharing projects evolved in **Bangkok** in the context of booming property market and strong conflicts between landowners and land holder. These projects in Bangkok ended up being rather successful in solving the conflicts between both parties- one which seeks to capitalise the value of land and the other which seeks for secure shelter. Seven slum communities in Bangkok have been able to implement land sharing project and accommodated commercial developments without displacement of squatting residents. Yap and Islam 1989, pp.122, point out- residents from two of these cases have acquired freehold title for their land and the rest have long term leasehold either for flats or land. Summary of these projects as stated by Rabé 2010, have been presented in the table below.

Table 22: Land sharing cases in Bangkok

Name of Settleme	No. of famili	Total area	Landowner before land	Negotiatio n period	Interme diary	Summary of outcome for
nt	es	(ha.)	sharing		organiza tion	slum dwellers
Rama-4	1,250	8.5	CPB lease to developer	1977-1981	NHA, Treasury Departm ent	2.4 ha. reserved to rehouse residents; 850 high-rise units leased to community by CPB on 20-year leases
Manang kasila	500	1.6	Treasury Department lease to developer	1979-1982	None	0.87 ha. leased to 198 remaining families
Wat Lad Bua Kaw	63	1.6	Private land- owners lease to developer	1978-1983	NHA, BMA, Military	0.32 ha. sold to 67 remaining families
Klong	7,500	69	PAT	1982-1985	NHA,	11.5 ha. sub-leased to

Toey Area					Military	1200 families for 20 years, via NHA
Sengki	143	1.1	KPB	1984-1987	NHA	Housing co-operative purchased 0.60 ha for all families, with loans from KPB
Sam Yod	30+	0.95	СРВ	1982-1989	NHA	0.65 ha. sub-leased to 200 families (including newcomers), via NHA
Klong Pai Sing To	350	n/a	СРВ	1989-1997	None	All families relocated to two high-rise buildings owned by CPB

Abbreviations: BMA = Bangkok Metropolitan Authority; CPB = Crown Property Bureau; KPB = King's Property Bureau; NHA = National Housing Authority; PAT = Port Authority of Thailand; ha. = Hectare

Source: Rabé, 2010, pp.7

Although each community had its unique circumstance and negotiation agreement, the key aspects that led to implementation of land sharing were strong community leadership and support from external organisation- public authorities like NHA, NGOs and press. The strength, patience and representativeness of community leaders enabled the communities to struggle throughout the years consistently against any threats and legal issues as well as sufficiently voice their demands in negotiations. Another key character of these cases was that land and housing were made affordable to the low income families through reduced land prices, subsidies in infrastructure and most importantly access to loan schemes. "In general, the land sharing projects in Bangkok have eliminated the threat of eviction and vastly improved land tenure conditions. From occupants without any land rights, residents have now become land title holders" (Angel and Boonyabancha, 1988, p. 123).

According to the Banarjee, n.d., pp.1, Hyderabad in **India** has also successfully adopted 35 different land sharing agreements as a form of conflict resolving tool in private lands. These cases have been led by Urban Community Development (UCD) programme in Municipal Corporation of Hyderabad. Banarjee points out that the success of these projects has greatly dependent on the leadership and negotiation skills of the UCD. Successful cases has been in land under active dispute especially in areas where values are high and squatters have settled for a long time, whereas in other areas without much dispute, land sharing has been abandoned (Banarjee, n.d., pp2)., According to her this initiation has provided a way forwards to 5 other cases in Vishakhapatnam and 3 in Vijayawada. However, it is seen that these cases have not been easy to implement since they have been complex, time consuming, difficult to have community consensus among occupants that have different interests in land. The cases have also faced technical problems over unavailability of land and difficulty in convincing designs of multi-storey apartments to the residents (Banarjee, n.d., pp3).

On the other hand, cases in **Cambodia** shed a different story (Rabé 2010, pp.8). Out of the four pilot projects proposed in Phnom Penh, only one ended up in an agreement and with much difficulty. Squatters in rest of the area were relocated after unsuccessful land sharing negotiation as shown in table below:

Table 33: Land sharing cases in Cambodia

Name of Settlemen t	Numbe r of families	Tota l area (ha.)	Landowner before land sharing	Negotiati on period	Intermedia ry organizati on	Summary of outcome for slum dwellers
Borei Keila	1,776	14.1	MoEYS*	2003- 2004	MPP	2 Ha. reserved to rehouse residents in 10 apartment blocks; developer received 2.6 ha. for commercial development and later bought remaining portion of land
Dey Krahom	1,465	4.7	MPP*	2003- 2005	None	Planned relocation of all residents, after unsuccessful land sharing negotiation
Railway A (Santiphe ap)	70	1.3	State Railway Co. lease to developer*	2003- 2008	None	Individual relocation of residents, after unsuccessful land sharing negotiation
Railway B (Roteh Pleung B)	255	10	State Railway Co. lease to developer*	2003- 2008	None	Individual relocation of residents, after unsuccessful land sharing negotiation

^{*}Landowner status in all four settlements was disputed. Long-term residents claimed legal possession of their properties according to the 2001 Land Law. The MoEYS claimed ownership of the land in the case of Borei Keila; the MPP claimed ownership of the land in the case of Dey Krahom; and in the case of the two Railway settlements, the developer claimed legal use of the property leased from the State Railway Company.

Abbreviations: MoEYS = Ministry of Education, Youth and Sports; MPP = Municipality of Phnom Penh; ha. = Hectare

Source: Rabé 2010, pp.8

Some of the major reasons behind such outcomes in Cambodia can be the weakness in institutional and legal frameworks of the country as well as weakness in leadership and organizational support. The diversity of people, lack of trust among each other and their differences in opinion was an obstacle in obtaining a common goal. This was also due to ignorance of the residents regarding the details of the process and their land rights since they were not adequately involved in negotiations while deciding the design, plots or compensation. While a high level of community organisation and participation in Bangkok lead to unified voice and ease of negotiation, in Cambodia the society was divided and seeking for short term monetary gains. Also institutional support such as provided by NHA in Bangkok was almost non- existent in the case of Phnom Penh. Lack of proper law enforcement and ignorant attitude of the government towards activities of illegal "selling out" names and titles added to the problem. The government involvement was in fact much biased and top-down and in many ways corrupt. As such land sharing failed as a tool to provide secure housing in Cambodia where informal market seemed more potent. "As an instrument to provide secure tenure, land sharing may not even be a sufficient inducement for residents of informal settlements, who are able to negotiate with developers even though they enjoy no formal land rights as such" (Rabé, 2005, pp. 11).

Practices indicate that application of land sharing can take place over wide range of circumstances with varying arrangements made through negotiations. The criteria of success depend on various political, legal, physical, social and economical scenarios. Due the flexibility, the practices of land sharing have brought different results in each country and in each case.

Further lessons learnt from practices are discussed in the following sections

2.5.4 Relevance of land sharing

As seen from these cases, land sharing has different performances in each case. Some of the dynamics of land sharing that affect the redevelopment and influence its outcome are discussed below:

Perception of tenure security: The irony of implication of Land sharing is that - it is relevant in squatter communities only when there is fear of eviction. In countries, where the rights of slum and squatter settlement residents are better protected and evictions are rare, land-sharing may not be acceptable to squatters (Islam and Yap, 1989). If the country has strong policy towards regularization and upgrading of slums, it is difficult to evict squatters even from private land they have invaded. As such communities may not prefer to move - even temporarily, especially since reconstruction and resettlement under land sharing consumes much time. If the residents have a perception of tenure security such as de facto or through political support, they become the dominant party in negotiation -for instance in Day Krahom, the 2001 Land law provided them sufficient protection to believe they own the land (Rabé, 2009, pp. 2). Often in such case, they can suggest other alternate solutions than land sharing which needs much compromise in terms of land and housing.

Rise in land values do create incentives for squatter communities to participate in formalization through land sharing which allows them to benefit from shared land values. Even under such circumstances, if they hold de facto tenure, squatters may prefer to dominate over landholding and informal land market since tenure insecurity is not an issue due to tolerance policy over squatter communities. "Land sharing is, therefore, only possible in slums under serious threat of eviction. Where no such threat is present, the slum community feels no need for land sharing." (Yap, 1992, pp. 66)

Extent of conflict and timing of negotiation: Land sharing can be more relevant in cases where there is some level of conflict over a piece of land and both parties want to hold on to it. Timing of negotiation then becomes crucial. If the proposal of land sharing is made at a time when there is no conflict over land and the land prices are still low then, neither will the land owner try to capitalize the value nor the land holders be willing to compromise their free housing. Although, in such timing, land sharing could act as conflict-avoiding instrument, it is barely practical (Islam and Yap 1989, pp.123-124).

However, if the land prices have raised and the landowner seeks to clear the land for commercial uses, conflict will arise. If the squatters resist eviction long enough, it will be increasingly expensive for the landowner to clear the land. Also humanitarian agencies and civil societies may voice against eviction if the conflict does not resolve soon enough. And this is when both parties may be willing to compromise to the agreements of land sharing. In such a case land sharing becomes a conflict-resolving instrument and more feasible although not the best policy solution –since it becomes a curative action and not preventive one (Islam and Yap 1989, pp 123-124).

2.5.5 Potentials of land sharing

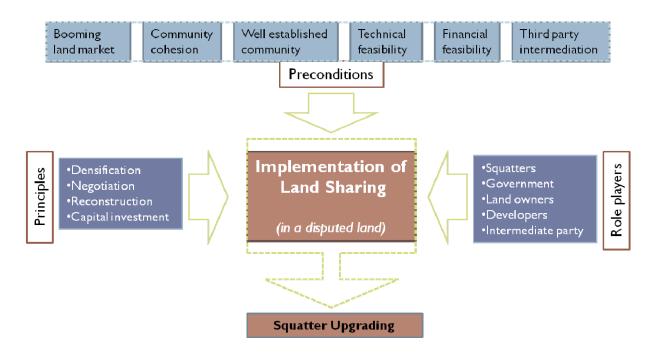
Land sharing may not be universally applicable; however if conditions are suitable it can be a good instrument for provision of secure tenure and has advantages over two other presently available types of low income housing projects- sites-and-services schemes and squatter settlement regularization and upgrading projects (Islam and Yap 1989, pp.1). Governments have more and more difficulties finding land for sites-and services schemes in a suitable location and at prices affordable for low income groups. Moreover, residents in sites-and-services schemes have to move from their original places of residence (near centers of employment) to new sites (usually in the urban fringe). Such a move is costly and may lead to a loss of employment and income opportunities. As for squatter settlement regularization and upgrading programs, they remain limited to settlements constructed on public land. Private landowners usually refuse to cooperate as they consider squatting to be an illegal act which should not be rewarded. They are only prepared to sell their land to the government or the squatters at market prices which are obviously not affordable to low income families.

Land-sharing may be a solution for slums and squatter settlements on private land and on public land if the owner is reluctant to cede the land for regularization and upgrading of the settlement. It combines some of the advantages of squatter settlement regularisation and sitesand-services schemes: it leaves the low income community on a site near its employment opportunities, yet does not deprive any property rights cherished by landowners.

Practices as mentioned above, suggest that Land Sharing is applicable to wide range of contexts and not necessarily restricted to a set of conditions. Levels of negotiations vary from each context bringing flexible tenure solutions to the problem and often increasing the land value which can be shared by both the parties. Considering that land sharing simplifies the clearing process and can save developers valuable time, there are reasons to believe that it can benefit developers as well as slum dwellers in future projects (Angel and Boonyabancha1988, pp.123-127). Land-sharing may be a useful strategy for slums and squatter settlements where landowner and community are engaged in a prolonged struggle for the control over the land and none has a clear prospect of success. If land-sharing can resettle a large majority of the families on the community's part of the land at affordable costs, it can be an effective low income housing strategy.

2.5.6 Conceptual framework

Figure 22: Concepts behind Land Sharing



Overall, the literature study shows that Land sharing can be a useful tool for squatter upgrading in a land that is facing strong dispute between owner and occupants. The process basically involves negotiation, densification, reconstruction and investment. However, it is necessary to ensure that all the prerequisites are met before the formulation of such a project since it is not applicable under all conditions.

Chapter 3: Research Design and Methodology

This chapter outlines the nature of research, explains methods used to inquire the problem and discusses the analytical framework which was to evaluate the research findings. It provides justification to the choice of research strategies, instruments, subjects and process of survey proposed that they are appropriate and will result in valid and reliable conclusions.

3.1 Research strategy and type

The research strategy of this paper is case study analysis which addresses a single case of Sankhamul settlement. According to Yin 1994, pp.1, "Case studies are preferred strategies when "how" or "why" questions are being asked about a contemporary set of events over which the investigator has little or no control. Case studies can clarify a decision or an event and explain why those decisions were taken or how the event took place with what result (Yin 1994 2003). Since the scenario of this thesis is in line with Yin's narrative, it uses case study as a technique to derive answer regarding why a recent event of "land sharing" was abandoned in the context of Sankhamul.

The research basically uses qualitative methods to analyze results of failure to launch the proposed land sharing project. It also examines subjective aspects such as perception of stakeholders involved. Leedy and Ormond 2009, suggest that qualitative research serves in description, interpretation, verification and evaluation of the research problem. This research too describes the nature and setting of the event, verifies the process of implementation and evaluates if the project was appropriate for the context. Also quantitative analysis is done for certain necessary calculation such as financial feasibility and figurative representation of survey results

In order to answer the research questions, this study makes an explanatory approach. First part investigates and explains the reasons behind abandonment of land sharing project by judging them against the set of preconditions as posed by theory. The second part analyses the perceptions of stakeholders involved. It also explains if the project was applicable in the context. This research can actually serve as a point of departure for carrying out more detailed analysis in future to address the problems of squatter settlements throughout Kathmandu and possibly in the rest of the country.

3.2 Unit of Analysis

According to Yin 1994, unit of analysis in a research is the case that is being studied. This research focuses on the case of land sharing project proposed in Sankhamul squatter settlement. The project was chosen since it was the first and the most recent attempt of land sharing in Nepal which enables the researcher to gain insight upon the recent approach made towards squatters in the city. It is also an ideal case since it is the first project for squatters whose funding was initiated by government after the revolutionary change of the national constitution from being Kingdom to a Republic Nation in 2008.

3.3 Data Collection Instrument

Adaptation of case study as a strategy allows the use of various methods of data collection which includes a combination of historical and recent data, systematic interviewing and direct observations. The sources of data include:

3.3.1 Primary data collection

Three main instruments were utilized for primary data collection namely:

- Survey through questionnaires among squatters
- In-depth Interview with officials from government and NGOs
- Direct observation by researcher in Sankhamul settlement

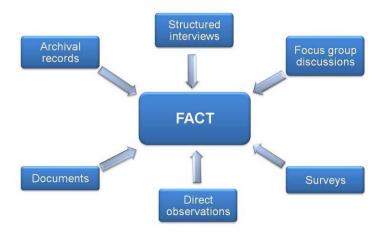
Such primary data were collected within the time period of July1, 2010-August 5, 2010. The questions for interviews and survey are presented in Annex 2.

3.3.2 Secondary data collection

Various sources of secondary data were:

Documents and literatures relevant to squatter settlements in general Archival records from relevant to the project

Figure 33: Convergence of multiple sources of evidence



Adapted and modified from Yin, 1994

3.4 Sampling Strategy

Respondents were selected through purposive sampling for collection of primary data.

Pilot Survey: Before the actual survey, a pilot project was performed on a family of four from another squatter settlement. This survey revealed a very important distinction between the answers of the father and the son showing that generational gap would create different

choices regarding attachment to the place, choice of housing and choice of tenure. Accordingly, the sampling of the real survey made sure that different age and gender groups were included.

Survey: Main respondents of the survey were residents of Sankhamul Squatter Community. The population of the area is 503 and household number is 105 (2008 survey) out of which purposive sampling was done among 25 households within the community. The respondents for survey were selected based on their involvement in land sharing negotiation (i.e the community leaders age and gender. These categories of sampling were purposively chosen based on the pilot survey. Hence, strategic combination of these categories enabled the researcher to gain more insight in the case.

Table 44: Respondents of survey

Criteria	No. of households	Instrument
Youth male	5	Survey through open-ended
Youth female	6	questions and closed-ended
Elderly male	6	questions
Elderly female	6	
Community Leaders (elderly men)	2	

Youth: 15-40, Elderly:41-85

Interviews were conducted among government officials from DUDBC and HPBCIDC. Also officials of involved NGO- Lumanti and members of two squatter organisations NBBSS and NMES were interviewed. The respondents for interview were chosen on the basis of their involvement in the project and expertise. Snowball sampling was utilized as a strategy when some interviews revealed other relevant respondents during the process. Seven people were interviewed formally regarding the Land Sharing case.

Table 55: Respondents of interview

Stakeholder	Organization	Position	Instrument
Government	DUDBC	Deputy Director General	Open ended questions
(Policy Level)	HPBCIDC	Project Manager	through interview
Government	DUDBC	Senior Divisional Engineer	
(Project Level)	DUDBC	Engineer	
Intermediary	Lumanti	Executive Director	
Squatter	(NBBSS)	Chairperson	
Organizations	(NMES)	Executive member	

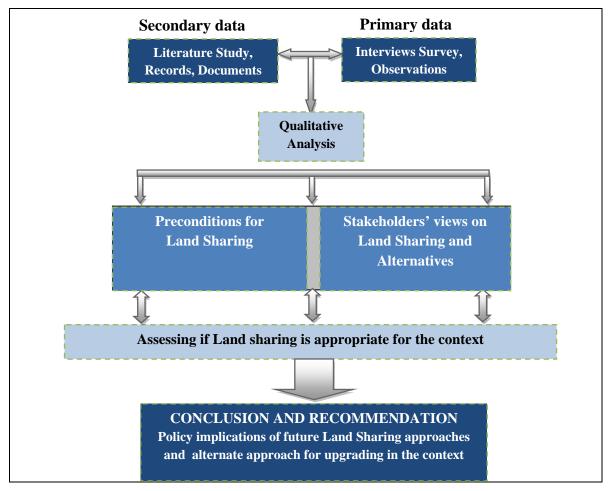
Apart from interviews with offices directly involved in the case, additional interviews were also taken with three organizations for supporting information as shown below:

Table 66: Respondents of supporting interviews

Organization	Position	Relation to the case
Squatter Problem Solving	Chairman	Political approach towards squatter
Committee		issues
UN-Habitat Nepal	Habitat Manager	International involvement in squatter
		issues
NSET	Urban Planner	Physical mapping of the Sankhamul
		settlement after abandonment of LS

3.5 Data processing and Analysis

Figure 44: Analytical Framework



After the collection of data, interviews were systematically transcribed and coded whereas answers of survey were input into SPSS software to analyse and compare the correlation between different variables. To perform qualitative analysis, the coded data was categorized under different variables of preconditions and perceptions. A logical matrix was created to compare the data against the set of preconditions and recommendations from literatures and understanding of views of stakeholders to ascertain if Land sharing was appropriate for the context. Further on, land sharing was compared with other approaches suggested by the

stakeholders to identify if any alternate approaches was applicable. Following figure illustrates the framework for data processing and analysis.

3.6 Validity and Reliability

For validity of data, observations and questioning was done at different times of the day among different sources-which is a method of triangulation, according to Easterby-Smith et al. (1991). This helped to verify that the responses are true expression of events and thoughts. Critical questions were asked to all the respondents to determine the accuracy of narration of the events.

Yin (1994), states "...conduct a research in such manner that if other investigators were to conduct the same research they would arrive at the same results". To ensure such reliability of data, records of interviews and observations were taken through notes, tapes and videotapes which were reviewed repeatedly at a later period for consistency. Interview questions and questionnaires were also pre-tested before field work to ensure that only relevant questions were asked. These questions were translated in the local language of Nepali for ease of understanding. The table below indicates the steps that were taken to ensure validity and reliability of research.

Table 77: Case study Tactic

Tests	Case study tactic (Yin 2003)	Case study tactic (The case of Sankhamul)
Construct validity	Use multiple sources Establish chain of evidence Have key informants review draft case study report	Multiple sources of primary and secondary data Asking similar questions to each stakeholder and checking if they match. Review of report by DUDBC &Lumanti officials
Internal Validity	Do pattern matching Do explanation building Do time-series analysis	Matching data against preconditions Explanation of events of negotiations and role played by each stakeholder
External Validity	Use replication logic in multiple-case studies	N/A
Reliability	Use case study protocol Develop case study data base	Study protocol to cover every issue (See Annex 1) Interview recording and data input in computers

Reference from Yin (2003)

3.7 Operationalisation of Variables

Table 88: Operationalisation of Variables

Research Question1:

Which preconditions were opportunities and constraints for application of Land Sharing project in Kathmandu?

Variables	Indicators	Sources of Data	Questions
Well established communities	Age of community	Survey Records	 How long have you been here? How many households have joined in the last 10 years?
Booming property market	Growth in land value Commercial developments	Comparison of local land prices over time, Interviews	 Has there been any significant change in land value over the recent years? Have any commercial developments been planned in this location? Does this area have potential for commercial developments?
Financial feasibility	Financial scheme proposed Affordability	Records, Interviews, Survey	 How was the project proposed to be financed? Was there any form of subsidy? Did the squatters have any saving groups to support to themselves financially? Could the squatters afford the housing?
Technical/Physi cal preconditions	Regulations Land available	Interviews, Survey	 Did the policy and legal framework support the implementation of project? Do regulations allow construction on the location? What percentage of land was planned for squatter resettlement? Is the area sufficient?
Proposed housing and plots		 What type of housing was proposed? Were equal plot sizes/ are given to all households? Was the proposed housing and plot size acceptable to the residents? 	
	Proposed tenure type Selection of beneficiaries Community Participation		 What was the type of tenure was proposed? Was it acceptable to the residents? What were the selection criteria of beneficiaries? Was there any plan to include external residents? Were the residents made clear about the technical aspects of design? Were you allowed to participate sufficiently in the negotiation? Were your opinions taken notice of?
	·		, ,

	Role and influence of third party	Interviews	What was the role of NGO involved?Did it help in solving any disputes?Was it a neutral body?
Community organisation	Organisations Choices of residence, tenure Internal conflicts Representation of leader	Interviews, Survey	 Is the community affiliated to any associations? What are the agendas and activities of the associations? Would you like to stay in this location or move? Why? Would you prefer to move in an apartment or single housing? Would you accept communal tenure if provided or want individual tenure? Has there been any internal problem amongst the community members? Did all the residents have similar opinions about land sharing? What is the role of leader? Do you think your all views and problems are well represented by the leader during negotiations with NGOs and government?
	Question 2: the stakeholder perspecti	ves regarding the relevan	ace of the project?
Need of Land sharing project	Perception of Security Level of conflict over land	Observations, Interviews, Survey	 Do the squatters feel threatened by eviction? Are the squatters given any political assurance of no eviction? Do the squatters possess any form of legal/semi-legal documents? Do the squatters pay any form of bills or rents? Do the squatters get access to any form of loans? Does the government want commercial developments in the area? How important is the location to both government and squatters and why?
Potential of alternate approaches	Relocation / Re-development/ Compensation/ On-site upgrading/	Interviews, Survey	 What new approaches would be appropriate for improvement of the squatter settlement? Which do you think is more appropriate: Relocation / Re-development/Compensation/ On site upgrading/ Site and Services

3.8 Limitation of research

The possible limitations of the study are as follows:

- Since the study is based on one particular case, the policy implications suggested in the conclusion may not be able to cover all circumstances in other squatter settlements in the city.
- Although the research had initially intended to include a focus group discussion it was not possible due to hesitation of intended respondents.
- The sampling strategy aimed to include renters within the squatter community. But
 during the field visit none of the "squatter-renters" agreed to answer questions due to
 restrictions by the "squatter owners". Perhaps it was because they were hesitant to
 reveal the facts about ongoing informal rental market in the settlement. Therefore,
 related data could not be included.
- Some of the official documents were confidential matter could only be referred for personal knowledge but not allowed to mention in this paper.

Chapter 4: The Context

This chapter provides a background of the issue. First part of the chapter explains the national urban scenario and relates it to the housing situation in Kathmandu. Formation of squatter settlements and consequent efforts of upgrading squatters in then discussed. The last part of the chapter details out the main case i.e. the proposal of Land sharing in Sankhamul squatter settlement.

4.1 Urbanization in Nepal

Dramatic growth of cities of the developing world has been under constant debate in the last few decades. Estimates indicate that the world's urban population is likely to cross 4.6 billion by 2020 out of which 2.2 million alone will increase in the developing countries. This means that the poorer countries will have to manage a population growth of 160% within a decade's time. Despite the global trend, level of urbanization in Nepal is relatively lower. More than 80 percent of the population in Nepal is still living in rural areas. The urban population of the country accounted to only 14% of total population in 2001 and is estimated to be 18% within 2015 (National Urban Policy, 2007).

Nonetheless, with economic growth induced by the service sector and foreign remittance as well as rural-urban migration due to economic opportunities and political instability, urbanization is taking place at a rapid pace in Nepal. A report from UN, World Urbanization Prospects in 2005 shows that the rate of growth of urban population in Nepal during the period of 2000-2005 was 5.29 percent which was one of the highest in Asia. Following table compares the population growth of Nepal with other Asian countries.

Table 99: Urban Population Growth in Asia

		rbanisation lation living	Urban Growth % growth per year			
	1950	1975	2000	2025	1950-1955	2000-2005
Asia (overall)	16.8	24.0	37.1	51.1	3.57	2.61
Japan	34.9	56.8	65.2	71.7	3.62	0.36
Korea	21.4	48.0	79.6	85.2	1.79	1.03
India	17	21.3	27.7	37.3	2.62	2.3
China	13	17.4	35.8	56.9	3.6	3.08
Cambodia	10.2	10.3	16.9	33.2	2.24	5.06
Nepal	2.7	4.8	13.4	27.2	4.12	5.29

Source: United Nations, World Urbanization Prospects: The 2005 Revision

The urban population of Nepal is spread over 58 municipalities, most of which are located in the Southern part of the country. National urban structure is imbalanced due to concentration of physical, social and infrastructure components mostly in Kathmandu and few other municipalities. This tends to attract rural migrants only in few of these cities. On one hand urban areas increasingly contribute to the growth of the national economy, on the other hand, growing number of people are facing scarcity of land and housing in the cities and submitting to low substandard living with inadequate housing infrastructure and services. The contribution of the urban areas to the national economy in Nepal is 61%, whereas the annual investment in the urban areas stands at only a meagre 2%.

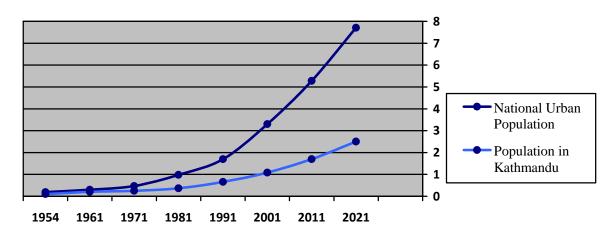


Figure 55: Urban population of Nepal and Kathmandu

Data source: http://www.cbs.gov.np/

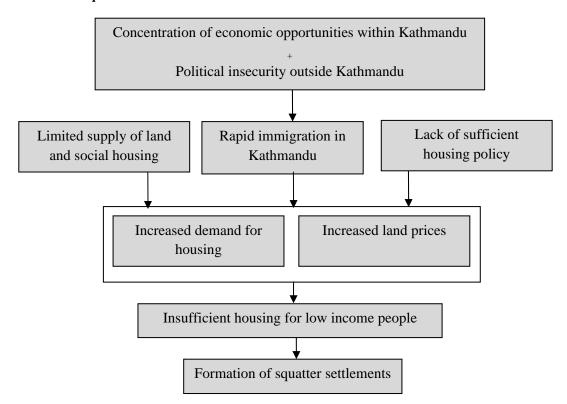
4.2 Formation of squatter settlements³ in Kathmandu

While the national urban population as per 2001 data is 15 percent, almost 61 percent of this urban population is present in Kathmandu Valley alone which is the national capital of Nepal (DUDBC 2007b, pp. 1 and Thani 2005, pp. 3). Urban activities of the country are majorly concentrated within the Kathmandu valley that comprises of three main municipalities-Kathmandu, Bhaktapur and Laitpur. Settlements are rapidly expanding wherever there is provision of roads, water and electricity. Among all the land uses in these urban areas, housing activities utilises maximum land. There has been enormous conversion of land from rural to urban use between 1971 and 1981, whereby the residential area of the city has doubled. Unfortunately, such growth has occurred in an unplanned manner which has lead to substandard development in the city. Organic and haphazard expansion has created urban sprawl where residential densities vary from as high as 700 persons/ha to as low of 10 persons/ha (Mathema 1999, pp. 4). This has been compounded by overcrowding, congestion and unhealthy living conditions due to lack of adequate infrastructure, open spaces and housing regulations in residential areas.

³ Squatter Settlement locally referred as *Sukumbasi Basti*, meaning settlement on an illegally encroached land.

Most of the supply of land for housing is being provided by land brokers and mostly focused on those who can afford to pay for it. The concerned department and limited municipalities have been engaged in land pooling which provided access to developed land; however, such a provision is also limited to those who already have land or who can afford to purchase it. Not much has been done to provide access to land for housing for the poor. Prices of land have soared in recent years, and most people have resorted to so-called "unauthorized" or informal house construction in the absence of 'developed' land within their means. General process of squatter formation in Kathmandu is shown by figure below.

Figure 66: Process of Squatter Settlement formation in Kathmandu



Due to the above mentioned factors, capital of the country has been experiencing increased number of squatter settlements over the decades. "Squatter settlements" in Kathmandu are basically illegal encroachments on public land by urban or rural poor. Often susceptible to forced evictions, these settlements are blighted communities in the city with extremely bad living conditions. Despite their vulnerability characterized by extreme poverty and lack of appropriate shelter and basic infrastructures, issues of these communities have rarely been addressed, rather they have been looked upon as minority and a nuisance to the city; communities that need to be discarded. Only until recently, growing size of the squatter population and increasing dependency of formal sector of the city on informal economic activities of the squatters has drawn serious attention in the public eyes.

In 1985, it was estimated that there were only 17 squatter communities in Kathmandu valley, but now the number has grown to 45 with further new emerging settlements. Majority of

these settlements (approximately 30) are located on the banks of Bagmati River and its tributaries; mostly due to the ease of accessibility of vacant public land along the 20m (60feet) setback from the river. According to an inventory study, 81% of the squatter families in Kathmandu live along the riverside, Often; the squatter communities are solely blamed for defilement of the river and their surroundings. Time and again, some of these communities are threatened with evicted for providing way for "development". However, attempts of eviction have never brought solution to the housing problems.

Table 1010: Squatter settlements in Kathmandu

Location	No. of	Total	Total	Name of squatter settlements
	settlemen	populatio	households	
	ts	n		
Bagmati	11	3,903	863	Shantinagar, Bijayanagar, Jagritnagar,
River				Gairigaun, Chandani Tole, Pragati Tole,
				Kalimati Tole, Kimalphant, Bansighat,
				Kuriyagaun, Sankahmul
Bishnumati	11	1,564	306	Dikhurechauki, Kumaristhan,
River				Budhhajyoti marga, Balaju Jagriti Tole,
				Sangam Tole, Ranibari,
Hanumante	1	2,422	589	Manohara Bhaktapur
River				
Dhobikhola	5	1,247	271	Shantibinayak, Devinagar, Bishalnagar,
River				Kalopul, Pathivara
Tukucha	2	843	176	Narayan Tole, Khadipakha
Other	16	2747	530	Palpakot, Anamnagar, Maijubahal,
Location				Kumarigal, Radhakrishna Chowk,
				Mulpani, Kapan Dhunge, Subigaun,
				Ramhiti, Mahankal, Dhumbarahi,
				Sukedhara, Mandikatar, Golfutar

Source: Status of Squatter Communities along Bagmati River and its tributaries in Kathmandu Valley, 2008

Lack of affordable housing for urban poor leaves no choice but to squat in vacant land closest to the city. But due to constant fear of eviction and low income, squatters hold back from investing for better housing which leads to poor living conditions. Most houses in the squatter settlements of Kathmandu are temporary types without adequate infrastructure facilities. Squatter settlements along riverbanks have converted into dumping grounds for solid wastes and open sewerage disposal which in turn is adversely affecting the health conditions of its inhabitants.

4.3 Shelter policy and squatter upgrading efforts

Despite the issues, housing was never a priority sector in Nepal until the establishment of democracy in 1990. Thereupon a new constitution was established and shelter was finally recognized as a basic need and the agenda of "shelter for all" put forward. A National Housing Survey was then conducted in 1991 to understand the housing condition of the country, which presented a grim picture by showing the housing problems that existed due to migration, urbanization, population growth and deteriorating environment. It also showed a huge scarcity of dwelling units. In realizing the plight, the government formulated the "National Shelter Policy" in 1996 in collaboration with United Nations Organization and Habitat. Main goal of the policy was provision of good quality shelter for all the citizens of Nepal. The strategies and working policies included under this policy were based on the Global Shelter Strategy (GSS) adopted by United Nations in 1988. This policy aimed at identifying the right course of action for the implementation of short term (upto 2000) midterm (upto 2006) land long term (upto 2010) housing programmes (DHUD, 1996).

Although this policy did support provision of shelter for disadvantaged groups, it did not clearly mention the execution procedures and therefore no programmes were actually launched by the government. In fact some of the eviction attempts continued after the formulation of this policy. And so it lagged behind in addressing the issues of rapid increase of squatter camps in various parts of the country. Nonetheless, a few upgrading efforts were made by Lumanti which provided water and sanitation facilities in coalition with Water Aid Nepal in some of the squatter settlements. It also successfully resettled a squatter community under threat of eviction through the "Kirtipur Housing Project" with support from Kathmandu Metropolitan City, Slum Dwellers International (SDI), Action Aid Nepal, Water Aid Nepal, and Asian Coalition for Housing Rights (ACHR). But its major works with squatters were capacity building, initiating micro-financing schemes, organising community associations and building their linkages with international communities. As such, the squatters were highly mobilised and empowered by the NGO during the last decade while the government chose to remain rather ignorant and tolerant towards the issues.

Considering the extent of work initiated by Lumanti (the only NGO working for squatters) the concerned government body i.e. DUDBC invited the organisation for sharing relevant information and facilitating upgrading projects by signing a three year Memorandum Of Understanding (MOU) in the early 2005 [contract document] (personal communication, Kathmandu, August 2010). Yet, no significant projects were initiated immediately.

In 2007, after pressures from media, NGOS, international organisations and international treaties such as MDGs the government began revising the National Shelter Policy by formulating new regulations on land and housing to enable upgrading of squatter settlements. The new draft policy adopted the concepts of resettlement and on-site upgrading by stating:

"Squatter settlements (Sukumbashi Bastis) in various cities on risky land shall be resettled in new locations with small serviced plots, whereupon they can construct their own shelters and other settlements in safer location shall be gradually upgraded with provision of infrastructure" [Translated by author] (Draft National Shelter Policy, 2007, pp.12).

Based on the new draft policy, the government finally decided to launch an upgrading programme and set aside a budget. As a part of this effort, Land Sharing was proposed at Sankhamul squatter community by Lumanti to DUDBC in the February, 2008.

4.4 Land Sharing Proposal in Sankhamul Squatter Settlement

Land Sharing in Sankhamul Squatter settlement was the first pilot project of its kind in Kathmandu proposed as upon collaboration between an NGO (Lumanti) and the government (DUDBC). As per the contract between the two bodies in 2005, Lumanti had the leverage to utilize the government budget for facilitating upgrading projects. Hence, Lumanti conducted a study among three squatter communities along the river banks of Bagmati- Sankhamul squatter community, Bansighat squatter community and Kuriagaon squatter community. This was done with technical assistance from a group of three Thai architects working in a consultancy named 'Open Space Community Architects' hired by ACHR in 2008 (Lumanti and ACHR, 2008). After a thorough observation and study, the experts from Bangkok proposed a "Land Sharing" project in Sankhamul squatter community where upon inhabitants of all the three settlements would be accommodated into Sankhamul area and provided with upgraded housing. Land Sharing was considered as one of the viable approaches for the context of Sankhamul as this tool could liberate part of the riverbank for commercial development and enable both- upgrading of living conditions of squatters and revitalization of riverside.

The design of Land Sharing was an outcome of influence from similar projects in Thailand and so the experiences from Thailand were borrowed while proposing the project. The group of three architects from Thailand, closely observed the three communities, studied the surrounding areas and traditional building styles of the city before designing the project. Their study indicated that Sankhamul had sufficient land to accommodate inhabitants from all three settlements together with commercial developments (Lumanti, interview with author, Kathmandu, August 2010). Also, Sankhamul had potential for commercial development due to the rapid increase in land value in the surrounding and growing demand for commercial and institutional buildings in the area. Furthermore, the community was well-organised and cohesive. Some of the leaders within the community were closely involved with Lumanti in past projects of sanitation, micro-finance, trainings and capacity building. It was thus assumed that negotiations with the community would be much easier in Sankhamul than in the squatter settlements elsewhere. For these very reasons Land Sharing seemed most feasible in this particular settlement and was thus selected for the project.

4.4.1 Proposed Design

According to the proposal, the existing row houses would be demolished and new constructions would be made at the north corner of the site, liberating 17000m^2 of land out of the total 35452 m^2 . This liberated land would be sold to developers for commercial purpose. Subsequently, the profit from selling the land would be used as cross subsidy for construction of houses for the squatter inhabitants. The ambitious housing project aimed to accommodate a total of 220 families which included 105 families from Sankhamul, 100 from Bansighat, 9 from Kuriagaon and 6 additional units.

Picture 33: Proposal for accommodating inhabitants of three settlements in one



Source: Lumanti and ACHR, 2008

The housing complexes were designed as four storey courtyard apartments. These included 220 housing units for families in the first and second floors, 220 rental shops in the ground floor, and further space for rental housing on the third floor if desired. Further on there were proposal for inclusion of other facilities as shown by the box below:

Box 33: Elements of proposed housing package

- Total housing units: 220
- Rooms for rent:114
- Shops as income for community: 220
- Childcare centre, school, community centre, health care centre
- Green space and playground in courtyards
- Riverside protection and water treatment

Source: Lumanti and ACHR, 2008

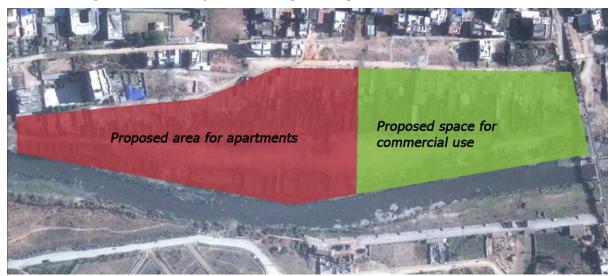
Although the proposal mentions building components as shown above, it did not have a detailed design of structures other than the housing units. Practically, facilities such as child care, school, health and community centre seem very ambitious and perhaps could not be accommodated if the liberated space was to be sold off to developers for commercial use.

Picture 44 Existing settlement with compact row houses and backyard open space



Source: Google Earth, 2010

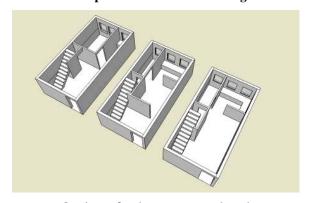
Picture 55: Proposed Land Sharing scheme with space for apartments and commercial use

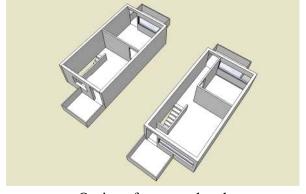


Source: Lumanti and ACHR, 2008

The building would be frame structure in design allowing incremental construction at its uppermost level for rental rooms. Each house was designed as a double storey unit, with entry at first floor level. Each housing unit would have approximately 46 m² including both floors which is rather small as compared to the area of existing houses. Only the outer walls and staircase of the units would be constructed initially as a shell design to allow flexibility of interior designs as per the residents' choice. Hence each housing unit could have 3-4 rooms, bathroom and kitchen depending on the users' placement of interior walls. The possible options for design are shown in the pictures below.

Picture 66: Proposed incremental housing units





Options for lower entry level *Source: Lumanti and ACHR*, 2008

Options for upper level

4.4.2 Proposed process for implementation

The institutional frame work for execution of the project was not clearly outlined. However it was certain that the inhabitants would receive the use-right over land for free but would have to pay for the housing units. The transfer of housing and ownership of land were not detailed out in the proposal, due to lack of official working policy during the period. It was only after the abandonment of the project one year later that a Working Policy was prepared by joint efforts of concerned government bodies, NGOs and members of squatter associations in 2009. If the policy had been outlined on time, the project would be implemented as follows:

- Firstly, the land would be transferred to DUDBC from the current owner; in this case -UN Park Project, Ministry of Environment; by adopting existing laws.
- Land ownership would remain with government for 30 years and the inhabitants would be granted right-of use of land. This ownership was renewable after 30 years.
- Government would hire developers through tendering for construction of designed housing units.
- Construction costs would be availed from government subsidies and cross-subsidies through sale of liberated land. Surplus amount, if available, would be used as community fund trust for future use.
- According to the clause of "Financial resource mobilization", 15 years of housing loan would be available to the target group and amount would not be more than 3.5 lakhs NRs (US \$ 5477) to each family for purchase of housing units
- Once the target group repaid the housing loan and remained in the settlement throughout the duration of right-of-use then it was possible to transfer the land ownership with Government's prior acceptance. Thereafter the community would be able to gain land ownership in the form of communal tenure.
- Selling of housing units would only be allowed after payment of loan upon acceptance of the community association.

The Land Sharing proposal was presented to DUDBC by Lumanti in February, 2008. However the government could not accept the proposal due to some legal constraints realized by stakeholders only at a later stage of the proposal. The land was not legally appropriate for construction works due to existing regulations of setbacks and configuration of river flow. Also due to lack of working policy the government could not execute the project immediately. (The details of these legal constraints are discussed in the section 5.1.4)

Despite disapproval from government, Lumanti was still convinced about the possibility of the project and insisted on updating the cadastral map, being flexible in the setback regulations and quickly formulating the working policy. The government i.e. DUDBC did start preparing the working policy but backed off from changing the regulations. Also the squatters disapproved of the apartment designs and insisted on row housing. Lumanti was unable to convince either the squatters or the government.

Yet the government continued to exercise row housing designs by attempting to accommodate as many residents in the legally available portion of land. It also continued preparation of working policy. But before working policy could be approved, the one year time-frame for utilization of government budget was over. Unfortunately, upon completion of fiscal year and the file of Sankhamul squatter settlement was **closed**.

To sum up, Land Sharing project was proposed as a means of upgrading the squatter community in Sankhamul and utilize the budget allotted by government for the first ever initiative of such kind. Initially, the project was highly anticipated⁴ by all stakeholders as it projected a positive approach towards addressing squatter issues (Tanaka 2009, pp.157). But, the proposal was much based on the experiences of Land Sharing in Thailand and seems to have overlooked the legal scenario of Nepal. Additionally, the design appears to be unrealistic in attempting to accommodate residents from three different communities in one area which could be extremely controversial as exemplified by prior experiences of difficulties in selection of beneficiaries in other Asian countries. Similarly, proposal of multi-storied apartment buildings may not be a convincing design as indicated by earlier Land Sharing practices and inclusion of facilities other than housing seems more ambitious than possible.

On the whole, relevance of the proposed project seems rather questionable- findings of which are discussed in the next chapter.

⁴ Also an enthusiastic mention of the project in a national newspaper article titles "Apartment for Sukumbasi" on 19 May, 2009.

Chapter 5: Findings and Analysis

This chapter explains the findings based on primary and secondary data collection and analyzes them based on literature study presented in earlier chapter. The first and second parts of this chapter provide answers to the two specific research questions by respectively examining the preconditions and analyzing stakeholder's perceptions on the case.

5.1 Preconditions for Land Sharing in Sankhamul

The literatures state six different criteria that need to be met in order to successfully implement land sharing projects. The following section analyses whether these preconditions were opportunities or constraints in case of Sankhamul squatter settlement as a part of answering the first specific question of this research.

5.1.1 Well-established community

According to literature, longer establishment of the community creates affinity towards the land and makes the inhabitants claim their right over the land. As such the inhabitants are willing to compromise a part of their land through land sharing in order to stay in the area. Such an attitude is also seen among inhabitants of Sankhamul community who have resided in the place since 1973 and this provides opportunity for Land Sharing.

Initially, certain parts of the occupied land was owned by a businessman Bishnu Shankhar Shrestha who considered it to be risky and unproductive and handed it over to some squatters at nominal price [informal contract document, 1988](personal communication, Kathmandu, August 2010 ⁵). The squatters who were unable to afford formal housing within the city at that period felt fortunate to have a piece of land for shelter within the Kathmandu valley. They made Sankhamul their home out of sacks, bamboo and water weed. The number of residents gradually grew over the period of two decades there after it remained to a constant of 105 (57 years old community leader, interview with author, Kathmandu, August 2010). The community was a long row of houses with their backyards reaching up to the river side. The open back yard space was used for cultivation of vegetables for both household and commercial use. After a few years of stay and working their way through wages, they started getting established in the city and earning a better living. They began upgrading their houses in attempts to make them permanent. Their affinity towards the place started growing with time and investment. These created more reasons for inhabitants to desire formal tenure over the land.

⁵ This is a contract document signed I between Mr. Birendra Kumar Shresth a (a local resident in the squatter settlement) and Mrs. Ganeshmaya Shrestha (wife of the deceased owner Mr. Bishnu Shankhar Shrestha) as a proof of handing over the land (certain parts of the occupied land) at a nominal price.

Meanwhile, the river was constantly changing its course and receding in width, leaving behind a larger portion of dry land. This not only added more area to the settlement but also lowered the risk of flooding and land slide (Community leader, interview with author, Kathmandu, August 2010). With time, the surrounding neighborhood that was originally agricultural and crematory grounds began growing as residential area. The location value thus gradually increased. After two decades of its establishment, the surrounding land value had substantially increased. Also people had established themselves at work at close proximity (64% respondents had jobs at walking distance). Due to these factors, the territorial attachment of the land grew stronger among the squatters. When asked about their feelings towards the location, some of the replies were:

"It doesn't matter to me if this looks like a slum to your eyes, in my eyes this place is a heaven"- (57 years old housewife, interview with author, Kathmandu, August 2010)

"I was born there (pointing out to a nearby house) and got married here in the same settlement. I have nowhere else to go, this place is my life"- (27 years old housewife, interview with author, Kathmandu, August 2010)

Despite such attachment to the place, the replies from the elderly and younger people vary to a certain extent. Since the older generation worked hard to get their families established in the area, they have more sentiments over the land. But the younger generation grew in better conditions and therefore do not necessarily hold the same sentiments. The research indicates significant correlation between the older age and their affinity towards the location. Elderly residents do not prefer move out of the location at all but the answers vary among younger residents. When the respondents were asked if they would ever move out of the location, their replies were as shown in the figure below.

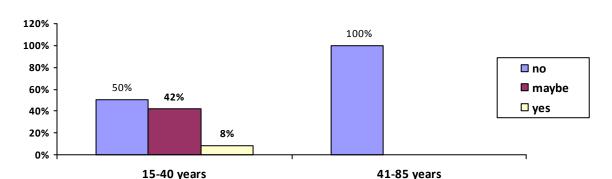


Figure 77: Preference for moving out of the location

Nonetheless, most of the younger generation still prefers to stay in the location and the community as a whole is determined to make the land their own formally. Such an attachment to their land could have only grown out of longer duration of stay in the area. This determination to hold on to the ground was definitely a positive point for possibility of land

sharing. If the residents were willing to give up the land, the land need not be shared, but since they are insistent on staying, government would have to persuade them to compromise a part of it. Hence, the long age of establishment of the community presented an opportunity for implementation of Land Sharing.

5.1.2 Booming property market

Since the land occupied by the squatters is illegal it does not have a legal market or even much of an informal market at present. But the land value of surrounding area has been escalating rapidly in the recent years and it continues to grow. According to the local residents, surrounding land value has raised ten folds over 37 years as shown below:

Table 1111: Calculation of Land Value

Year	` '	Average inflation rate	Real value at proposed period (NRs.)	Value in US \$
1973	10,000	8.23%	159,000	2,488
2008	15,00,000	-	15,00,000	23,475

Note:

- 1ana= 31.796 sq.m
- Calculation by author as per information on rates from interviews in 2010 and inflation data provided by Nepal Rastra Bank 2007, pp. 6- average inflation rate of Nepal from 1976-2006 shown as 8.23%. Due to lack of further data, the author has assumed same rate for 1973-2008.

"The area of land used to be measured in ana a decade earlier, but now it is measured in hands" – (50 years old local resident, interview with author, Kathmandu, August 2010)

Also the land-use has been changing over the years. Earlier an agricultural belt along the river front, the locality now is an attractive residential area to the increasing urban population. To cater the needs of these new formal residents, the municipality has been increasing its services in the vicinity. The locality has good road linkages and transportation services, water, electricity and other infrastructures. Also a number of schools, institutes, shops and commercial buildings are emerging in the neighborhood.

"When we first arrived here, the entire neighborhood was an agricultural land. I still remember pointing out our small hut from New Baneshwor Chowk (a major road junction 1 km away) to my so, we could easily locate it since there was no big structure to obstruct our view. Now it is a concrete jungle. There are every types of buildings and all facilities you want" – (52 years old community leader, interview with author, Kathmandu, August 2010)

Such booming property market increases the anticipation of being formalized among the squatters so as to gain a share of land value. According to Yap 1992, pp.16-17, land sharing can be **justified in principle** by the right of slum dwellers to benefit from a part of the increased land value. Increase is result of the investments by society as a whole and not just the owner who bought the land and left it vacant, therefore the society can claim a portion of

the increased value. This justification is regularly used by the squatters in Sankhamul while placing demands of legalization to the government.

"Our fathers invested in the land when everyone else thought it was a waste land. Today when the land value has increased, it has become a target in all eyes. But only we deserve the right to gain profit over the land because it is us who have been preserving it so far." - (27 years old member of NMES and resident of Sankhamul, interview with author, Kathmandu, August 2010).

This rapid rise of surrounding land value and change in land-use also provides enough incentives for the government to desire the land, legalize it and make substantial profit from commercial developments. Possibility of Land Sharing is thus heightened by the desire for land by both the squatters and the government sector. Hence the booming property market (even the formal booming market of the surrounding) is a drive for Land Sharing in Sankhamul. This very potential of the land was recognized by the architects of Bangkok, who designed apartments and not row housings for the squatters so that more vacant land could be capitalized through commercial use.

5.1.3 Financial Feasibility

Land sharing project is considered financially feasible if the cross-subsidy from commercial development is large enough to compensate most of the project costs. The project proposed in Sankhamul could gain its income by selling off the liberated land to developers (assuming that the entire parcel of occupied land as visible in satellite map, 2010 was legally available for executing the project). This amount could be substantial as a cross subsidy for incurring costs of construction due to the large available area and booming land market. Additionally, it would charge the residents a nominal price for housing as well as receive government subsidy from the budget announced. A surplus amount would be used as a community fund for future use. The residents could access loans from their own saving cooperatives and pay the amount in instalments over a period of 15 years. Following table indicates the basic costs and incomes of the project.

Table 1212: Calculation of Costs

Sno	Description of Item	No	Quantity	Unit	Rate	Amount	Remarks
1	Cost of land purchase	-	-	-	-	-	Public land does not need to be purchased
2	Demolition of existing houses	1	7,506	Sq.m	7,532	56,535,192	Demolition rate of load bearing structure
3	Temporary resettlement of families	50	12	Month	7,000	4,200,000	Only 50 houses shall be resettled in nearby rental housing.

4	Construction of frame- structured building	4	5,024	Sq.m	30,666	616,263,936	Construction rate of frame structure building including pavements and coutyard spaces
					Total		
					NRs.	676,999,128	
					Total		
					US\$	10,594,666	

Table 1313: Calculation of Incomes

Sno	Description of Item	No	Quantity	Unit	Rate	Amount	Remarks
1	Sale of Land Liberated	1	17,000	Sq.m	37,692	640,767,916	Rate as per the formal land market value in 2008
2	Payment of housing by inhabitants	220	1	Flat	350,000	77,000,000	Each household has to pay for its individual housing
3	Subsidy from government	1	1		150,000,000	150,000,000	Allocated Government Budget
					Total NRs. Total US\$	67,767,916 13,580,093	

The surplus amount= <u>US \$ 2,985,427</u>

Note:

- This calculation was based on an assumption that the land could have a formal market.
- Calculation by author as per the information on land values gathered during interviews in 2010 and building construction rates as per the data obtained from, Kathmandu Division, DUDBC, 2008.

The surplus obtained from calculation indicates that the project was definitely feasible in financial terms and therefore provided an opportunity for implementation of Land Sharing.

Interestingly, the research reveals that despite the nominal payment for housing and loans available only 76% of the respondents were willing to pay for new housing; the rest wanted it for free. Experiences of Land Sharing in Cambodia have shown that provision of free housing as in Borei Keila case have led to instant selling off or renting, where as in all the cases of Bangkok, slum dwellers had partially invested in their new land and housing through loan

schemes which turned out to be a successful low-income housing solution (Rabé 2010, pp 6-11). Now considering the huge amount of surplus of the project in Kathmandu, free provision of housing would have been possible, but not a feasible policy option for the government. Since Lumanti and DUDBC are well acquainted with the experiences of Land Sharing from foreign countries, they would not have opted for provision of free housing to squatters and so it would have been a difficult negotiation between them and the squatters (DUDBC and Lumanti, interviews with author, Kathmandu, August 2010).

Nonetheless, it can be stated that 'financially' the proposal posed no constraints for Land Sharing. Rather, the hurdle would be lengthy negotiations for convincing the squatters to contribute certain amount to their housing.

5.1.4 Technical Feasibility

Land Sharing is considered technically feasible if the land is sufficient to accommodate new constructions for both squatters and owners, if design is in accordance with existing regulations, if the design is attractive enough to all stakeholders and if the selection of inhabitants to be housed is considered fair by all involved (Rabé 2009, pp.127). But in Sankhamul none of these criteria were fulfilled.

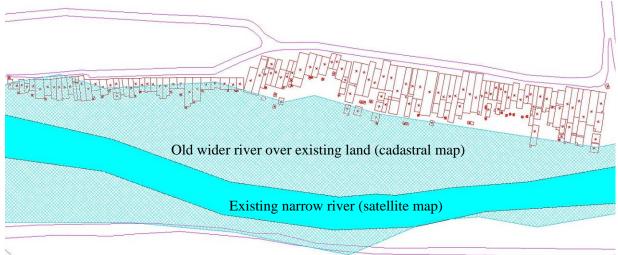
One of the major difficulties for the government to agree upon implementing the project was the legal constraints. Since DUDBC as a government body has a strong responsibility to abide by the existing rules and regulations, it was obliged to take a step back due to some legal obstacles as explained below.

Legally non-existent land: One of the major restriction faced by government to proceed any further was that most portion of land occupied by Sankhamul squatters at present did not exist legally in the survey records of past. As per regulations, the official cadastral maps have to be referred for any construction works. The cadastral map of Kathmandu Metropolitan was prepared by the Survey Department in the year 1965 and was not revised thereafter. This map indicates a wider course of river which has substantially narrowed down today. Much of the river flow in the past was over the area that is a dry land on which the settlement remains today (Cadstral map 1965). As such, out of the 35452 m² of visible dry land only 9975 m² of land legally exists in cadastral map of the city (Physical Mapping, NEST 2010). Due lack of any updated data government is forced to overlook the existing conditions. Lumanti however insists on continuation of project based on the argument that government has the power and responsibility to update records for a public good.

"Government has revised rules according to changing times and conditions many times in the history, why does it hesitate now? Why cannot the government simply revise the survey records?"- (Lumanti, interview with author, Kathmandu, August 2010) Government, on the other hand, argues the possibility of changing rules by saying:

"Whenever there is controversy over any piece of land, the oldest mapping records have to be followed, whether there is updated data or not. Since this is a conflicting land, illegally held by squatters we cannot be flexible with regulations" – (DUDBC, interview with author, Kathmandu, August 2010)

Picture 77: Overlapping cadastre map of 1964 and satellite map of 2010 at Sankhamul



Source: Physical Mapping of Sankhamul, NEST 2010

River bank regulations: Moreover, the municipal By-Law of Kathmandu states a construction setback of 20m from river banks of Bagmati River to prevent possible disasters from flood and land slide. Also due to poor soil conditions near the banks and in general a low construction quality of buildings, the setback rule had to be strictly followed (Kathmandu Valley Town Development Committee 2007, Section 2, pp.24-25).

Additionally, this setback is also intended for future use by a government body HPBCIDC (High Powered Bagmati Civilisation Integrated Development Committee) which has a master plan for constructing 12m wide green belt and 8m wide road along the Bagmati River throughout the city area for conservation purposes (HPBCIDC 2010, interview). These criteria further decreased the area of constructible land in Sankhamul to 4140 m² leaving insufficient area for construction of any apartment buildings as designed in the Land Sharing proposal (Physical Mapping, NEST 2010).

Absence of working policy: The biggest institutional flaw in the process of this proposal was announcing the program without any backup of a working policy. This policy was to be the guideline for step-wise execution for transfer of land ownership, construction procedure, payments, form of tenure, transfer of use right and other legal aspects that was extremely important for carrying out the project- all of which needed to be approved by the Cabinet of

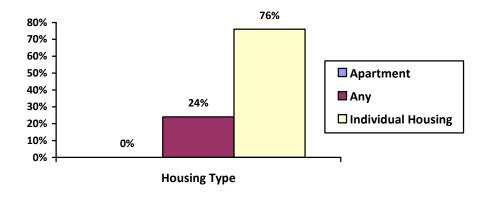
Ministers of government of Nepal. Without such a policy no form of upgrading project could be executed. Strangely, such an essential aspect of paper work was completely overlooked by the stakeholders before commencement of the project (DUDBC and Lumanti, interviews with author, Kathmandu, August 2010).

The absence of working policy was realized only after the negotiations began. The entire process had to halt thereafter until the formulation and approval of the working policy document. The government formed a committee of officials from government body, UN-Habitat, NGOs including Lumanti and members of squatter associations to advice upon policy actions (Draft Working Policy 2010, pp. 6-7). But, the budget period passed by before the completion of the document and negotiations for the proposal could not be continued further. Although the proposal dialogues could not continue, the government continued with formulation of policy in the next budget year, which at the present date remains among the pile of files at the office of Cabinet of Ministers waiting to be approved (DUDBC interview with author, Kathmandu, August 2010).

Apart from the government, the squatters also had inhibitions about the technical aspects of the proposal. Basically they disapproved the design and selection criteria of inhabitants as explained below:

Criticism of design: The proposal had designs of apartment housing which would occupy less land as compared to individual housing and could be vertically expanded. This was done with a purpose to liberate maximum land possible for commercial developments (Lumanti and ACHR, 2008). But the squatters in Sankhamul preferred to live in individual housing as opposed to apartments. They did not find the idea of living in an apartment much appealing. When asked about their preference of housing type during the survey, none of the respondents heartily voted for apartment buildings and only few expressed that they would not mind living in flat system if majority of inhabitants decided to go ahead with its construction.





Reasons behind such a preference varied among each respondent. Some expressed the possibility of arguments over shared spaces, while some did not like the idea of losing their backyard space, while the rest had concerns about limitation of space and future accommodation of growing family size. According to the Physical Mapping of existing households prepared by NSET in 2010, the average area of existing houses is 65 m². Whereas according to the proposed design, each household would have around 44m² of living space which was smaller than the sizes of their existing homes. For an average HH size of 5 family members, such small space is generally insufficient. Although extra floor could be added on the top floor, it was meant for rental purpose only. So the idea of not being able to provide additional living areas for growing families was not appealing to the residents which have been expressed as below:

"We are used to having independent homes and doing things on our own terms. Few years back my brother-in-law got married and built an additional room at the backyard for his new family. But such increment will not be possible in apartment system, the community will have to share many spaces, partition of growing joint families will not be possible which can lead to family problems". – (26 years old housewife, interview with author, Kathmandu, August 2010)

"I have a small lawn at my back yard. I often sit here and study. My wife dries clothes in this back yard and grows vegetables. The apartment design does not even have a balcony to dry clothes or to get some fresh air. How can we sacrifice such a nice home we built with our own hands for something worse?" – (60 year old social activist, interview with author, Kathmandu, August 2010)

Criticism of selection criteria: The proposal aimed to provide housing for squatters not just from Sankhamul but 109 more households from Bansighat and Kuraigaon. This inclusion of external residents was not appreciated by the inhabitants of Sankhamul. The survey indicates that only a few residents were willing to share space.

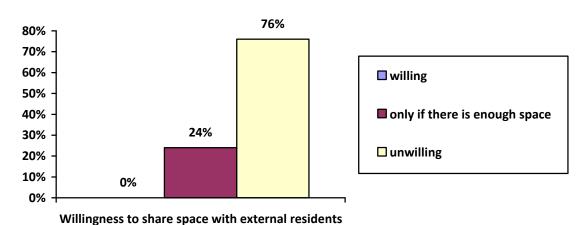


Figure 99: Preference for inclusion of external squatters

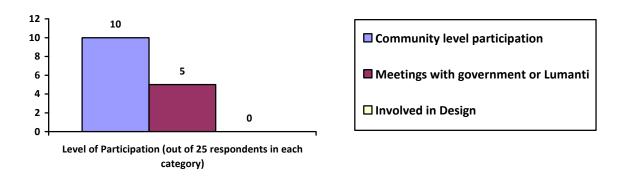
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The possibility of having to share land with other residents is seen as a big threat by the residents. Some feel, the cohesion and unity among the old residents will be negatively affected by such act. Others argue that the economic, social and political views of the new residents will clash with the old residents creating a friction within community. The squatters insist demand to have bigger accommodation for themselves in design as opposed to more accommodations for others. This hesitation was also due to possible increase in density. According to the author's calculation using figures from proposed document (Lumanti and ACHR 2008) and drawings of built up area from Physical Mapping (NEST, 2010) the existing density seems to be 0.04person/m² whereas proposed density is 0.06person/m². This densification was unappealing to the residents who were used to living in rather open area.

Another reason behind rejecting external residents is because the number of squatter households in Sankhamul has remained to a constant of 105 for over a decade. Although there appears to be an informal rental market, there does not seem to be a much active market for selling households or plots to new squatter households. The community has a strong sense of territorial belonging to the land and has not allowed any external households to squat in the area for a long time. The community leader expressed "We have preserved and invested on this land for too long to let others come and reap off benefits from our hard work".

Clearly, such views of the squatters were neither considered nor reflected in the design of proposal. This was due to lack of 'true' community participation during the formulation of the proposal. Although the designers claim that they were in regular contacts with the residents from the initial phase of site study to design, the final decision was top-down (Lumanti and Community Leader 2010, interviews). During the survey, the squatters mentioned that they held meetings among themselves at a community level to discuss the proposal and some leaders participated in meetings with DUDBC and Lumanti but none of the residents were involved in the design process nor asked about their choice of housing.

Figure 1010: Community participation in design



5.1.5 Third Party Intermediation

According to Rabé 2009, pp. 127, an intermediary party must be involved in a land sharing project that acts as an arbitrator in bringing both the owners and squatters to negotiation tables and persuades them to consent upon necessary compromises. This third body is present to make sure that agreement is executed by all parties.

But the role of intermediation takes place on different grounds in case of Sankhamul. Usually, intermediary bodies step in when there is a heat of conflict over land among owners and occupiers. Here, Lumanti steps in as a third party at the very beginning stage of project proposal. In doing so, it does not act as an intermediary body but as an active facilitator of the project. It then persuades both the government and squatters to participate in the project according to the terms of its own proposal. So, instead of remaining as a neutral arbitrator it becomes a third stakeholder who takes a big commitment of implementing the project.

It is evident from above findings of technical feasibility that both the government and squatters had strong disapproval towards the project. Close observation of the case reveals that in fact, the proposal of land sharing was one-sided imposition of Lumanti; neither the government nor the squatters were willing to participate in the project. DUDBC was much guided by Lumanti in this entire process since it had not worked with squatters before this case and therefore had no prior knowledge in the field. Similarly, the squatters in Sankhamul were also much guided by Lumanti since they were closely involved with the organisation in many projects prior to this. Lumanti definitely had an advantage of knowledge and information over both stakeholders but apparently it was not able to utilise this advantage in formulating a project that could attract both stakeholders to participate.

"Sankhamul area was chosen for this project by Lumanti, the proposals were made by Lumanti. We trusted the organisation since it had prior knowledge on the field. But if one looks at the design, it seems unrealistic. It overrules regulations of land and yet does not provide sufficient living space to the residents." – (DUDBC, interview with author, Kathmandu, August 2010)

Due to legal constraints the government backed out of the project and due to technical dislikes the squatters backed out. However, Lumanti insisted on implementing the project even thereafter. Due to this imposition, the inhabitants had doubts regarding the motives of Lumanti.

"Lumanti was our main supporter from the very beginning of our struggle. We appreciated their efforts earlier, but not after the proposal of this project. Lumanti must have had some ulterior motives of self-benefit. Why else was the government not interested in commercial developments and only Lumanti"- (33 year old social activist, interview with author, Kathmandu, August 2010)

Whether such doubts were based on facts or personal dislikes is not confirmed by the research. But such reactions show that imposition of the proposal by Lumanti was not appreciated by the stakeholders.

Ironically, Lumanti was the party that initiated the idea of Land Sharing, but its own role of active involvement was one of the constrains in implementing the proposal.

5.1.6 Community Organization and Consensus

Community organization and consensus is required among squatters to resist the threat of eviction and resist the temptation of being bought out of the settlement one by one (Rabé 2009, pp.126). Indeed, the potential threat of eviction that surrounded the squatters of Sankhamul 37 years back, led them to gradual establishment of several organizations to voice their right for housing, which has made the community considerably strong today. In the very first year of establishment of the settlement an area committee named Buddhamarga Tol Bikash Samiti was formed informally which was officially registered 22 years later in 1995. This committee acted as the first united front for voicing their demands of legalizing the settlement and confronting eviction attempts (52 year old community leader, interview with author, Kathmandu, August 2010).

"In 2003, when bulldozers were brought in this settlement to threaten us for construction of UN park, the members of area committee protested by laying down in front of the bulldozers. We fought together and drove them away." – (57 year old community leader interview with author, Kathmandu, August 2010)

The community leader and chairperson of the area committee of Sankhamul, Hukum Bahadur Lama was also a social activist who coordinated with squatters of other settlements all over Kathmandu in formulation of a national level organization named Nepal Basobas Basti Samrakchan Samaj (NBBSS) – Nepal Settlement Protection Society in 2000. A year later another organization named Nepal Mahila Ekata Samaj (NMES) – Nepal Women's Unity Society was established which majorly conducts a savings group called Community Women's Cooperative Network. Formulation and capacity building of both the organizations were facilitated by Lumanti. Today, these two organizations are the major pillars of squatter movements throughout the country (52 years old community Leader, interview with author, Kathmandu, August 2010). The works of NMES are considerably successful in running a saving's group that provides loans to the squatters without any collateral. Over the years, the financial base of this organization has grown considerably and supports many squatters throughout the country (NMES, interview with author, Kathmandu, August 2010).

Apart from Lumanti, these two organisations are associated with other NGOs such as Action Aid Nepal, Water Aid Nepal and international organisations like Asian Coalition for Housing Rights (ACHR) and Slum Dwellers International (SDI). As such these squatter organisations

get much international exposure and trainings. Many of the squatter leaders have visited Bangkok, Cambodia and India to understand the condition of squatters and approaches to upgrade them in other countries. The current chair person of NBBSS and resident of Sankhamul settlement recently attended the World Urban Forum 2010 in Brazil as a member of SDI representing the country. As such the organisation was exposed to the latest issues of squatters worldwide that increased the knowledge-base of the community (NBBSS, interview with author, Kathmandu, August 2010).

The study shows that Sankhamul settlement is well associated with NBBSS and NMES and some of the squatter leaders of national level with international linkages are residing in Sankhamul itself and therefore it is the most organised and mobilised squatter settlements in the country- much stronger and confident community today than when it was established 37 years before.

Now, according to the literature and experience of practices in Bangkok and Cambodia, such a strong organization and cohesion should have been an opportunity for implementation of Land Sharing. Strangely, it is not so because Sankhamul as an extremely well organized community has the confidence to relentlessly stay in the land with strong community protest against any opposition. Their knowledge of human rights and exposure to current international trend of advocating on-site upgrading enhances their bargaining capacity to negotiate for demands that benefits them to the fullest. Their demand of course is legalisation of land they are occupying and not compromising portions of it by sharing land. Thus, their strong organization and consensus works against implementation of Land sharing and for onsite upgrading.

In contrast, the government seems less knowledgeable about the issues of squatters. It had no data base or background study⁶ of Sankhamul and had to depend much on Lumanti before approaching the squatters which put them at the lower end of the bargaining table. Moreover, the government institution showed its weakness by announcing a project without formulation of working policy due to which they had to halt any further process of execution.

Well organized community is necessary for a land sharing project so that the capacity of negotiation is equal among both the opponents fighting for land. Interestingly, in case of Sankhamul, community seems to have more negotiating capacity than the government which has a weak institutional framework. Hence, community organization and consensus in case of Sankhamul is not an opportunity for Land sharing and will not be so until the residents feel threatened by government claims over land.

⁶As a lesson learnt, DUDBC hired a consultancy in 2010 to prepare the "Physical Mapping of Squatter Settlements in Kathmandu" to finally create a profile of squatters in the city for further approaches.

5.2 Stakeholders' Perspectives on Relevance of Land Sharing Project

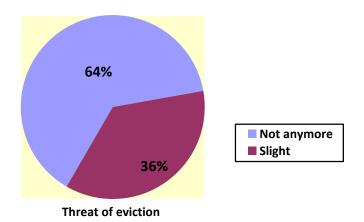
This section explores the stakeholder's perspectives regarding the appropriateness of land sharing project as compared to alternate approaches in Sankhamul squatter settlement- as a part of answering the second specific question of this research.

5.2.1 Perception of tenure security

According to Islam and Yap 1989, pp. 125, Land Sharing is only relevant in settlements where there is serious threat of eviction. Without threat of eviction there is no pressure for squatters to leave or share the land; they are able to occupy the entire land without any compromise.

In case of Sankahmul, the squatters have confronted a serious threat of eviction only once for construction of a UN park in their area in 2003. After a notice of eviction and bulldozing attempts by government, the community strongly protested and the government had to step back. Thereafter, government succumbed to the international treaties of human rights and adopted a more tolerant policy. Today, most of the residents do not feel threatened by eviction any more as shown by the survey below:

Figure 1111: Threat of eviction among Sankhamul squatters



The government of Nepal is not only tolerant but extremely ignorant towards the scenario of squatters, which gives the squatters the liberty to keep residing on the land. The government does have a statutory body called "Squatter Problem Solving Committee" that is established through political nominations which dissolves and re-forms every year, but this committee has not been able to provide any housing or solve any problem significantly since its establishment in 1991. The committee that was formed this year has not been assigned Kathmandu as its area of scope since the government feels the problems in the capital city are far too complicated to look after!(Squatter Problem Solving Committee interview with author, Kathmandu, August 2010). Due to such an ignorant attitude of the government, the squatters are at much advantage.

It is easier to implement Land sharing in a community, if the threat of eviction drives them to negotiate for the piece of land. According to Islam and Yap 1989, pp. 126 in countries where the rights squatters are better protected and evictions are rare, land-sharing may not be acceptable to squatters. In case of Nepal, the rights of squatters may not be better protected, but their existence is quietly tolerated by the government. One of the higher level government officials expressed similar feelings by saying:

"If they want to keep on staying in illegal land, let them. Ultimately they will have to leave." – (DUDBC, interview with author, Kathmandu, August 2010)

Such an attitude of government may have evolved from the difficulties in bureaucratic procedures caused by political instability. Ever since the establishment of democracy in 1989, there has been change of 18 Prime Ministers, insurgency created by Maoist groups, downfall of Kingdom and upraise of Republic Government, inability to create a new Republican Constitution and many more political problems. Due to such unstable political scenario, decision makers at the top-level are absent or their work period terminated constantly. Policies are difficult to formulate and implement under such circumstances. For instance, "Draft Working Policy" for squatter management and "Draft Shelter Policy" necessary for implementation of any squatter upgrading project have been queuing to be approved for almost a year at the cabinet level. Probably due to these barriers bureaucrats are reluctant to execute controversial projects related to squatters.

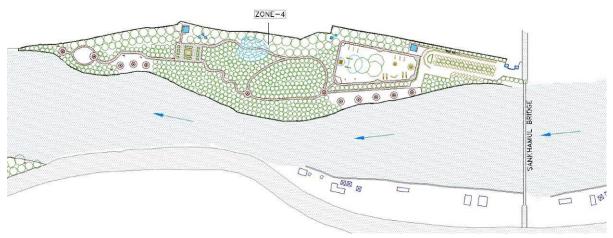
Land sharing is not and will not be appropriate tool to upgrade the squatters unless the residents feel threatened by eviction.

5.2.2 Extent of conflict and timing of negotiation

Land Sharing can be applicable in cases where there is some level of conflict over a piece of land. The best timing for negotiation is when land prices have raised and the landowner seeks to clear the land for commercial use (Islam and Yap 1989, pp. 123-124). Interestingly in Sankhamul, although land prices had risen and government had intentions of clearing land it was not meant for commercial purpose. This was due to the regulations and master plans made for environmental purposes on the river banks of Bagmati

Since the government is not able to construct buildings on land formed upon shrinkage of the river, it intends to utilise such lands as environmental parks. As such, the design of greenbelt along such areas (mostly occupied by squatters) is not limited to 12 m wide strip, as along other portions of the river bank in the city, but has an extended design in the form of a park. The design of such a park in Sankhamul includes river protection works, tree plantation and construction of road as shown in picture below:

Picture 88: Proposal of UN Park in Sankhamul



Source: UN Park Development Committee, 2010

According to the Bagmati Action Plan (2009-2014) prepared by NTNC (National Trust for Nature Conservation), Sankhamul falls under the Urban Zone 4 of actions. This zone is a critical area with highest level of river pollution and therefore major portion of the action plan investment is assigned to this zone for activities such as construction of waste water treatment plants, conservation of cultural heritage, and protection of river banks etc. One of such action plan focused specifically on the portion of Sankhamul riverbank, occupied by the squatters is development of a park along the Bagmati River from Sankhamul to Teku by The United Nations, in collaboration with the Government of Nepal, supported by Bird Conservation Nepal to control further degradation of the river ecosystem (NTNC 2009, pp.25-47). In order to construct the park, the ownership of land in Sankhamul was transferred to the UN Park Development Committee, a government body in 1995 (UN Park Development Committee, interview with author, Kathmandu, August 2010).

However, the government has not been able to construct park on any portion of the riverbank. One of the major obstacles identified in implementation of such activities in the urban zone is "...high encroachment of land by private as well as illegal settlements such as squatters" (NTNC, 2009, pp. 25). As a means of addressing such issues government intends to manage the squatter settlement along river banks which includes Sankhamul. Hence, upon close observation the research shows that the concept of squatter upgrading has emerged out of intentions river revitalisation⁷ and not just for squatter management. This makes it clear that government had no intention of commercial developments but only parks and roads by sharing land in Sankhamul.

⁷ The draft working policy for execution of upgrading projects is titled "Working Policy for Squatter Management for Bagmati River Revitalisation".

That was the reseason why the government approached Sankhamul squatter settlement with an eviction notice for construction of road and park and in 2003. The squatters confronted eviction successfully but they still faced a certain degree of threat. With support from Lumanti, they negotiated strongly with the government and later compromised certain portion of their back yards for the use of park. At that moment of time, the land was already shared for public good.

So, when Lumanti proposed to reconfigure the shared land (See Pic 4&5 in previous chapter) and build commercial purposes as a means of obtaining cross-subsidy for construction of new houses, it intended to provide secure housing to the squatters of Sankhamul permanently. But neither did it fall under government's action plan nor did it justify the necessity of the project. Basically, when asked about the relevance of the Land Sharing, the stakeholders had following opinion:

Table 1414: Summary of stakeholder's opinion towards Land Sharing

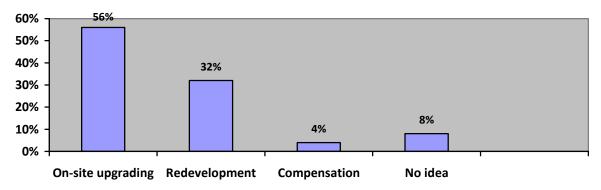
	Land sharing in Sankhamul
Lumanti's view	"Good solution since the land is sufficient and market value is high. Cross-subsidy from commercial use can help to provide secure housing for squatters."
Government's view	"Not feasible due to regulations and action plans. Parks can be built but not structures like commercial complexes."
Squatters' view	"We have already shares sufficient land from our back yards for public good. Now all we want is to be legalised."

It is clear from the findings that there was no serious conflict over land between the owners and occupiers and there was no serious threat of eviction. Lumanti felt that sharing land for construction of park could not provide enough cross-subsidy for construction of secure housing and so it formulated the concept of capitalizing the land value. It also assumed that this would be a win-win situation for stakeholders where squatter would receive formal housing and government would benefit from commercial developments. Lumanti believed that through Land Sharing the housing problems of residents of Sankhamul would be solved permanently. However, the rest of the stakeholders felt that the proposal of Land Sharing was inappropriate in Sankhamul.

5.2.3 Alternative Approaches

The study shows that stakeholders were not convinced about application of Land sharing. But all of them felt the necessity of providing secure housing for the poor. So, when the squatters were asked to chose among the alternate means of upgrading and presented the options of resettlement, redevelopment, compensation, site and services and on-site upgrading, following were the replies:

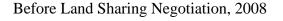
Figure 1212: Alternative to Land Sharing



As an alternate means of upgrading the squatters, most of the squatters felt that 'on-site upgrading' was the best tool to achieve it. In fact, the squatters feel sufficiently secured to start upgrading their homes themselves. Especially after abandonment of land sharing they sensed that government will probably never be able to evict them and therefore more families are willing to invest in their homes now.

Picture 99: Upgrading houses after failure of Land Sharing





Upgraded house after abandonment of Land Sharing, 2010

Source: DUDBC, 2008 and Author, 2010

Nevertheless, they still face the problems of stigma and obstacles of entering the formal land market without legalization. So they still demand unanimously for legal titles.

"Give us lalpurja ⁸(legal ttiles) and we will upgrade on our own." was a general reply from all respondents (All community respondents, interviews with author, Kathmandu, August 2010

But the government is not willing to provide legal titles. "There are 4.5 million squatters all over the country. We cannot grant land freely to all of them"-(DUDBC, interview with author, Kathmandu, August 2010).

However, the government is also in favor of on-site upgrading. So far, it has not completed its study related to squatters and is in the process of making the physical mapping of all squatter settlement within the city at current and therefore does not have an opinion regarding the best approach in Sankhamul for certain. But if the working policy is approved on-site upgrading would be executed (DUDBC, interview with author, Kathmandu, August 2010).

Interestingly, despite a strong stance for Land Sharing by Lumanti, it also feels on-site upgrading is a better solution. "Although Land sharing would have been a win-win scenario and much profitable to government, on-site upgrading is actually the best approach in the area. In fact we have invested a lot in improving the infrastructure of the area ourselves." – (Lumanti interview with author, Kathmandu, August 2010).

Surely, the stakeholders believe "on-site upgrading" to be more relevant than Land Sharing in Sankhamul squatter settlement.

⁸ "Lalpurja in Neplai refers to legal titles which could officially be either individual or communal title. However throughout the interview the squatters as well as government meant individual freehold title by the use of the term.

Chapter 6: Conclusion and Recommendation

This chapter summarizes the findings of research. It also discusses the answers of research questions and makes policy recommendations. The chapter concludes with scope for further research.

6.1 Reasons behind abandonment of Land Sharing in Sankhamul

The Land Sharing project proposed by Lumanti in Sankhamul squatter settlement as a part of a government announcement of squatter upgrading was eventually abandoned by the government and squatters both for different reasons.

According to prior experiences of implementation of Land sharing in other Asian countries like Bangkok and Cambodia, six pre-requisites should have been in place for successful implementation of the project as mentioned in literatures. At a glance, it appeared that all the preconditions were in place in Sankhamul and so land sharing should have been a success in this case. The squatter community was well established, well-organized and cohesive; the settlement had a booming property market that made it attractive for commercial developments and increased the possibilities of financial feasibility; it also had sufficient land for accommodation of both the squatter housing and commercial buildings; also there was some extent of conflict over the land as government had attempted to evict the squatters once in 2003 and Lumanti was present as an intermediary body for management of the squatter problems in the area. Due to all these criteria it seemed that Land Sharing could be feasible in the context.

However, after a closer look at the case, this study reveals that only three out of the six preconditions were in place and posing as opportunities while the other three remained as constraints, as shown in the table below.

Table 1515: Results of preconditions

Opportunities	Constraints
Long established community	Technically unfeasible
Booming property market (of surrounding area)	Ineffective role of Intermediary
Financially feasible	Community consensus against land sharing due to lack of threat of eviction

Thirty-seven years long establishment of the Sankhamul community was an opportunity for Land Sharing because it created a sense of territorial belonging among the squatters who had made the land their home and struggled hard to stay in the land. They could not be easily removed or resettled from the area. If the government intended to use the land, they could not

simply vacate all the occupied area. As a means of solving this, Land Sharing could step in as a useful tool of compromise that would allow squatters to stay in a portion of the area and use the rest of the portion by the government. So the long age of the community created way forward for implementation of Land Sharing. Similarly, booming property market of Sankhamul area created another opportunity for land sharing since it provided incentives for government to develop the plot of land- provided that the particular portion of land could have a formal market value like its surrounding area. Now, if (and this is a big if as it involves formalization of informal land) the government is able to capitalize the land value, by selling it to developers for construction of commercial complex, it could bring a sum of money large enough to compensate for construction of low-cost housing for the existing squatters in the same area. The calculations in previous chapter show that as per the land value in Sankhamul (during the period of project proposal) and the size of land that could be liberated and sold after sharing, the profit obtained would be more than sufficient for execution of the project. This financial feasibility was an added opportunity for implementation of Land sharing in Sankhamul.

Despite these potentials, there were several barriers in implementation of the project. The most prominent constraint and the biggest reason for government and squatters to abandon Land Sharing were because the proposal was technically unfeasible. Specifically, the government disapproved the proposal due to legal constraints whereas the squatters disapproved the housing design, form of tenure and selection criteria of new group of residents. On one hand, the legal cadastral map made in 1965 showed a much smaller area of land than the existing land configurations, which was due to change of course of river and drying up of the river. On the other hand, municipal regulations did not allow construction up to 20m setback from the river bank. Due to these two factors, the land proposed for sharing was not legally available. Government being a statutory body could not overlook such legal barriers especially on such a controversial land and therefore could not agree or even make considerations to the proposal. An additional legal constraint was absence of working policy required to enforce the proposal. Without this guideline of step-wise execution for squatter upgrading, no involved parties could proceed any further- be it a Land Sharing program or any other squatter management program.

Another aspect of technical flaw in the proposal was the design itself which did not reflect the preferences of the residents. The squatters of Sankhamul have been living in an individual housing for almost four decades. These houses have ample backyard space used for kitchen gardening, daily outdoor activities and even construction of incremental rooms to accommodate growing family. In contrast the proposed secure housing in the form of apartments had smaller family area and several shared spaces like courtyards; and the residents had strong inhibitions towards it. Furthermore, the design also proposed accommodation of new families from nearby squatter communities of Bansighat and Kuriagaon. This gave the local residents a sense of being intruded into their community which was not at all agreeable to the Sankhamul squatter residents.

Apart from being technically unrealistic, the study also shows that Land Sharing proposal was a supply driven project; not a demand–driven. The supply was from the intermediary side i.e. Lumanti which was unable to convince the stakeholder to participate in its proposal. Furthermore, their proposal required several legal alterations by government and generous compromises from squatters. But neither was the government willing to revise regulations nor were the squatters willing to approve apartment housing and move in with other residents. As such, the intermediary party had proposed a design that was not wanted and not demanded by any other party. The role played by Lumanti should have been that of an arbitrator, a neutral party present to solve a conflicting land dispute and convince stakeholders to make agreements. But it played a role of third stakeholder which had a stance of its own in the case and was not able to convince anyone else. Basically, the true role of intermediary body was missing in Sankhamul case which was another barrier in implementing Land Sharing.

Beyond these prominent reasons, there was a basic underlying constraint and that was lack of fear of eviction among the squatters due to current ignorant policy of the government. Since there was no threat of eviction, the community automatically became stronger than government and they have the capacity to stay in the occupied land as long as they wanted without compromising any part of it. Moreover, this particular community is extremely organized and knowledgeable; in contrary the government has weak institutional structure. It approached the squatters without any policy to enforce real actions, which is why this well-organized community was at a better bargaining capacity. Although a well-organized community should have been the strength of a Land Sharing project, it was the opposite in this case. They already had a strong perception of security and therefore unwilling to participate in a project that would lead them to many compromises.

The most remarkable aspect of this whole case is that the government did not intend to develop the area commercially instead build parks for environmental purpose. Unlike commercial developments, parks do not need to be built on a parcel of land with good frontage and easy access. In such a case there was enough empty space for construction of road and green belt at the back yard of the existing houses which had been vacated by the squatters 5 years before the Land sharing proposal. So in fact, the parcel of land was already shared for the purpose of a park. Essentially, the government and squatters did not feel the urgent need to reconfigure the settlement and share the land. It was merely Lumanti's imposition to use Land sharing as a tool to create subsidy for secure housing. But due to lack of conflict over land, it was a wrong timing to propose land sharing. The failure was in identifying the need of the project. Sankhamul was **not the best pilot project** for Land Sharing. The proposal seemed more professionally driven than people driven.

Rather, on-site upgrading was more relevant tool in such a scenario. The study shows that on-site upgrading was the most preferred alternate tool for upgrading the settlement opted by all stakeholders including Lumanti as shown in the table below:

Table 1616: Results of stakeholder's perception on relevance of Land Sharing

Stakeholders	Land Sharing
Squatters	On-site upgrading is more relevant than Land Sharing
Government	On-site upgrading may be more relevant than Land Sharing
Lumanti	Land Sharing was relevant too but on-site upgrading seems to be more relevant now

To sum up, the Land Sharing proposal in Sankhamul squatter settlement was abandoned because it was technically unfeasible, there was absence of intermediary party; there was no threat of eviction and consequently it was wrong timing to propose when there was no conflict over land; and also because this approach appeared less relevant than on-site upgrading in the context. Apparently, land sharing was not an appropriate approach for upgrading the squatter settlement of Sankhamul and it was a wrong choice of tool in this case.

6.2 Redefining Some Preconditions

Although the proposal of Land Sharing was a failure in the context of Sankhamul, the study of the case has revealed new aspects of the tool which is important to consider for future implementation. Due to the unique nature of the Sankhamul case, two of the preconditions namely-booming property market and community organization and consensus worked under a different scenario than as mentioned in the existing literatures. The additional dimensions regarding these preconditions have been clarified as follows:

Booming Property Market: According to the literature, booming property market on a piece of squatted land can increase development pressures and consequently push the owners to develop the land by either evicting the occupants or making agreement of sharing land with them. However, in case of Sankhamul, the land was illegal and had no formal market. That particular piece of land had no legal value and therefore no actual pressures of development. But the surrounding land value was soaring at an extreme rate and it was this rapid increase that created an anticipation of formalizing the occupied land among the stakeholders. In a way there was a virtual boom in property market created by expectations of being legalized.

If the regulations of the setback for Bagmati River and out-dated cadastral map of the river bank had not created legal obstacles, the government could have seriously considered the project. In order to execute the project, the government could have started the process of formalizing the land and selling it to the developers probably under leasehold to retain the ownership of land under public holding. The value of land would then be capitalized by the government and used as cross-subsidy for provision of low-income housing.

Therefore it seems necessary to clarify that apart from booming property market of land under conflict the booming property market of surrounding area of land under conflict can also be an opportunity to implement Land Sharing due to the hidden value of its *location* and the surrounding *market pressure* that can convince authorities to formalize informal land parcels.

Community Organisation and Consensus: The literature states that in order to implement land sharing, community as a whole must have the ability to struggle for the land and not be evicted easily. Therefore the literature presents community cohesion as an essential prerequisite for land sharing. This theory is based on an assumption that the owner of the land is powerful enough to create real threat of eviction among the squatters.

However, the case of Sankhamul highlights different scenario. Here the squatters are powerful enough to push way the government from their own land since they are not able to evict the squatters. This actually is not a new scenario. Many governments in developing countries are not able or willing to evict squatters. In such cases land sharing is either irrelevant or it can be used as a conflict-avoiding mechanism and not a conflict-solving mechanism (Islam and Yap 1989, pp.123-124). Although this is a slightly weak strategy, yet if the owner shows a strong commitment of utilizing the land and has an institutional capacity to convince squatters to participate, Land Sharing can work. In Sankhamul case, the government had weak organizational structure and did not have substantial commitment to develop the area commercially or even environmentally which is exemplified by its lack of any actions. That is why its stance was weaker as compared to the community.

Hence, it is important to stress that along with community organization and consensus, there should be simultaneous commitment from owner to execute a Land Sharing project. Without willingness from both stakeholders, project cannot be initiated and without both stakeholder's having corresponding capacity to negotiate, one of them will always out run the other.

6.3 Future of Land Sharing as a Squatter Upgrading Tool

Land Sharing is a promising squatter upgrading tool where there is strong conflict over land between squatters and owner. Without conflict, no stakeholders will be willing to compromise. In case of Sankhamul, lack of conflict is evident and Land sharing will not be a feasible policy tool until the situation remains so. But if in the future if there is more political stability in the country and the government is not as reluctant as now, there is a possibility of application of Land sharing.

Yet again, Land sharing as a tool of providing secure tenure can work only in areas where there is possibility of formalizing the settlement. In the case of Sankhamul, regulations did not allow this. If the government had serious intentions to execute the project, it would have to be more flexible on regulations of river banks. But if the government is to make such considerations for riverbank squatters, it can face a lot of criticism from general public especially the neighboring formal residents who have paid a high price to obtain land formally. Moreover, if special considerations were made to formalize even a single squatter settlement, the government would be under pressure to initiate formalization of all the settlements within the country. Such large scale of work could be controversial and practically impossible for a government with such weak institutional capacity. Therefore, as of now, Land Sharing is not legally applicable in Sankhamul and appears to be so in most riverbank squatter settlements in the city.

But if, Land Sharing is intended as a policy tool for regularization, it is necessary to consider that Land sharing faces the potential threat of gentrification. Cases in Thailand and Cambodia exemplify how a strategically located land will eventually succumb to market forces (Yap 1992, pp. 69-70 and Rabé 2009, pp. 152-167). The intended use of land for low income housing then becomes a vain attempt. Lower income groups gradually get pushed away from the city by higher income groups. In case of Sankhamul, the difference of opinion regarding attachment of land between different generation hints that the younger generation is likely to sell off the housing and shift away if they are to be formalized. Although during the research, most respondents denied any possibility of moving away from the area upon formalization, it is quite possible that the stern demand of all the residents for legal title is in anticipation of capitalizing the increasing land value of the surrounding by selling their own parcel of land upon legalization. If this is to happen, the intention of the project will not be truly achieved. It is necessary to ensure that the policies which support execution of Land Sharing have strict outline against immediate transaction of property after completion of the project. The intermediary body can also play a role of monitoring that such agreements have been enforced by the stakeholders.

It is also important to assess if Land Sharing can be a politically appropriate tool in each case to case basis. In case of Sankhamul, it was not. It was not desirable to the inhabitants and to the government. Technical design of the proposal could not appeal to the needs of target group nor fulfil the intention of government. This was mainly because of lack of true participation during the design phase. Indeed in future, if land sharing is to be implemented, the process must be more transparent and participatory. One also has to consider that, Land sharing is a time consuming process of negotiation and implementation. Community participation in design process can demand even longer time for negotiations. The fiscal year constraint of one year must therefore be reconsidered for such demanding projects. As such strong political will is essential in implementation of Land Sharing.

One has to acknowledge that every community has a heterogeneous mixture of inhabitants, as exemplified by the difference in opinion among generations in Sankhamul. So, Land Sharing as a single-track solution cannot truly address the needs of all residents. However, despite its shortcomings, Land Sharing could be an appropriate option in areas where all the preconditions are met. There are more than 45 squatter settlements in the city itself and more increasing every year. Surely, in some areas, this may be the most relevant tool to upgrade. As such, the government policy should be open to Land Sharing possibilities in future.

6.4 Possible Future Scenario in Sankhamul

In case of Sankhamul, there were three stakeholders involved with different interests and ideas. On one hand was the well established squatter community in Sankhamul which had been occupying a river belt area, unwilling to be resettled elsewhere and struggling to formalize the land. On the other hand government was trying to manage the squatters and develop the area as an environmental park for river revitalization. And there was Lumanti, who had been working long in the field of squatter management and had its own objective to facilitate in upgrading projects. It looked upon the budget announcement by government as a good opportunity to perform a large-scale upgrading project. But it is rather surprising that Lumanti as an expert in the field opted Land Sharing as the tool upgrade squatters when the precondition of technical feasibility was clearly missing in the first place.

After the failure of land sharing in Sankhamul, on-site upgrading appears to be next alternate approach as an upgrading tool since all the stakeholders have now shown interest in it. In order not to end up in a failure as before, the approach needs to be reasonably assessed.

There needs to be an evaluation if on-site upgrading is in fact more realistic and appropriate than Land Sharing. On-site upgrading could mean formalization of the settlement and provision of tenure security. These may face similar legal challenges as Land Sharing did, because the legal existence of the land is still questionable. Only a small portion of land is legally available for construction according to the current regulations. As such, some of the residents might have to be resettled and only some allowed to upgrade on their own ground. However, it is unlikely that resettlement will be approved by the residents and once again the proposal could remain abandoned.

A solution to this could be updating the cadastral map and allowing the existing squatters to upgrade in their own land. The set back of 20 m and more at the backyard of the houses could be used for construction of park. In this way, the squatters could stay in their desired location and the government could create a public space-although not as sizeable as intended but sufficient enough. However, formalization could be a controversial issue in a public land. The government can face severe opposition from general public which can hinder any further progress. Most citizens still have negative perceptions about squatters. So, high level of political commitment is required to initiate and sustain any approach towards the squatters.

Also lack of working policy, as seen in case of Land sharing proposal, may yet hinder the execution of on-site upgrading. So a strong policy framework is essential without which such an commencement may have to be withdrawn upon protest once again. If the stakeholders are committed to carry out on-site upgrading, there should be clear negotiation and agreement regarding form of tenure. Since, in Sankhamul the next level of problem seems to be the conflict regarding form of tenure. The squatters have clearly stated their demand for individual freehold titles. But the government is not willing to provide so. Issue of tenure could be the major point of disagreement between stakeholders which need to be considered by all involved parties before formulation of the project. Probably the best solution would be lease hold, but this is a matter of discussion and negotiation. Furthermore, considerations need to be made for investments of on-site upgrading since it does not generate cross-subsidy as Land Sharing does. Although is not a financially demanding tool, yet stakeholders may need to think of provision of subsidies for upgrading housing conditions through loan schemes. Financial feasibility of the project has to be assessed.

In general, the possibility of on-site upgrading is most likely in Sankhamul but its success is still dubious. Hence, there needs to be a clear study regarding its feasibility in order to justify its implementation in the best interest of all stakeholders.

6.5 Scope of Future Research

Studies related to squatter upgrading is very relevant to the current times of rapid urbanization when the issues of providing secure housing to squatters is critical and related policies are being revised in Nepal. The practices mentioned in the literature show that Land Sharing can still be a useful policy tool for future upgrading projects in squatter settlements of Kathmandu despite the failure of this particular project. This is because the application of this tool is unique to each case and depending on the circumstances of other squatter settlements in the city, it can be relevant. Therefore, further research needs to be done on which settlements would be more appropriate for use of this tool.

Apart from upgrading, the dilemma of providing legal titles is a major policy debate today. Even if land sharing or any other appropriate upgrading tool had been implemented successfully in Sankhamul, the squatters would have continued demanding for legal titles. But the government of Nepal would not be capable of providing so in a public land. Also a related research needs be done on the implications of providing legal titles and in exploring the cultural context of land-based society of the country which makes people struggle for land titles. So far, the fate of Sankhamul is still uncertain due to the ongoing deadlock of upgrading program, hence further research needs to be done on what would be best possible future scenario for redeveloping Sankhamul and providing secure tenure to its inhabitants.

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Annex

Annex 1: Case Study Protocol

Following is a case study protocol which includes the necessary topics that need to be covered up during visit to the Sankhamul squatter community. This is a guide or a check list to ensure that the surveys and interviews do not miss out on questioning any related issues that would be helpful in the process of analysis.



Annex 2: Questionnaire for Survey

Land Sharing Experience in a Squatter Settlement of Kathmandu Questionnaire for Survey		
Interview Date: Interview Time:		
Name:		
Age: Gender: \square M \square F		
Years of Residence in Sankhamul:		
Prior place of Residence:		
HH size:		
Ownership: Rental Self owned after buying Self owned and self built		
Physical condition of house: Permanent Semi permanent Temporary		
Level of Education: ☐ Illiterate ☐ Primary ☐ Secondary ☐ Higher		
Employment: Daily wages Services Business Unemployed Others		
Average household Income:		
Status of respondent in the community: Leader General member		
Member of any organizations ☐ Area committee ☐ NBBSS ☐ NMES ☐ Savings cooperative ☐ Youth Committee		
Type of Response: Good Average Poor		

1.	What is your main reason for squatting in Sankhamul?
2.	How important is the location to you?
3.	How far is your work place from here? How do you get there?
4.	If given a good alternative would you move from this place?
5.	What kind of housing would you prefer- Apartment or Single? Why?
6.	What kind of housing would you prefer- Communal or Individual ? Why?
7.	What kind of relation do you have with the rest of community members?
8.	What activities do the community members do together?
9.	Do you think your all views and problems are well represented by the community leaders during negotiations?
10.	Has the community faced any eviction threats?
11.	Has the community reacted together against eviction?

12. Have you heard about the recently proposed land sharing project?
13. What do you know about the project?
14. Were you involved in the negotiation meetings with the project?
15. What kind of meetings did you attend? (within community/with Government/with NGO)
16. Did anybody ask you what design of house you prefer?
17. Were your opinions taken notice of?
18. Did you like the design of housing?
19. Were you willing to pay for the housing?
20. Would you accept if external residents would be shifted in this area after land sharing?
21. Were these proposals acceptable to you? Why/why not?
22. What do you think of the role of Lumanti in this project?
23. What do you think about the role of Government in this project?

24. Do you feel threatened that you could be evicted in future?
25. Has any political party given any assurance that you will not be evicted?
26. Do you possess any form of legal/semi-legal documents? (identity cards)
27. Do you pay any form of bills (water /electricity) or housing rents or land tax (tiro)?
28. Have you repaired or upgraded your house recently?
29. Do you get access to any form of loans? (from your own cooperative/ externally)
30. Do you think you would sell the house if it is upgraded or redeveloped?
31. What new approaches would be appropriate for improvement of the squatter settlement? Why?
32. What do you think is more appropriate among the following: Relocation / redevelopment in the same site /Compensation/ On-site upgrading

Annex 3: List of Interview Respondents

- Department of Urban Development and Building Construction (DUDBC)
 - Dr. Mahendra Subba, Deputy Director General
 - Ms.Sarita Maskey, Senior Divisional Engineer
 - Mr. Dilliram Adhikari, Engineer
- High Powered Bagmati Civilisation Integrated Development Committee (HPBCIDC)
 - Mr. Anil Khanal, Project Manager
- Lumanti
 - Ms. Lajana Manadhar, Executive Director
- Nepal Mahila Ekata Samaj (NMES)- Nepal Women's Unity Society
 - Mr. Moti Lama, Executive Member
- Nepal Basobas Basti Samrakchan Samaj(NBBSS)- Nepal Settlement Protection Society
 - Mr. Raju Tamang, Chairperson
- Squatter Problem Solving Committee, Nepal
 - Mr. Gopal Mani Gautam
- UN-Habitat, Nepal
 - -Prafulla Man Pradhan, Habitat Manager
- Nepal Engineering and Software developer's Theater (NEST)
 - Mr. Yogesh Purna Shrestha, Urban Planner

Annex 4: Questionnaire for Interview

Questions to Policy Level Officials (DUDBC and HPBCIDC)

- 1. Is there a squatter upgrading policy in Nepal?
- 2. Do the existing urban and shelter policies support squatter upgrading projects in Nepal?
- 3. Does the Bagmati Action plan incorporate policies for squatter upgrading for riverside squatter settlements?
- 4. Why was Land sharing chosen as the tool to upgrade in Sankhamul?
- 5. Do you think land sharing is relevant tool in the Sankhamul settlement?
- 6. Do any regulations hinder application of squatter upgrading projects?
- 7. Do you think there is possibility to revise the regulations for this purpose?
- 8. What do you think of the demand of the squatters for formalization of settlements such as in Sankhamul settlement?
- 9. Do you think government is committed to resolve the squatter issues in future?
- 10. What is the best alternate tool for upgrading Sankhamul squatter settlement in the future and why?
- 11. What does the government intend to do if the squatters hesitate to participate in future projects?

Questions to Project Level Officials (DUDBC and Lumanti)

- 1. How was Land sharing proposal formulated in Sankhamul?
- 2. Why was Sankhamul chosen?
- 3. Do you think it was a relevant upgrading tool?
- 4. Do you think the area has potential for commercial developments?
- 5. What type of housing design was proposed? (apartment/row) and why?
- 6. What was the financial scheme?
- 7. Was it feasible?
- 8. Was the government seeking some form of financial benefit though construction of commercial complex?
- 9. Did policy and regulations hinder application of the project?
- 10. Do you think there is possibility to revise the regulations for this purpose?
- 11. What about the claim of the people that the neighboring areas fall within 20-m setback?
- 12. Did the government want commercial developments in the public land?
- 13. What was the scheme of tenure ship?
- 14. What do you think of the public demand of legal titles?
- 15. What do you think about the organizations of squatter community?
- 16. Did government have enough study of the area?
- 17. Did the government have enough manpower and expertise for this project?
- 18. Do you think the NGO was more of a leader in this case and government was being led?

- 19. Was this idea influenced by Bangkok cases?
- 20. Have any other options been considered? (on-site upgrading/ Resettlement/ Redevelopment/ Compentstaion/ Site and services)
- 21. What do you think about the new constructions that are taking place?
- 22. Why/How does government provides water and drainage and accept bills when the squatter are legal?
- 23. What do you think should be changes in current housing policy?
- 24. How committed is the government towards squatter upgrading? Are there any future policies?
- 25. Would you say the LS project is completely abandoned or still under consideration?

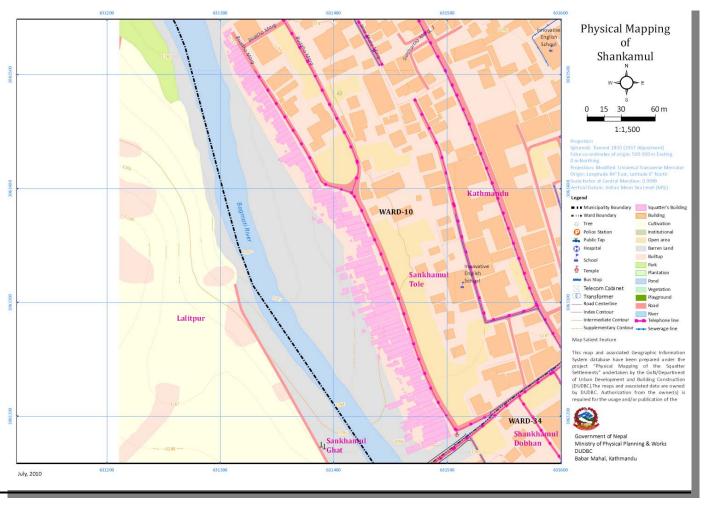
Questions to Support groups (NBBSS & NMES)

- 1. Was your organization involved during the negotiations for implementing Land sharing project in Sankhamul?
- 2. Do you think the proposal had affordable financial scheme?
- 3. What do you think about the scheme of communal tenure ship?
- 4. What did you think of the inclusion of residents from Bansight and Kuriagaon?
- 5. What do you think of the design of buildings and surrounding?
- 6. Do you think the settlement faces any threat of eviction?
- 7. What do you think about the relation between members of the squatter community?
- 8. What do you think of the proposed Land sharing project in general?
- 9. Do you think it was a relevant upgrading tool?
- 10. Would you advocate any other options? (on-site upgrading/ Resettlement/ Redevelopment/ Compensation/ Site and services)
- 11. What do you think about the new constructions that are taking place?
- 12. What do you think should be changes in current housing policy?
- 13. How committed do you think is the government towards squatter upgrading?
- 14. What do you think about the role played by Lumanti?

Questions to organizations for supporting information

Organization	Basic Questions
Squatter Problem	What have been the past, present and future political approaches
Solving Committee	towards issues of squatter settlements in Kathmandu?
UN-Habitat Nepal	What have been the past, present and future international involvement
	in the issues of squatter settlements in Kathmandu?

Annex 5: Physical mapping of Sankhamul Squatter Settlement



Source: NEST 2010